

Kalevi Ahonen

From Sugar Triangle to Cotton Triangle

Trade and Shipping between America
and Baltic Russia, 1783–1860



JYVÄSKYLÄ STUDIES IN HUMANITIES 38

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ABSTRACT

Ahonen, Kalevi

From Sugar Triangle to Cotton Triangle: Trade and Shipping between America and Baltic Russia, 1783-1860

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Diss.

The purpose of this study is to discuss the development of trade and politico-commercial relations between the U.S and Russia from the Treaty of Paris in 1783 to 1860. The problems are approached on four levels: 1) commercial diplomacy between the countries, 2) the entrepreneurs involved in commerce and their activities, 3) mercantile shipping, 4) the volume of trade.

The neutrality of trade and the seas (free ships-free goods) was the cornerstone of American commercial and foreign policy. Britain did not accept the principle in the forms proposed by Washington and the Department of State sought support from Russia. The results were poor. Articles of neutrality were even omitted from the commercial treaty concluded between Russia and the U.S. in 1832. In the name of freedom of the seas the U.S. took the initiative in the abolition of the old Danish Sound dues in 1857.

Most of the entrepreneurs in American trade with Baltic Russia were from New England, as were the ships, brigs, barks and schooners that crossed the Atlantic. At first insufficient information about the distant markets was the biggest obstacle to commercial intercourse. The captains and supercargoes played a crucial role in getting the best cargoes for the Russian markets and find the most reliable trading house in St Petersburg to deal with.

In practice about 90-95 percent of the trade between Russia and the U.S was carried through the Sound, 95 percent of it on American vessels. According to the Sound Toll Accounts and Consular reports altogether 9500 American vessels sailed to the Baltic and back in the period 1783-1860. Most of them visited St Petersburg. European wars created new opportunities for the Americans to trade with Russia. During the Continental System Americans sailing under the neutral flag "found" excellent markets for their colonial products in St Petersburg. The good days came to an end during the Anglo-American War in 1812-14.

Initially the U.S. imports from Russia were bar iron, hemp and "manufactures" (i.e. hemp and flax cloths). The main American exports and re-exports to St. Petersburg consisted of a wide range of products (e.g. sugar, rice, tobacco, coffee, cotton, spices). From the 1820s onwards American merchants created "the sugar triangle": the trade from New England via Havana to St Petersburg and back to the ports of Massachusetts or New York. The sugar carried by the Americans was worth over twice as much as direct exports from the U.S. to Russia. At the beginning of the 1850s "the cotton triangle" entered the scene. Americans carried cotton wool from Southern ports to St Petersburg and sailed back to western Europe, New York or Boston. The raw sugar and cotton the Americans carried gave a major boost to the creation of modern industrial production in Russia. British money played a central role in the shipments of sugar and cotton. Over 45 percent of the American tonnage involved in commerce with Russia did not trade directly between the two countries.

Keywords: Russian-American trade, Øresund, sugar trade, cotton trade, neutrality, American shipping, trading houses.

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My interest in American history began rather by accident. In my first seminar, supervised by Professor Jorma Ahvenainen, I had to write a paper about the problems of neutral shipping on the Baltic Sea during the Continental System. When reading the reports of American consuls and ministers in Denmark I repeatedly came across the beautiful name: Elsinore. Elsinore was familiar to me in totally different context, and at first I wanted to know more about the famous castle. In fact the reports gave no answers. After that the American captains caught my attention: they tried to sail with valuable cargoes under the neutral flag through the Sound to St Petersburg. Some of them succeeded, some did not. It was really exciting to follow their attempts. It was thus easy to become a student and researcher in American history. Professor Aira Kemiläinen encouraged me to pursue for further studies, and I am indebted to her for her almost unlimited patience and support.

In my professional work I have concentrated as much as possible on the history of United States. It has been the most important area in my teaching as a lecturer in general history.

Because of the nature of my subject matter of my research there are a great number of institutions and individuals who have assisted me in various stages of the work. This study would not have been possible without them. There are so many of them, that its impossible to enumerate them all here. However, I want to mention a few of them. I would like to express my appreciation to a small army of archivists, librarians and curators which have guided me through their respective collections. Particularly helpful were the staff of Rigsarkivet, the British Library, the Public Record Office, Peabody Museum, the Historical Society of Pennsylvania, and, of course, the Jyväskylän University Library.

Financial support for my work has been most welcome from many institutions. Above all I wish to acknowledge with thanks a grant from the American Council of Learned Societies (ACLS). It made possible for me to study for almost a year at Harvard University Business School and collect material in its Baker Library, as well as in many other archives in Salem, Providence, New York, Washington D.C., and Philadelphia. From the point of view collecting source materials, it was of the utmost importance that I was able to go through the best archives in the eastern seaboard. This book took first shape during this fellowship year. I want to express my gratitude for Dr Paula Robbins, who extended the most valuable help and hospitality to me and my family during our stay in Winchester, MA.

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I have been fortunate in being able to work in a stimulating environment, in the Department of History and Ethnology of the University of Jyväskylä. My thesis could never have been completed without the quiet encouragement of my colleagues in the hard years when I was on the point of giving up. Thank you all.

It is common in the prefaces of thesis to save recognition of one's greatest debt untill last, and I have no reason to make an exception to this rule. Most of all, I am grateful to my family for their unfailing support. My wife Sirkka and our sons Timo, Mikko and Antti were tolerant of my odd working hours and the piles of books and papers which tended to spread from my study to all over our home. Sirkka ran a one-parent family more often than is reasonable. I also wish to thank my wife's parents, Hilikka and Matti Tantarimäki, for all kinds of help during so many years.

For my grandchildren Susanna and Matias

Laukaa
May Day, 2005

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ABBREVIATIONS

APS = American Philosophical Society
ASPCN = American State Papers, Commerce and Navigation
BIP = Brown & Ives Papers
BPP = Benjamin Pickman Papers
BSP = Benjamin Shreve Papers
BT = Board of Trade
BUJCBL = Brown University, John Carter Brown Library,
CFP = Crowninshield Family Papers
CR = Consular Reports/Consular Returns
CRI 1915 = Commerce of Rhode Island (Boston 1915)
CTPP = Charles and Thomas Parsons Papers
DFP = Derby Family Papers
DRA = (Danmarks) Rigsarkiv (Danish National Archives)
EGPP = Ebenezer and Gorman Parsons Papers
EI = Essex Institute
ENP = Everett Noble Papers
EP = Endicott Papers
FFP = Forbes Family Papers
FP = Fabens Papers
FO = Foreign Office
GFP = Goodhue Family Papers
GP = Girard Papers
HGP = Henry Gray Papers
HMM = Hunts' Merchant's Magazine and Commercial Review
HP = Hale Papers
HSP = Historical Society of Pennsylvania
HUBL = Harvard University, Baker Library
IHP = Isaac Hicks Papers
JDB = John D. Bates and Nathan Bridge Co.
JHAP = John H. Andrews Papers
JOP = John Osgood Papers
JRHP = John and Robert Hooper Papers
JRP = Jeffrey Richardson Papers
LNP = Lewis-Neilsen Papers
LP = Lewis Papers
MHS = Massachusetts Historical Society
NA = National Archives
NTC = Nathan Trotter Co.
NYHS = New-York Historical Society
NYPL = New York Public Library
OFP = Orne Family Papers
PDCP = Phelps, Dodge and Co Papers

PM = Peabody Museum
PPP = Philemon Putman Papers
PRO = Public Record Office
RG = Record Group
RFP = Ropes Family Papers
ST I = Sound Tables I (*Vareregistre fra Nord- og Østersøen 1773-1803, 1805-1817, 1824-29, DRA, ØTA*)
ST II = Sound Tables II (*Lister over Varer, som ere førte igjen- Øresundet fra Nordsøen og fra Østersøen 1831-56, DRA, ØTA*)
STA = Sound Toll Accounts (*Øresunds Toldbøger, DRA, ØTA*)
USR 1980 = The United States and Russia. The Beginning of Relations, 1765-1815 (Washington 1980)
WCRIC = Wetmore Collection on Rhode Island Commerce
WDLP = William D. Lewis Papers
WFP = Wendell Family Paper
ØTA = *Øresunds Toldkammerets Arkiv, DRA*

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ABSTRACT

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1 INTRODUCTION

1.1 The setting

The 19th century has often been described as the century of coal and steel. However, there are few signs of their triumphal march in the United States at the beginning of the century, and even fewer in Russia, which is considered as a trading partner of the United States in this study. The economic and commercial structure of both countries was agrarian and yet they were different from one another in many respects. The period in question, from the United States' independence to the Civil War, coincided with the beginning of modernization and industrialization. These processes began later in Russia and were different in nature but they did influence the country's foreign trade either directly or indirectly.

Walter Kirchner says in his work *Studies in Russian-American Commerce, 1820-60*, that American trade with Russia was "*sui generis*", totally different in essence from U.S. commerce with countries in Western Europe, Africa and Asia. Kirchner also claims that Russo-American trade benefited the East more than the West. He not only rejects the idea of Russia as an object of "colonial exploitation", but claims that relations between the countries benefited Russia more, since the U.S. share of its foreign trade was greater than Russia's share of U.S. trade. According to Kirchner, the need for Russian raw materials for the American shipbuilding industry made the commercial relations important. The situation changed in the 1850s due to the great demand for cotton wool in Russia.¹ It is true that at least until 1808, the year of the Embargo, trade relations were regulated by the demand for Russian products in America. But after 1815 the demand for colonial products in St Petersburg became the major force behind the commerce between the two countries. The culmination of this development was the bulk shipment of raw sugar from Cuba in the 1830s and the early 1840s. American cotton wool became important only after this period.

¹ Kirchner 1975, 3-5.

Both the United States and Russia were countries of economic nationalism, and the old mercantilist ideas, for example the emphasis on primacy of exports, played a central role in both. Russian trade with Western Europe increased significantly in the period from the mid-18th century to the mid-19th century. In Immanuel Wallerstein's terminology, this meant that Russia was incorporated into the European capitalist world-economy. The structure of the country's exports changed dramatically as the export of manufactures and semi-manufactures (hemp, iron, flax) decreased and the export of primary products, above all grain, increased. All in all, Russia did not end up in the same position in the world economy as, for instance, India or Turkey. According to Wallerstein, the American market for Russian products in the "semiperipheral zone" had a central influence on Russia's incorporation into the world-economy.²

The development of commercial intercourse between Russia and the United States during the 80 years in question must be considered in connection with the structure of the economy in each country and the way this changed. The role of the Americans in the problematic industrialisation process of Russia is interesting with respect to two key fields, raw sugar and cotton. According to Thomas C. Owen, forms of capitalistic entrepreneurship first appeared in the cotton industry, which used semi-finished or raw American cotton wool as a basic raw material.³ The English dominated the import trade of both of these into Russia, and only in the 1850s did direct trade begin between the southern ports of the United States and St Petersburg, in which cotton was carried by American tonnage.

The above-mentioned work by Walter Kirchner is the only study concentrating on American-Russian commerce before the Civil War. Studies dealing mainly with political questions and special problems which also touch upon commerce are, however, numerous. Generally speaking, the origin of super power relations has been the focus of interest. The most thorough survey of the field is Norman E. Saul's *Distant Friends. The United States and Russia, 1763-1867*, published in 1991. N. N. Bolkhovitinov is perhaps the best-known and most highly-respected Russian expert in the field, with several thorough and detailed articles to his name. However, their approach to the subject reflects the author's own political concerns.⁴

The massive source publication *United States and Russia (USR)*, published in 1980, is the result of a Soviet-American Cultural Agreement. The work, which covers the period from the 1760s until 1815, is by far the most reliable printed publication on the first decades of relations between the two countries. Most of its contents deal with Russian-American cultural relations, but it also

² Wallerstein 1989, 129,137, 141 (note 61), 142, 151-152, 184; cf. Bolkhovitinov 1975, 79-80.

³ Owen 1983, 64-65.

⁴ Bolkhovitinov (1975, 357): "What are the main lessons to be learned for Russian-American relations?"; see J. Dane Hartgrove's foreword to the work in question.

includes much on commercial diplomacy and correspondence between trading houses, which has been of use in this study.⁵

American merchants and trading houses were the central actors in U.S. trade with Russia. Thus, the history of this commerce must be researched from the perspective of American entrepreneurship. The written material about the activities of these entrepreneurs in connection with trade in the Baltic is most abundant for the beginning of trade with St Petersburg and events during the Napoleonic Wars. The latter period offers excellent, yet fragmentary, material for dramatic and eventful narratives, Alfred W. Crosby produced an interesting and persuasive account of this period in 1965 in his work *America, Russia, Hemp and Napoleon: American Trade with Russia and the Baltic, 1783-1812*. The study includes excellent specific studies of the gains and losses, and privateers and smugglers in American trade, but it discusses commercial diplomacy between the United States and Russia and its central problem, the principle of “free ships – free goods”, on quite a general level.

1.2 The aims of the study

The principal purpose of this study is to discuss the development of commerce, mercantile shipping and politico-commercial relations between the United States and Russia from the Treaty of Paris in 1783 to the year 1860. These problems are approached on four different levels: 1) commercial diplomacy between the countries, 2) the entrepreneurs involved in commerce and their activities, 3) mercantile shipping between the countries and 4) volume of trade.

During the period under consideration the foreign policy of the United States was quite tightly harnessed to the advancement of commerce and shipping. The equation of commerce and foreign policy shows perhaps most clearly in the principle of free ships – free goods, which Britain, the most prominent trading partner of the United States and also the power which dominated the seas, did not easily accept in the form the Americans proposed. American diplomacy sought support for its objectives from St Petersburg. During Napoleon’s Continental System the Baltic Sea was for a while at the core of the entire American neutrality policy. Successive orders and declarations by countries at war, which sometimes cancelled one another out, had a deep influence on trade with Russia. This study aims at answering the question of how the neutrality of trade was sustained or struggled for during the Revolutionary Wars, the Napoleonic Wars and the Crimean War. A special role was attributed to Russia in American policy. What was this, and how far did the Americans succeed in their objectives?⁶

⁵ For the work “fifty American and ten Soviet repositories were searched ... in areas from California to the Black Sea”; Bradford 1987, 283-284.

⁶ Privateering in the first years of the 19th century on the Baltic Sea, which had a strong influence on Russian trade, is left outside the scope of this study. John N.

Commerce between two countries is naturally influenced by both international and national trade policy and sometimes, special cases arise where, sanctions or privileges apply to one particular trading partner. In a late mercantilist spirit, problems of commercial policy appeared to the Americans – and also to the Russians – mainly as questions concerning customs duties and their effects. The same applied also to mercantile shipping: to what extent should it be reserved to the country's own vessels with the help of, for instance, tonnage duties? These questions were answered in partly divergent but also to some degree similar ways in St Petersburg and Washington.

The point of view in this study is “American” – not because the American sources are more abundant or informative than the Russian, but because the activity discussed in this study originated mainly on the west coast of the Atlantic. Most of the entrepreneurs involved in trade operated from New England, and the tonnage of mercantile shipping between the countries also came from the North-East states of the United States. The purpose of the study is to shed light on entrepreneurship in American-Russian trade: the practices, the merchandize and those engaged in trade.

Not only the Atlantic, but also the Baltic Sea lay between the centres of commerce and thus merchant shipping played a central role in the system. The study attempts to give answers to questions of how and with what kind of vessels such trade centres as Havana, Boston and St Petersburg, located thousands of miles apart, were connected. The scale of trade between the United States and Russia was naturally influenced by fluctuation in supply and demand, which in turn were connected to the economic development of both countries. On this subject more attention is paid here to long term changes rather than short-term cyclical movements. The sugar triangle via Cuba also had a crucial influence on American-Russian commerce, which meant that American mercantile shipping to St Petersburg carried mostly the products of so-called third countries. This also had a crucial influence on U.S. imports from Russia, but did not directly effect U.S. exports. In any case, the triangular trade made the exchange of goods and merchant shipping between the countries a rather complicated matter.

Because of the sugar triangle it is difficult to obtain data on the American carrying trade, since both the American and Russian “official” statistics are almost useless as a source for assessing its volume and estimating its commercial importance. In practice, however, all American merchant shipping on the Baltic Sea and trade between the United States and Russia was carried through the Sound, and goods and their carriers were caught on record in Elsinore, where almost all traffic passing the Sound was registered for the purpose of collecting the Sound dues. Thus, a comparison of American and Russian trade statistics with the Sound Toll Accounts (STA) becomes a basic

Tønnessen (1955) and above-mentioned Alfred J. Crosby (1965) have discussed the question thoroughly.

problem affecting the above-mentioned main concerns of the study.⁷ Do the records created by officials in Elsinore constitute a relevant source for American commerce and shipping?

The problem of regional distribution of commerce and merchant shipping does not really exist as far as Baltic Russia⁸ and even Russia as a whole are concerned: commerce was almost totally concentrated on St Petersburg. Trade via Archangel, the Black Sea and Pacific Russia remained very insignificant. Although New York became the paramount centre of U.S. foreign trade at the beginning of the 19th century, the major export products to Russia were not carried via there. As a rule cotton from the Southern ports and sugar from Havana went directly to Russia, while re-exports went mainly via New England to St Petersburg. New England was also a centre of shipbuilding, and the sailing vessels which carried Russian trade were built there and also owned by merchants of the region. Several structural and institutional changes took place in U.S. foreign trade in the period discussed. Did these changes occur also in trade with Russia?

1.3 Source material

Sound Toll Accounts as a source for American trade.

Printed records of the Sound dues collected by Danes in Elsinore are available from the 1660s to the year 1783 in a form edited by Nina Ellinger Bang and Knud Korst in 1930-53. The value of this publication as well as the significance of the toll accounts as a source for commerce and shipping has been discussed for several decades.⁹ *Sound Toll Accounts 1784-95* is available in a form devised by Hans Christian Johansen, partially printed, partly as microfiches and in its entirety in code form on magnetic tape. They provide all the same information as the original toll accounts including all possible combinations of the data about the vessels and their cargoes.¹⁰

The original toll accounts record the date of passage, name of captain and home port, the port(s) of departure and destination, composition of cargo, and the amount paid in dues on each article and the vessels entering Elsinore more

⁷ Several studies use also Sound Toll Register (STR) the English name for the toll accounts (*Da. Øresunds Toldbøger*); see e.g. Christensen 1938a; Christensen 1941; Rasch 1965; Rabuzzi 1998, 24; Müller, 2004.

⁸ In this study, Baltic Russia refers to Russian Baltic provinces and the autonomous Grand Duchy of Finland. Apart from St Petersburg, only Riga in Latvia, Wiborg (Viipuri) in Finland and Reval (Tallinn) in Estonia had any real significance in American trade.

⁹ E.g. Faber 1988, 95 (note 1); Christensen 1941, passim; Christensen 1938a; Christensen 1938b; Heckscher 1942, 170-186.

¹⁰ See Johansen 1983a.

or less in chronological order.¹¹ The actual purpose of the lists, i.e., documentation of the collection of duties, shows very clearly in the fact that the cargos of the vessels are usually very carefully itemized, and the amounts paid in duty are recorded in the same meticulous way.¹²

Sound dues were collected on products mentioned in the general tariff as specific duties, and as the market prices of the products sometimes fluctuated significantly, the accounts can be used as a measure of the value of the trade flow only on a very general level. The toll accounts show only one phenomenon indisputably: how many vessels passed the Sound in a given period and the quantities of which products they carried. What was in question was traffic in transit and the payments levied on it, and it is obvious that far-reaching conclusions cannot be drawn on their basis about the total trade between areas east and west of the Sound, and even less can calculations be made as to the trade balance or balance of payments of the Baltic Sea region with, for example, western European countries. On the other hand, it has also been claimed that the traffic in the Sound is an effective barometer for economic transactions in Northern European East-West trade in the early modern period.¹³ Yet it must also always keep in mind that the Sound was not the only passage for trade between the Baltic Sea and the North Sea. Particularly in the times of crisis many products were carried to the Baltic via Hamburg, through the straits of the Belts or via Schleswig-Holstein, in other words through the channel of the Eider.¹⁴ These alternative routes did not play a significant part in trade between the United States and Russia.

The Sound Toll Accounts, which are retained in the Danish Record Office (*Da. Rigsarkivet*), have been examined for the years 1783-1806 and 1815-50 for this study.¹⁵ The vessels passing the Sound are divided into six, later seven,

¹¹ The names, description and tonnage of vessels are not usually recorded. Some exceptions to the practice occur mainly from the 1840s on. By contrast, the agent who took care of clearing the ship's documents at the customs house is almost always recorded.

¹² In practice, the duty was collected as follows: the captain or supercargo of vessels anchored off Elsinore contacted an agent, who straight away lodged his papers with the toll authorities. The duty of cargo was set according to bills of lading and invoices. The vessels were very rarely inspected, unless especially an American ship's documents were incomplete. In such cases – and also when the documents were suspected to be false or forged – the customs officers directed the vessel to Copenhagen for further clarification; see Rasch 1965, 32.

¹³ See Heckscher 1942, 172-177; Christensen 1941, 54-55; Harder-Gersdorff 1988, 237.

¹⁴ The channel of the Eider, which was built in 1777-84, connected Tønning at the mouth of the Eider on the North Sea with Holtenau, which was close to Kiel. Vessels of 150-180 tons (*Da. 60-70 kommercelæster*) could pass the channel. In 1791-95 an average of somewhat more than 1700 vessels a year used it. See Attman 1986a, 97; Johansen 1983a, 7, 9; Johansen 1983b, 170; Rasch 1965, 36; Wheaton to the Secretary of State, 20 April 1830, NA M-41/3/18.

¹⁵ Also material on Hans Christian Johansen's magnetic tapes for 1784-1795 has been used in this study. Professor Johansen kindly supplied material that contains information about all vessels that passed the Sound, the homeport, port of departure or port of destination in North America. The customs book for 1807 is incomplete (according to DRA it has been missing since 1961), and the vessel-specific data is

groups in the custom books according to the vessel's (captain's) home country. Thus, for example English and Swedish vessels each form a group of their own in the account volumes, but the countries from which fewer vessels visited the Baltic Sea were lumped together into "miscellaneous groups". The distinction between the vessels of "privileged" and "non-privileged" countries was vital to the Americans. The latter formed a group of their own, and vessels belonging to it had to pay somewhat higher duties on some products than did the others. At the end of the 18th century the countries of origin were divided into six groups; the United States belonged to the same group as the other "non-privileged countries", such as Prussia, Portugal, Lübeck, Danzig, Emden and Bremen. For instance in 1786-89 this group on average included 1700 vessels. At the same time an average of 9700 vessels sailed through the Sound.

In 1815-18 the "American group" included an average of 1750 vessels per year. The number of British vessels was 2800, and the total that passed the Sound numbered 10,900.¹⁶ A trade agreement between Denmark and the United States was concluded in 1826, and by this the American vessels were promoted to the group of "privileged nations". American vessels were listed together with Prussian and Dutch, and in the 1830s first Belgian and later Austrian and Bremen vessels were included in this group. In 1841-43 the size of the group was 3800 vessels on average while the total number of vessels passing the Sound had risen to 14,600. The vessels were divided into groups according to nationality until 1850 and in some years each group was divided into two: those sailing westward and those sailing eastward.¹⁷ Until the year 1850 vessels of all groups were recorded in the custom books with a consecutive number roughly in the same order as they arrived off the Elsinore coast. In that year the old practice was abandoned: vessels were not specified according to nationality; instead, vessels sailing east and west were recorded in the order of their arrival in two large registers, which recorded altogether almost 20,000 vessels.¹⁸

missing for 1808-1812. Due to the war between the United States and Britain, vessels admitting American origin did not visit the Baltic Sea in 1813-14.

¹⁶ Total number of vessels passing the Sound can be seen in Appendix, table 22.

¹⁷ The Americans that sailed east through the Sound belonged to the volume/band 3B-2 and those that sailed west to the volume 7B-2. All vessels sailing in ballast were included in volume 10B-2.

¹⁸ In 1850 19,100 vessels (2.4 million tons) passed through customs. – For the sake of brevity, individual American vessels are referred to without recording the serial numbers of the volume in question. Only the year and the running number in the volume(s) in which the American vessels are recorded are mentioned, for example: STA 1794 (384). When the reference discusses for example a vessel that passed Elsinore four times in the same year, the consecutive numbers are marked as follows: STA 1794 (384/631/1054/1291). When different vessels are referred to, the consecutive numbers are separated with a comma: STA 1794 (363, 384). As the consuls' shipping lists are compiled under the name of the vessel other information recorded by the consuls, such as the description of the vessel, its name and tonnage, are recorded in references when necessary to ease the recognition of a vessel. STA does not usually record them, for example: STA 1801 (2479/2783), the ship *Fox* from Charleston (279 tons). Sometimes also the captain, and in some cases also the owners of the vessels the consuls have reported, are mentioned. – Consular Reports or

STA can be considered a generally reliable register at least in that all mercantile vessels passing the Sound are recorded in it, except at times of war. However, some American vessels sailing to the Baltic Sea never, according to STA, returned. Similarly, there are vessels that sailed west through the Sound that had never entered the Baltic according to STA. There are several possible reasons: sailing through the Great Belt and the Little Belt, which was unusual as such, or else the sale or wrecking of the vessel.¹⁹ Vessels that arrived in St Petersburg late in the autumn sometimes returned to Elsinore only during the next spring. To all appearances the greatest differences in the records between the numbers of vessels sailing to the Baltic Sea and those arriving there are the result of several American vessels being recorded as British, particularly at the beginning of the period. One reason for the practice may have been the similarity between British and American place names or the slight advantage the Americans gained before 1826 when they posed as British.²⁰ For some reason the Americans sailing in ballast ended up particularly commonly as part of the British group. It can be concluded from the consuls' shipping lists that this no longer happened after the 1830s.

Several problems arise from the use of STA. In this study they are discussed in greater detail in the chapters dealing with shipping, exports and imports. Generally speaking, uncertainties are created by the fact that it cannot be concluded on the basis of the customs accounts whether vessels sailing to the Baltic and North Sea did, in fact, sail to the ports of destination the captains reported in Elsinore. The question was quite essential to American trade particularly at the turn of the centuries, when exports to the Baltic Sea were concentrated almost totally on Copenhagen according to STA. As imports from the Baltic were, above all, imports from St Petersburg on the same vessels, one is often left with the question of what proportion of the exports aimed at Denmark really stayed there, and how much ended up in Russian ports. The problem is less significant with regard to imports, as the vessels sailed almost

Consular Returns (CR) are referred to only with the abbreviation CR and the year, and the marking of the series of microfilm of the National Archives (NA) in question, for example: CR 1801, NA T-201/2.

¹⁹ For example Captain J.B. Brusck took A. & C. Cunningham's brig *Caribbea* registered in Boston, from Boston to Pillau via Copenhagen in mid-June 1836. A month later the vessel was again in the Sound on its way to Boston. The brig arrived at Elsinore for the third time on 21 October and the captain reported sailing to Königsberg via Copenhagen. Neither the consul in Elsinore nor the list of American vessels in STA record the return of the vessel westward at the end of 1836 or the next year. In 1841 Captain W. Curtis took the bark *Hudson* from Boston to St Petersburg with a cargo of over a million pounds of sugar. However, the vessel did not arrive at St Petersburg, and STA does not record her return from the Baltic.

²⁰ Sometimes, but not always, the American ports were distinguished by the note "i Amerika", e.g. Bristol i Amerika; STA 1816 (386). In this study information about vessels, including their ports of departure and arrival, is recorded according to STA if not mentioned separately; only some clear slips of the pen have been corrected. For instance in 1802 Brown & Ives's (of Providence) brig *Eliza* was claimed to go from St Petersburg to Antwerp when she sailed eastward; STA 1802 (2184); CR 1802, NA T-201/1.

without exception directly from St Petersburg unless occasionally with Russian products loaded in Copenhagen.

Usually STA recorded only one port of departure for vessels sailing east through the Sound, and this was not necessarily the port where the original cargo was loaded but the port the vessel had last visited.²¹ Thus, the problem with the itemization of products carried to the Baltic Sea is that vessels sailing with a wide variety of products had sometimes taken on their cargo at several different places and in different countries. However, ordinarily a part of the cargo carried from North America was unloaded at a west-European port, for instance at Le Havre, and then Le Havre was recorded as the loading port for the rest of the cargo carried to the Baltic Sea.²² The same phenomenon also appears with vessels that passed the Sound westbound: for example when a vessel crossed from St Petersburg to Stockholm to take on iron, the cargo loaded in Kronstadt was sometimes recorded as Swedish in Elsinore because of the last port of departure. However, the consignments in question were quite small. Moreover products that the tariff list of Elsinore did not recognize were left without detailed records; they were included under “miscellaneous goods” or “sundries” (Da. kræmmeri / købmandsskaper). It is problematic for this study that “machines and devices” were also registered under that category. Occasionally, though rarely, only the value of the entire cargo in rixdollars (Da. rigsdaler) was recorded and the duty payable on it.²³

In addition to actual customs books, also a kind of summary table of goods passing the Sound was drawn up in the Elsinore customs house from the 1770s on. These Sound Tables (ST)²⁴ are employed systematically in this study for the years 1815-17, 1824-29 and 1831-56. The products carried from the Baltic and North Sea are listed in alphabetical order for the period before 1831, and ports of departure and ports of destination are recorded for each product. Thus,

²¹ The ship *Coliseum* of Boston had, according to STA, departed from Boston for St Petersburg in summer 1837, but according to the consuls in Elsinore and St Petersburg, the ship had visited both Cuba and Antwerp. Even the scales of measurement (kilograms or pounds) of the produce carried by the vessel sailing short-loaded (madder, pepper, sugar) do not indisputably reveal the loading port; STA 1837 (2822); CR 1837, NA M-81/3, and T-201/1.

²² Analysis of American traffic with respect to Copenhagen is, to some degree, complicated by the fact that traffic between different parts of the monarchy and the carriage of Danish products was duty-free. Thus, for example records of traffic between St Croix and Denmark and export of Norwegian iron at the end of the 18th century are insufficient; see Johansen 1983a, 8.

²³ E.g. in the summer of 1844 the ship *Lucas* of New York (Capt. James Miller) carried “150 packages tools” and an unspecified number of “locomotive engines”. They were material sent from Philadelphia by Eastwick & Harrison and from Baltimore by Ross Winans for Russian railway enterprises. The consul in Elsinore recorded their value as \$14,200 and STA 13,111 rixdollars; STA 1844 (254); Gibson to Calhoun, 1/13 August 1844, NA M-81/4; CR 1844, NA T-201/2. Also in 1838 the bark *Venice* of Boston carried 433 cases of machinery (valued at 47,800 rixdollars) to St Petersburg; STA 1838 (2517).

²⁴ DRA, ØTA, Vareregistre fra Nord- og Østersøen 1773-1803, 1805-1817, 1824-29; Lister över Varer som ere førte igjen- Øresundet fra Nordsøen og fra Østersøen, 1831-56. For the sake of brevity the names of the series of records are omitted in the text and footnotes; see Abbreviations.

these Sound Tables report, for example, how much iron and hemp was carried west from St Petersburg and Stockholm through the Sound, and similarly what quantities of those products were carried to Boston, New York or London. In other words, ST does not report the amounts carried from St Petersburg to Boston. ST records for instance how much sugar from Havana or rice from Charleston was carried east of the Sound, and the total quantities these products carried to St Petersburg and Copenhagen. The tables are not interrelated; they do not show how much rice from Charleston or sugar from Cuba was carried to St Petersburg or Copenhagen. The tables before 1831 are referred to here by the abbreviation ST I.

From the year 1831 onwards the structure of the Sound Tables changed so as to be interrelated according to countries: they report how much, for instance, iron was transported from Russia or Sweden to the United States and, conversely, how much rice was carried from the United States to Denmark or Russia. The Sound Tables for the years 1831-56 do not record individual ports of departure or ports of destination. This study refers to this series using the abbreviation ST II. These tables are, at least with respect to American trade, a somewhat problematic source, as the names given to products are sometimes different from those in STA. An even odder situation is created by the fact that, for some reason, smaller amounts of, for instance, hemp are recorded as being carried from Russia to the United States than can be calculated from the vessel-specific catalogues of STA or the consuls' shipping lists. However, ST I agrees in the case of lumber, for instance, with Bang's and Korst's catalogues and Johansen's material. A study by Jorma Ahvenainen of Finnish lumber exports shows this rather well,²⁵ and Sven-Erik Åström claims that ST is a "relatively reliable and very informative source".²⁶

Other archival material

Consular Reports or Consular Returns (CR) are a basic source for trade between the United States and the Baltic ports, particularly as far as navigation is concerned. According to regulations laid down in 1790 and specified in 1801 and 1803, consuls were expected to provide detailed accounts of trade at their posting. Although consuls were subordinate to ministers, their duty was also to report independently to the Secretary of State and send biannual reports by the end of June and December including all American vessels that visited their territory. The reports were expected to indicate the name of the captain and his place of residence, the name of the vessel, her description and burden, the number of sailors, ports of departure and destination, intermediary ports of call, quantity and value of outward and homeward cargo and, finally, the owners of the vessel and the cargoes. However, not a single report fulfilling all these demands was sent from the Baltic ports, except for Stockholm, in the period discussed. The consuls did not possess the means to gather all this

²⁵ Ahvenainen 1982, 139.

²⁶ Åström 1988, 112.

information if the merchants did not report them themselves. An obvious reason for this was that most of the consuls were themselves merchants and thus possible competitors of American captain visiting the ports.²⁷ At the beginning of the 19th century the reports were still very incomplete, but they had become more comprehensive by around the middle of the century, especially with respect to St Petersburg.

The most valuable contribution of the consular reports is shipping lists, which give specific information for each vessel. The information about the burden of vessels, the number of crew and the contents and amounts of their cargoes are often very precise. By contrast, the rouble or dollar values and information about the owners of the vessels or cargoes are very indefinite. The most common practice was to report the main owner(s) and to cover the rest with "etc." The records also do not reveal whether the merchants mentioned in the lists were also owners of the cargoes or whether they were sent to them for sale on commission. Often cargoes carried from St Petersburg to non-American ports were recorded as "cargo on freight".

The consuls in Elsinore and St Petersburg had the best point of vantage from which to observe American traffic on the Baltic Sea. Their returns are used in this study in conjunction with STA as complementary and comparative materials. Reports of the consul in St Petersburg are available as a continuous series from 1835, and the returns of the consul in Elsinore/Copenhagen from 1834. The earlier reports from Elsinore include exceptional information about the owners of the vessels in the beginning of the 1790s and in the first years of the 19th century. The reports from Copenhagen include similar data from around the year 1830.²⁸

Trade between the United States and Russia was almost totally carried by American vessels. This state of affairs also shows up in the terminology used by the consuls. From the point of view of St Petersburg, "export to the United States" was synonymous with the expression "export on American vessels".²⁹ Only in the 1850s, with the growth in non-American tonnage, was a distinction made between these two.

Both the American and the English consuls, and sometimes also their ministers, attached to their reports sent from St Petersburg summaries, printed in English, German and French, on trade at their posting. Many of these summaries are also attached to letters sent to their American and English trading partners by firms in St Petersburg. They are based on information provided by the St Petersburg customs house, which was suitably edited. These summaries were of two types: lists recording exports, imports and shipping traffic to St Petersburg, and lists concentrating on the vessels of particular countries, drawn up principally by English, German or American consuls or

²⁷ Levett Harris to Madison, 1/13 September 1804, NA M-81/1; Abraham Gibson to Adams, 12/24 January 1822, NA M-81/2; John Randolph Clay to Livingston, 12 May 1832, doc. C, NA M-35/12/24.

²⁸ Consular reports from Copenhagen also contain Le Pelley & Marcussen's printed lists of American vessels passing through the Sound from 1834-38.

²⁹ E.g. Abraham Gibson to Adams, 14/26 March 1824, NA M-81/2.

trading houses.³⁰ These lists are reprinted in the much-used works of Timothy Pitkin and J. Jepson Oddy, a member of the Russia Company. Both works equate export from St Petersburg on American vessels with the U.S. importation from Russia.³¹

In this study the above-mentioned printed lists are considered comparable to consular reports, and they are used for the years where the consular returns are missing or are for some reason unusable. Printed summaries exist only for some years at the beginning of the period. For the mid-1830s onwards both the printed lists and the shipping lists the consuls themselves drew up are used in this study. In principle the information provided by these sources should be convergent. Nevertheless, it is not in fact so. The summaries the consuls have drawn up with respect to different types of cargo do not tally with the other lists, nor even with sums calculated on the basis of the data about vessels the consuls themselves drew up. The vessel-specific records sometimes lack products that were considered of lesser importance, although usually the reports are fairly precise. Together with STA and ST II, the consuls' vessel-specific lists constitute the basis for the statistics in this study.

Information about cargoes as it appears in STA and in consular returns is not uniform, though great or systematic differences are scarce. The consuls often reported the data in the weights and measures used at their posting, but sometimes converted them rather erratically into American ones, for example converting Russian measurements of capacity into pounds.³² Some differences are also caused by the equation of gross and net weight. However, even when different kinds of possible error-causing factors are taken into account it is difficult to explain, for instance, the illogical variations in coffee amounts.³³ By contrast, when there appears a difference of 10 percent in the quantities of sugar or rice recorded this can probably be explained in terms of gross instead of net weight being given. The difference was sometimes above 20 percent with indigo.³⁴ It is not unusual for the amount of, for instance, cotton wool carried on a given vessel to be different in all three lists, i.e. the consular reports of Elsinore and St Petersburg and STA. The differences are not crucial.³⁵ The

³⁰ For instance in 1854 the accounts of trade appended to the reports of the U.S. consul in St Petersburg (NA M-81/5) were as follows: "Account of Goods exported in American Ships from St. Petersburg in 1853" (by Row & Wilkins), "General list of principal goods imported to St. Petersburg during the Navigation of the last four years 1850-53" (by H. Conradi), "Account of Goods exported from St. Petersburg anno 1853" (by John Booker & Son), "Verzeichniss aller von Sanct-Petersburg im Jahre 1853 ausgeführten waaren" (by Friedrich Winberg & Co.), and "Übersicht der Schiffart von Cronstadt im Jahre 1853" (by Friedrich Winberg & Co.); see Cuenca Esteban 1984, 49ff.; North 1960, 590ff.

³¹ See Appendix, list 1.

³² On weight and measures used in the study, see Appendix, list 2.

³³ For example in 1832 the cargo of coffee taken on in Havana by Boston merchant John Brown's ship *Coliseum* was registered in Elsinore at 316,400 lbs; yet as much as 404,300 lbs was unloaded in Copenhagen; STA 1832 (723); CR 1832, NA T-195/3.

³⁴ E.g. the ship *Panthea* of New York and the ship *Manchester* of Bath; STA 1844 (857), and STA 1845 (180); CR 1844-45, NA M-81/4.

³⁵ E.g. ship *Plato* of New York; STA 1841 (1178); CR 1841, NA 201/2, and M-81/4.

consular returns are essentially more precise than STA with respect to vessels sailed in ballast or short-loaded.³⁶

The information in STA and in the consular reports as to ports of loading and destination differs slightly. Usually neither of the sources specifies at which port each cargo item is loaded on, for instance, what kind of cargo the vessel had on board on leaving Boston for Russia via Cuba.³⁷ The recorded ports of destination of vessels sailing from St Petersburg to the United States are distinctly more consistent in the consular reports and STA than the departure ports of voyages from the west to St Petersburg. The greatest differences occur with vessels in ballast whether sailing east or west. The consuls recorded the ports of destination in markedly greater detail than STA.³⁸ The differences had only a minor influence on the figures for the actual turnover of goods. It is natural that the consuls were more “right” than STA about the destination of vessels sailing to the Baltic, since the former recorded in their biannual returns a voyage which had already taken place whereas STA recorded only the declared intention.³⁹ Because raw sugar was carried as freight from Cuba, the reports of consuls in Havana are also an important source for American shipping. Unfortunately, the reports record only some of the vessels that departed from Havana for St Petersburg, either when they supplemented their cargo in Matanzas or when they sailed via North American ports. Sometimes the European destination was kept secret, while sometimes it was simply not known until instructions were received in, say, Cowes.

The United States had a consulate in St Petersburg from 1803 on and a legation from 1809. Despatches from ministers are central sources for commercial policy and questions about neutrality, but they cast little light on commerce and shipping. The ministers were content with general comments, and may have offered them only when “there was nothing else to report” as Minister William Wilkins wrote in 1835.⁴⁰

³⁶ E.g. bark *Wallace*, brig *Hardy*, and ship *Cherokee*, all of Boston; STA 1841 (1204, 2154, 2578), CR 1841, NA T-201/1, and M-81/4.

³⁷ For instance, for 1841 the brig *Athens* and the ship *Virginia*, both of Newburyport, are exceptions. Both of them sailed to St Petersburg via Cuba. The former had taken on logwood as ballast at her home port and the latter had done so in Boston; STA 1841 (1181, 2189); CR 1841, NA T-201/1, and M-81/4.

³⁸ For example, in 1841 the destination port of the bark *Lucretia* of Portland was, according to STA, the “North Sea” when she left the Baltic, but the consuls of both St Petersburg and Elsinore recorded the vessel as sailing in ballast to Gothenburg; STA 1841 (2204); CR 1841, NA M-81/4, and T-201/2.

³⁹ E.g. Captain Thomas Oakes of Boston brought iron from Copenhagen although STA records the captain sailing to St Petersburg. Oakes only spent from 19 August to 7 September (1801) in the Baltic with the ship *Pocahontas* (240 tons) owned by J. Holland, and even if the vessel sailed eastward in ballast (according to STA, she had departed from Hamburg; according to the consul in Elsinore, from Gothenburg), she could not have managed to fetch a cargo of iron from Russia in the given time. When the *Pocahontas* returned to Elsinore, STA and the consul both recorded Copenhagen as her port of departure. The port of destination, though, was again recorded differently: the consul put down Boston, but STA only “North America”; STA 1801 (1781/2051); CR 1801, NA T-201/1.

⁴⁰ Wilkins to Forsyth, 1 September 1835, NA M-35/13/10.

Most of the archival material used in this study consists of correspondence between merchants and trading houses in St Petersburg and America, and correspondence between American shipowner-merchants and their captains. They are the most central materials when mercantile shipping is studied from the point of view of entrepreneurship. They cast light on the profitability of trade to some extent, but even more on problems of decision-making, financing arrangements and acquiring information. Generally speaking, a great deal of material from American merchants and trading houses about trade with Russia has been preserved. The material used in this study is mainly from the Baker Library of Harvard University Business School, and the collections of the Peabody Museum and the Essex Institute in Salem.

Printed statistics

The weaknesses of the so-called official statistics for different countries' foreign trade have been remarked upon and discussed in innumerable contexts. This problem applies equally to the statistics of the United States and Russia. The problems with using the statistics of either country start with that absolute figures are often incorrect, or even more often carelessly compiled. It is quite impossible to "combine" the trade statistics of Russia and the United States. However, they are not unusable for research purposes.⁴¹

U.S. foreign trade statistics were compiled from the records kept by the customs. Although the American statistics are probably the most reliable national records of this kind by comparison with any others, shortcomings do occur. The import figures are probably more reliable than the export figures, if only because export levies did not exist and it was therefore not necessary to register exports in great detail. However, it cannot be known whether the figures are too high or too low. Re-export adds to the problems of export statistics. It is difficult to ascertain whether re-exports were subject to U.S. customs procedures. It is also difficult to deal with the problem of how often the captains gave false information about their port of destination on departing from North America for the sake of concealment or otherwise trying to mislead. One additional problem is that the invisible items which affect the balance of payments must be estimated, because how they were priced often depends upon "merely informed guesses".⁴²

The export prices of the U.S. official statistics were, at least usually, official assessments of market prices made by customs officers, and most often based on written statements submitted under oath by the captains. There was no reason for deception, but there is good reason to assume that the captains were not always aware of the exact values of the cargoes they carried. The value of

⁴¹ See Kirchner 1975, 3, 56. On problems with 19th century British trade statistics, see Davis 1979, 10-11.

⁴² See North 1960, 575; Kirchner 1975, 43-45; Taylor 1951, 198.

imports was defined in the same way, but customs officials were much more alert in estimating them than exports.⁴³

Before 1812 the items on which ad valorem duty was payable are lumped together without specifying what exactly they were, and only the quantities of specific dutiable goods were recorded. Many products going to Russia belonged to the latter group. According to a tariff law of 1816 the value of imports was to be declared "on the net costs" at the port of departure. In other words, it did not include commission and charges. Only the import value of products subject to ad valorem duty (e.g. linen) was recorded. The value of products was not recorded if duty by weight was in question. No records were made on duty-free articles. As a consequence of a law of 1820, comprehensive foreign statistics were gathered for the first time and the total value of all imports was ascertained regardless of their duty status. From 1821 on the value of exports and imports was calculated according to prices at American ports. The figures for both imports and exports became more precise, although at least import values still appeared lower than they should have done.⁴⁴

The U.S. statistics which are called "official" present different export and import figures. The series *The Annual Reports of the Treasury in the Executive Documents on the Commerce and Navigation* from 1821 on is used in this study. Several American trade publications used in this study also used this source, for example *Hunt's Merchants' Magazine and Commercial Review* (published from 1839) and *Nile's Weekly Register*, which was founded in 1811, and had a wide circulation.⁴⁵ *The Commerce and Navigation* series also provides information about navigation, for instance, specifying the figures for the exports and imports of each country carried on American and foreign tonnage.

The Russian foreign trade statistics are often judged one the poorest of their kind. In 1834 Secretary of Legation John Randolph Clay rejected the official statistics as being more or less fabricated and therefore thoroughly unreliable.⁴⁶ The massive bureaucracy of the tsar produced a mountain of

⁴³ Cuenca Esteban 1984, 49; Isserlis 1938, 64-84; North 1960, 590. Undervaluation was usual throughout the period. It was a common practice to draw up two invoices, one for customs and the other with "true value".

⁴⁴ Before 1821 the import figures for "official statistics" are usually taken from Pitkin's work (1816) and hand-written records of the Treasury Department. Pitkin uses the calendar year and the Ministry the fiscal year. The value of imports is considered lower than c.i.f. -prices at the port of entry, but higher than f.o.b. -values. Duty-free imports are added to the statistics by estimation; Cuenca Esteban 1984, 49; Isserlis 1938, 64-84; North 1960, 590. Calculations of import and export values before 1821 were made in 1835 by the Treasury Department. They were regarded as "official" figures; see Taylor 1951, 199; North 1966, 24-25; Pitkin 1835, 163-164.

⁴⁵ Miscellaneous Documents of the House of Representatives, compiled in 1892-93, provides somewhat divergent information from the series Commerce and Navigation. They differ by about five percent; Kirchner 1975, 45. Nile's Weekly Register was in the 1820s and the 1830s the semi-official protectionist publication; Bairoch 1989, 140, note 200. Taylor (1968, 3) calls the founder of the publication, Hezekiah Nile, an "indefatigable worker in the protectionist vineyard". Several American Ministers to St Petersburg used the publication. For example John Randolph took with him 35 bound volumes; Oeste 1966, 58.

⁴⁶ Clay to Louis McLane, 16/28 February 1834, NA M-35/12/19.

statistics, but above all they were intended to serve financial objectives of the state.⁴⁷ Russian statistical material is used in this study in the form edited by Walter Kirchner in 1975. Possibly the most fundamental weakness of the Russian statistics with respect to the United States is that it is by no means always clear to what "America" refers. Before the mid-1840s "America" is in most cases an undefined entity, which consists of the United States, the West Indian islands and Central and South America.⁴⁸

Imports from the United States in Russian statistics and exports to Russia in American statistics should in principle correspond. Likewise Russian export figures should match American import figures. However, even the value of goods was calculated in a different way in Russia and in the United States.⁴⁹ Also the fact that for statistical purposes the American year was until 1843 from 1 October to 30 September, and thereafter from July 1 to June 30, makes drawing an annual comparison of American and Russian statistics more difficult. The practice meant that a large proportion of imports from Russia in a given calendar year appeared in American statistics as imports of the next fiscal year, since a great number of vessels leaving St Petersburg arrived in the United States only late in the autumn.⁵⁰ The great problem with both the Russian and American statistics for the purposes of this study is that they register neither indirect trade nor transactions that could go through customs without payment. For example, government purchases were duty-free, and so purchases of American railway equipment and the government's acquisition of vessels do not feature in the statistics.⁵¹

Naturally illegitimate trade is the error factor most difficult to approach. However, to all appearances it did not play a central role in American trade with European Russia. Smuggling in one way or another was more the rule than the exception in Russian foreign trade and in trade that passed through the ports it mainly involved bribing customs officials, who considered themselves underpaid. However, the Americans were not involved in large-scale smuggling, and perhaps just 5-10 percent of their trade travelled by illegitimate channels. The many American complaints about the bribes the Russians

⁴⁷ Ludvig de Tegoborski, who is among the most respected experts on Russian economics in the 19th century, considered the foreign trade statistics "an approximation of truth"; quoted in Kirchner 1975, 43; see Kahan 1989, 212-213.

⁴⁸ Russian foreign trade statistics were compiled annually on the basis of Gosudarstvennaia Vneshniaia Torgovlia, and derived from merchants' reports; Kirchner 1975, 45, 56.

⁴⁹ According to Kirchner (1975, 60, 67-69), the exports were calculated in American statistics at American departure port prices, and imports according to the value of the product at the foreign port. The Russians "handled it in the opposite way"; see Pitkin 1835, 164.

⁵⁰ The differences between the orthodox calendar and the western calendar are not problematic. In the references of this study both datings are used when they also appear in the document. The same applies to printed documents to which the other style of dating is later added.

⁵¹ See Kirchner 1975, 60, 67-69; Saul 1991, 139-141, 156-159.

demanded mainly referred to additional payments that speeded up the formalities at ports, where many kinds of paperwork were required.⁵²

Indirect trade that went through so-called third countries is impossible to calculate on the basis of Russian statistics. The triangular trade that was created around Cuban sugar is the best example. A great deal of Havana sugar ended up in Russia via the United States, and conversely, some of the exports to the United States from Russia were carried on to the West Indies and used there to finance purchases of coffee and sugar. To take another instance, most of the American cotton wool required by the Russians travelled to St Petersburg via British ports and thus figured as an English product. In the same way Russian iron bought by London or Liverpool trading houses and carried to the United States was recorded as British product in the American statistics.

⁵² Almost 40 percent of Russia's foreign trade has been estimated to have been illicit, beyond the reach of the customs and the statistics. The Americans were newcomers in Russia and they may have not been as well aware of the finer points of illicit dealing as, for example, the English; see Kirchner 1975, 73-75.

2 DISTANT TRADING PARTNERS

2.1 The protectionist United States of America: an exporter of raw materials and importer of manufactures

The economy of the North American colonies and the trade that played a central role in it had been bound to the British mercantilist system, which had disintegrated at the latest by the summer of 1776 as a result of the decisions of the Continental Congress. The United States of America, which had become independent, looked towards the seas, and not only to the West Indies and the North Atlantic, but also to such areas as the East Indies, the Mediterranean and the Baltic Sea which had inevitably been of less interest during colonial times. The crucial point was that the former privileged position under the protection of the mother country had been lost and, together with it, the British West Indian markets too. Independence inspired a commercial rush to new areas, but it lacked real importance: an expansion of commercial frontiers could not spread very far since the United States was at the end of the 18th century – and even later – only an exporter of raw and semi-finished products.¹

Interpretations differ as to economic and commercial developments after the Treaty of Paris, but the years after the peace are usually regarded as critical. For instance, the export rate per capita was presumably still much lower in 1790 than twenty years earlier. The South in particular, whose trade no longer enjoyed a guaranteed market, suffered from the new situation. If a decline in prices is considered characteristic of depression, for the ports on the East Coast the 1780s was just such a period.² Overall during the decade and a half after Independence it became clear how poorly American commerce had been prepared for the new situation.

¹ Opening up trade with the Far East was widely discussed but in 1809, for instance, only two percent of U.S. exports went there; e.g. Douglass 1971, 35; Rabuzzi 1998, 177.

² McCusker & Menard 1985, 373-375; see Nettels 1962, 17, 47-75; Eckes 1995, 9-10; Wallerstein 1989, 334; Shepherd & Walton 1972, 420; Shepherd 1988, 23ff.; McCoy 1980, 91ff.; Bjork 1964, 541ff.; Engerman & Gallman 1983, 8.

Contrary to expectations, the products and capital of the former mother country came to dominate foreign trade during the years after the Independence. At the end of the 1790s it was clear that Britain remained the major trading partner of the United States. While American exports were geographically more widely dispersed than earlier, there was little change as far as imports were concerned. Around 1790 three-quarters of American imports came from countries belonging to the British Empire, and half of their exports went to the same area. The imbalance was caused by a simple phenomenon: the Americans bought British goods with the earnings from the sale of American products to continental Europe. There are several reasons why the trade was Britain-centred: old colonial ties, language, trading practices, ties of kinship, English capital and financial organisation.³

Douglass S. North is one of those who traditionally stresses the importance of the export sector for the economic growth of the United States and for the success of the Northeast in particular. American exports were unsuccessful in the 1780s. However, the Americans were helped tremendously by the situation that emerged in the next decade as a result of the European revolutions. Re-export and the carrying trade, exports and shipping all gained ground because of external non-economic events.⁴ The basic condition for this supremely advantageous commercial situation was the political neutrality of the United States and the principle of “free ships – free goods”. From the mid-1790s to 1815 American foreign trade and economic development were very closely connected to the situation of Europe at war. Seafaring and trading interests dominated the economy of the country. Even neutrality, the fundamental principle of U.S. foreign policy, was treated flexibly for the benefit of commerce, for example in the Jay’s Treaty of 1795. It is an accepted fact that the volume of foreign trade increased manifold but its impact on the American economy is not totally agreed upon.⁵ At any rate, rising prices and the growth of production and trade were factors that made the period seem “exceptionally prosperous” and “years of unparallel prosperity”.⁶ When Walter B. Smith and Arthur H. Cole stated, in their classic work *Fluctuations in American Business*, “political revolution in France brought about an economic revolution in

³ Britain’s share of U.S. exports in 1790-92 was 31 percent on average while in 1768-72 it had been 58 percent; Shepherd 1988, 25-26; Shepherd & Walton 1972, 406. In 1792 U.S. imports from the British Empire exceeded \$15 million while the total figure for Europe and its colonies did not reach \$20 million. On the other hand, Britain received only 47 percent of American exports to Europe and its colonies; see Nettels 1962, 47, 231; Perkins 1975, 11; Bruchey 1967, 59; Johnson et al. 1915, vol. II, 18-21; Lang 1985, 10.

⁴ North 1966, Chapter I, Part I.

⁵ For different interpretations see e.g. Engerman & Gallman 1983. According to North’s interpretation (e.g. North 1966), in the antebellum period there were three successive “leading sectors” in the American economy: from 1790-1815 it was re-export, from 1815-43 cotton and from 1843-60 cotton combined with Midwestern grain.

⁶ Nettels 1962, 130, 232; North 1966, 53; see Smith & Cole 1969, 21; Adams 1980, 713-714, 734; Wallerstein 1989, 247, note 325; Goldin & Lewis 1980, 22; Cuenca Esteban 1984, *passim*.

America," they were referring above all to the evolution of economic organizations and the increase in industrial production and real incomes.⁷

The foreign-trade balance of the United States was clearly negative in 1790-1815 taking into account only import and export rates. However, the situation changes drastically when income from shipping is taken into account such as the Americans earned in trade between the West Indies, the Far East, India and Europe, which was not necessarily connected in any way to the United States. Freight prices were high, there was a shortage of capacity on the ocean routes, and the countries at war had to abandon temporarily the mercantilist regulations that protected their colonies. The value of exports together with the earnings of the carrying trade almost equalled imports.⁸ The period has been called the golden age of American shipping with good reason. The combined effect of the wars and mercantilist regulations on shipping showed rapidly: in 1790 only 40 percent of foreign trade was carried by American vessels, but in 1795 their share was already 90 percent and it stayed at that level for a long period of time. Simultaneously foreign trade surged in value from \$43.0 million in 1790 to \$246.0 million in 1807. The exceptional situation created by the European wars perhaps showed up best in the growth of re-export. Between 1790 and 1807, these increased from \$0.3 million to \$60 million in value.⁹ It is not surprising that the country's merchant tonnage more than doubled in the same time, and net earnings from the carrying trade increased from \$5.9 million to \$42.1 million.¹⁰

The heyday of the American carrying trade and re-exports came to an end with Jefferson's Embargo in 1808 and the Anglo-American war of 1812-14. However, the prosperity of the period before the Embargo laid the foundations of economic growth, especially in the Northeast. Moreover, the

⁷ Smith & Cole 1969, 30. – Engerman & Gallman (1983, 12) summarize the research tradition before the Embargo by stating that "there are few data but many opinions".

⁸ In 1803-07 freight earnings were estimated \$2 million per year. At the same time, the average annual negative trade balance of the United States on paper was \$20 million. Net shipping earnings in 1807 came to about \$6.50 per member of the population and shipping contributed close to 10 percent of U.S. national income; Engerman & Gallman 1983, 8, and note 11.

⁹ At 1790 prices, exports increased between 1790 and 1807 from \$20.2 million to \$79.6 million, imports from \$23.8 million to \$116.0 million and re-exports from \$0.3 million to \$47.8 million; Engerman & Gallman 1983, 8.

¹⁰ Nettels 1962, 234; North 1966, 25, 41; Pitkin 1815; 167; Crosby 1965, 74-75. – Douglass (1971, 35) gives the following figures for the same period: between 1790 and 1801 exports increased from \$20.2 million to \$108.3 million and re-exports from \$539,000 to \$60.3 million. According to North (1960, 600, 605) the value of exports was \$23.8 million and that of imports \$31.1 million in the years 1790-94. In 1815-19 the corresponding figures were \$77.1 million and \$111.9 million. In 1805-07 imports rose to \$135.6 million on average. Both imports and exports rose before the Embargo to levels that were reached again only in the mid-1830s. The proportion of re-exports was at its highest in 1805 (70.7 percent) and in 1808 (70.6 percent). Re-exports constituted about 60 percent of the exports of Massachusetts (50 percent of New York, 59 percent of Pennsylvania, 58 percent of Maryland, 5 percent of Virginia and 19 percent of South Carolina); Pitkin 1816, 53-56; Adams 1980, 733. According to NWR (vol.16, 244), Massachusetts's share of re-exports was 53 percent in 1818 and that of New York 28 percent.

undependability of imports stimulated the country's domestic industry, at least for a while. Nevertheless, after the war nothing was as before – although re-exports revived partially and an active carrying trade continued for a few decades despite the abrupt decline in shipping rates. Net earnings from the carrying trade were scarcely half what they were in the years 1806-07. After the Treaty of Ghent, the Americans faced a Europe that had radically changed from the continent they had transacted business with for over 20 years. Foreign trade lost its adventurous characteristics and the privileged position of the Americans trade was lost. The European trading partners returned to protecting their own trade and shipping. They did not buy American products in such quantities as before and this produced a considerable level of import surplus. However, the deficit was partially balanced by carrying trade income. Around 1820 about 90 percent of American trade was carried by domestic tonnage and perhaps a fifth of the tonnage was entirely used for the foreign carrying trade.¹¹

Foreign trade and the maritime sector on the whole did not play as significant role in the economy of the United States after 1815 as before. However, the position of both merchants and trading capital remained prominent in the development of manufacturing among other things. The shift showed in trade policy with the abandoning of demands for equality and reciprocity, which had proved over-idealistic objectives. The beginning of the 19th century was still, in international terms, the age of the Navigation Acts. Nevertheless, international trade grew faster than before, by an average of 50 percent per decade.¹²

The foreign trade of the United States, whose expansion has often been overshadowed by the development of domestic trade and industrial development, almost quadrupled from the years 1821-25 to the years 1856-60, but it was still far behind the respective British figures. During the latter five-year period U.S. trade amounted to \$630 million and that of Britain \$1,602 million. In the 1840s, the U.S. share was 7.3 percent and that of Britain 30.1 percent.¹³ The growth of trade was not steady, however. For example, the value of exports hardly rose in the 1820s due to the collapse of prices in 1818-19 and after that the rise was rapid but not always constant.¹⁴

¹¹ Appendix, table 16; Smith & Cole 1969, 20; Taylor 1951, 192, 198-200; Foreman-Peck 1983, 22; North 1966, 61, 172, 178. The import surplus was calculated at \$150 million altogether in 1816-20. However, the net earnings of the mercantile marine were still \$143 million.

¹² See e.g. North 1966, VII; Livesay & Porter 1971, 63-87; Clark 1949, 239; Eckes 1995, 18; Kaukiainen 1993, 65.

¹³ Sager & Panting 1990, 246-47; Taylor 1951, 176-177; Pintner 1967, 3; see Appendix, tables 1, 5; Foreman-Beck 1983, 16. According to Bairoch (1989, 7), the trade policy of Europe after 1815 was "an ocean of protectionism surrounding a few liberal islands". European trade apparently increased by three or four percent per year. Between 1821 and 1825, U.S. domestic exports together with re-exports reached a value of \$70.3 million on average with imports at \$73.8 million. For 1856-60 the corresponding figures were \$297.4 million and \$321.4 million; Appendix, tables 1, 3, and 5; see North 1960, 605.

¹⁴ Taking five-year moving averages, aggregate indebtedness was \$70.0 million at the beginning of the 1790s and \$89.7 million in 1818-19. By 1860 it had risen to about \$380

The American trade balance remained negative: there were only nine years within the period of 1820-60 when it was positive. The dwindling freight incomes made up the balance of payments. During wartime neutrality shipping earnings were perhaps one-third of total international credits, but after 1815 their proportion dropped to ten percent. This was caused to a great degree by the rapid decline of freight rates between 1815 and 1860.¹⁵

In general, the United States exported food and raw materials and imported manufactured goods: iron and steel, cotton manufactures and wool products. Cotton's share of exports increased continuously. The earlier major export products, such as tobacco and rice, had to make way for "king cotton", although the export value of, for example, tobacco rose significantly in the 1850s, and rice exports stayed at the same level in dollars for the whole period. In 1816-20, the share of manufactures was only 7 percent and even during the five-year period 1856-60, did not rise higher than 12 percent. The exports of the United States remained agrarian in character until the Civil War. The value of domestic exports quadrupled from the 1820s to the 1850s.¹⁶

American re-exports played a significant role in Russian trade. Their large share of foreign trade has been seen as an indicator of the undifferentiated organization of international commerce. Under the exceptional conditions of the beginning of the 19th century, re-exports from the United States could constitute three-fifths of the total exports. Although their value did not change significantly after this, their proportion of the total fell sharply. After 1845 re-exports started to concentrate on Britain and the British North America, whereas earlier they had been mainly directed to the West Indies and South America.¹⁷ In the period 1821-60 perhaps a half of re-exports were traded via New York and a fifth via Boston.

Manufactures formed the most important group of articles imported into the United States. In the first half of the 19th century their share varied between half and three-quarters of total imports. Cotton, wool, silk and flax products together made up about a half of this sector, which constituted a third of total imports used for domestic consumption. Flax products, which were important

million. Service and current items then contributed to the balance of payments but not as much as at the beginning of the century. Measured by indices, the volume and real value of exports almost quadrupled between 1830 and 1860, although there was briefly a fall to the level of the 1820s in the 1840s; North 1960, 578-581; North 1966, 89-91. North (1960, *passim*) corrected the "official" import figures of 1832-46 by adding two percent, and those of 1846-60 by adding four percent.

¹⁵ North 1966, 81; North 1968b, 95. Net shipping earnings could remain below \$7 million per year. On the other hand, they could also rise above \$25 million.

¹⁶ See Appendix, table 1; Taylor 1951, 180-182, 188, 194; Bruchey 1967, 2. – Emory Johnson calls the years 1815-18 a period of normal growth, the years 1818-30 a recession, 1837-46 an irregular period and 1847-60 a period of growth and expansion in his old but much cited history of U.S. domestic and foreign trade; Johnson et al. 1915, vol. II, 31, 37-38, 52.

¹⁷ Appendix, table 3. In 1821-25 re-exports constituted about 20 percent of total exports, in 1836-40 12 percent and in 1856-60 just under six percent. In these five-year periods the dollar values of re-exports were \$17.1, \$13.4 and \$16.4 million, respectively; Commerce and Navigation, 1821-60.

in the Russian trade, accounted for about a third of the imports of cotton textiles. Swedish, Russian and British iron was imported throughout the period, but it became an important article only during the first railroad boom in the 1850s. The proportion of imports that destined for domestic consumption continued to increase: in the 1820s and 1830s it was below 80 percent, but in the antebellum decade it approached 95 percent. According to five year averages, Britain's share of imports was more than a half, while that of France ranged between 9 and 18 percent.¹⁸

Britain was the major trading partner of both the United States of America and Russia over the whole period discussed. Its central role in Atlantic trade can be illustrated by the fact that around 1830 it produced about 45 percent of European pig iron and consumed 66 percent of its cotton wool. In the years 1821-60 between 41 and 53 percent in value of U.S. domestic exports went to Britain. The respective share of re-exports was one fifth at best. Import rates ranged from 37 to 46 percent, with 7 to 19 percent of exports being directed to the West Indies, and the proportion of imports from there varied from 10 to 19 percent. In terms of import and export values, the third major trading partner of United States was France and the fourth Germany, a long way behind.¹⁹

The tariff policy of the United States was more or less protectionist between Independence and the Civil War. The first federal tariff of 1789 was moderately protectionist and thoroughly liberal compared with later import tariffs. This first general tariff specified import duties in terms of specific ad valorem duties ranging from 5 to 15 percent. The changes that were made during the next three years increased duties on most categories of goods by 50 percent. Further changes were introduced in 1795, in 1800 and in 1808. The rates remained relatively low until the War of 1812, below 20 percent on the value of dutiable articles. The tariff enforced in 1816 set import duties on most manufactured goods at a level of about 35 percent. The tariff was protectionistic, and protection for so-called new industries was demanded in particular. According to Congress, iron, textile products, hemp, flax and wool required the most extensive protection and their tariffs rose to a somewhat higher level than before the war.²⁰

¹⁸ Appendix, tables 4 and 5; Taylor 1951, 182-183, 444-445; North 1966, 78-79.

¹⁹ Appendix, tables 2 and 3; Taylor 1951, 444-452. Europe's share of U.S. exports increased: in the 1820s it was 64 percent on average, and in the 1850s 73 percent. South America and British North America reached higher export rates than Germany. Brazil and China were in the same position as far as imports are concerned. In 1855, Britain's share of imports was 41 percent, that of France 12 percent, and that of Cuba 7 percent. Total imports were worth about \$260 million, of which \$129 million represented manufactures. Britain's share of exports was 42 percent and that of France 13 percent. Total exports were worth \$193 million, 46 percent of which was cotton wool, 16 percent meat products, 15 percent leaf tobacco and 12 percent wheat; see Foreman-Peck 1983, 23; Bairoch 1989, 10; Matthews 1979, 199; North 1966, 77.

²⁰ Bairoch 1989, 140; Shepherd 1988, 33; Nevins 1969, 557-568. Import tariffs were temporarily doubled for fiscal reasons in 1812; see also Stanwood 1903, vol. I, 171; Taussig 1914, 30, 71; Eckes 1995, 14; Shannon 1958, 213.

The tariffs of the United States were established to a great extent as a result of the political compromises that were made between the South which exported agricultural products (above all cotton and tobacco) and New England, which demanded protection for its infant industry. Tariff policy was distinctly a domestic issue and independent of trading partners. Peter Temin suggests that under the protection and transportation charges American manufacturers created a production process known as the American system.²¹ National economic objectives could not be overlooked, and not least for the reason that at the beginning of the 1850s, for instance, import duties accounted for more than 90 percent of Federal government revenue. Tariff arrangements could become very complex, since the interests of the shipbuilding industry and mercantile shipping in New England differed significantly from those of the region's industry. The period between 1816 and 1846 can be labelled a protectionist phase in the history of American tariffs. Tariffs were increased in 1824, in 1828 and in 1832, and the period between the two latter years can be considered the peak of protectionism in the antebellum period. The level of import duties in relation to total imports increased to over 50 percent. South Carolina's decisions to disapprove the federal tariffs, which it considered unreasonably high, shows an example of how politically critical the tariff questions were. The "Compromise Tariff" of 1833, a result of much negotiation, required tariffs to be reduced to such an extent that by 1842 manufactured goods would incur a tariff level of about 20 percent. This situation obtained for no more than a few months. At the end of August 1842 the protectionist Whig party enacted a tariff which re-established approximately the level of 1832.²²

The Walker Act, which came into effect on 30 July 1846 and was mainly the work of the democrats of the South, decreased import levies by 10-20 percent and unified the rather incoherent system on an *ad valorem* basis. Tariffs decreased slightly during the next 15 years. American import levies were heavy compared with those of most European countries, but the tariffs of the period were considered rather liberal in the United States. To what extent the reduced levies contributed to the simultaneous strong growth of trade and industry remains an open question.²³

Mercantilist practices that aimed at protecting shipping were close kindred soul of the protectionist customs policy. Despite the voices that demanded free trade, the first federal tariff in 1789 still gave 10 percent discount on customs duties for those products that arrived by American or American-owned vessels. However reciprocity of shipping was an aim right from the beginning. The Reciprocity Act, which was enacted in the spring 1815 and its amendment in 1818, created the following line of policy: as far as the countries

²¹ Temin 1964, XVI.

²² Bairoch 1989, 59, 140-141. Bairoch calculates that in 1821-24 the ratio of import duties was 43.4 percent, 50.8 percent in 1829-31 and 16.3 percent in 1857-61; see also Hawke 1975, 85; Shannon 1958, 218-219; Stanwood 1903, vol. II, 282; Taussig 1914, 110; Taylor 1968, 4; Hidy 1978, 128; Pincus 1975, 757-758, 775-776; Trescott 1960, 345.

²³ Bairoch 1989, 142; see also Foreman-Peck 1983, 58; Taussig 1914, 65-66, 115; Taylor 1951, 194-195; Bills 1984, 1033-1045.

that did not discriminate against American tonnage in favour of their own national tonnage were concerned, the favouring of the national merchant marine could be reciprocally abandoned. In the summer of 1815 the Reciprocity Act was tested on the most important trading partner of the United States, i.e. Britain. The trading agreement between the countries was based on the reciprocity requirement, but the British colonies stayed beyond its reach. However, the products of the so-called third countries came gradually under its reach, and, in the long term, an American line of policy became clear: the country of origin of products and the nationality of the vessels would not result in extra tariffs. It is claimed that this practice reveals a strong belief that American shipping could hold its own in international trade when it was given equal opportunities compared with its rivals.²⁴

Trade policy is generally considered to have been the basis of U.S. foreign policy at the beginning of the 19th century. In general, the objectives of American trade policy were free trade and equality, either on a national basis or reciprocity on the basis of most-favoured-nation treatment. There was also the principle of free ships – free goods which was related to demands for political neutrality, including the neutrality of the seas, which the leading maritime power Britain did not accept in the form that the Americans proposed. This did not prevent the United States from trying to insinuate its objectives into, for instance, treaties with Russia. From the Franco-American Treaty of Amity and Commerce in 1778 onwards, attempts were made to include all these principles in treaties with different countries. Although perfect equality and reciprocity were not in fact established, the French treaty served as a general model for treaties for a long period.²⁵

Generally speaking, the commercial foreign policy of the United States aimed at serving the interests of the mercantile marine after 1815. Yet, discriminatory customs duties could not be used as a weapon in trade policy in a situation where freedom of seas was an objective and where the country's

²⁴ Nettels 1962, 110; Setser 1937, 182-185; Taylor 1951, 128. From 1828 onwards the products of the so-called third countries were allowed to enter the United States under the same conditions whether shipped by national or foreign vessels. Coastal trade was prohibited to foreign vessels.

²⁵ Morris 1987, 206-207; Eckes 1995, 6-7; Setser 1933, 319-323; Setser 1937, *passim*. – In addition to France, the United States concluded trade agreements with the Netherlands and Sweden (3 April 1783) before the Paris Treaty. According to Alfred E. Eckes (1995, 293, note 2), in a reciprocity agreement benefits are not extended automatically to other governments. As a general principle, equality means non-discrimination, which can mean either equal treatment of foreign and national goods and shipping or equal treatment of all foreigners. Discrimination between nationals and foreigners would be most-favoured-nation treatment. In the unconditional form non-discrimination is provided to a nation eligible for most-favoured-nation treatment. In the conditional form third parties must bargain equivalent compensation for most-favoured-nation treatment. Bairoch (1989, 39) argues that the United States preferred the latter; reciprocity "implies that the most-favored-nation – clause only works automatically in cases where the new benefit which is to be shared has been obtained without a concession in return". According to him Europeans preferred unconditional reciprocity with few exceptions, for instance in the 1840s. In the Anglo-French agreement of 1860 the unconditional most-favoured-nation clause was restored; see Setser 1933, 319–323; Eckes 1995, 5-7.

foreign trade was almost entirely carried by its own vessels.²⁶ The Americans wanted to abolish such practices if their trading partners did likewise. These demands were not unproblematic, however. To take one example, Sweden, which was concerned about its iron exports, would have liberated trade between the two countries immediately after 1815, and this was further than the Americans dared.²⁷

The mercantile marine of the United States grew relatively steadily in the first half of the 19th century. Between 1815-21 and 1856-60, the registered tonnage tripled from 0.8 million tons to 2.5 million tons. In spite of these figures, the importance of American tonnage as a carrier of foreign trade decreased steadily. In the 1820s, its share of exports and imports was about 90 percent, but by the 1850s it had dropped to about 70 percent.²⁸ More than 80 percent of foreign tonnage that arrived in the United States was British. The rest was mainly German, French and Dutch. American shipping lost its special position particularly in trade with Britain.²⁹

At the beginning of the 19th century economic growth in the United States was dependent on the evolving market economy, in which domestic markets played an integral role. There are several different interpretations of national economic growth, the national wealth and the factors that influenced them. However, there are many different indications that several crucial changes occurred in the U.S. economy in the 1840s. According to Alfred J. Chandler, for example, the forces of supply and demand, the 'invisible hand' of the market, dominated up to that point, but after that technology started to play the leading role in the economy. New technology that was based on steam and coal revolutionized transportation, distribution, production and finance. Industrialization was well under way already before the Civil War. The value of manufacturing output was ten times in 1860 what it was in 1810. In the 1850s, cotton textile output increased by almost 80 percent, the production of pig iron by more than 50 percent, and the production of railroad iron almost doubled. The United States had become an industrial nation by 1860, probably second only to Britain in manufacturing.³⁰

²⁶ The benefits gained from discriminatory customs and tonnage duties were also questionable since a considerably greater tonnage was needed to export American bulk products to Europe than was needed for return cargoes to the United States.

²⁷ Russell to Monroe, 15 July 1815, 29 April 1816, 13 August 1816, and 5 September 1816, NA M-45/2; Setser 1937, 184ff.

²⁸ Appendix, tables 16-18.

²⁹ Taylor 1951, 440-441; Marvin 1916, 193, 238, 284.

³⁰ Chandler 1978, 87, 131-132; e.g. Taylor 1964, 440ff.; North 1968b, passim; Engerman & Gallman 1983, 1-46.

2.2 Russia: a backward exporter of manufactures and importer of colonial products

The mercantile shipping of Russia differed completely from that of the United States. Though, their protectionist customs policy was similar in many respects, Russia did not possess a merchant navy significant enough to require protection or favouring by mercantilist practices. Russia may be considered to have been rather passive with respect to trade policy – at least as far as treaties concluded with other countries are concerned.³¹ There were also several curious phenomena in the Russian economy and foreign trade, which western trading partners remarked upon. One of the peculiarities was the guild system, which complicated the dealings of foreign merchants and entrepreneurs.

The backwardness of the Russian economy as compared with that of the West has usually formed the background for the portrayal of Russian economic history in the 18th and 19th centuries. Serfdom is also often, although not that unanimously, considered a factor that obstructed modern economic growth in some way or another.³² The adverse attitude of Tsar Nicholas I and his leading officials is often referred to, particularly when the process of industrialization is discussed: the model of western industrialization was not desirable in Russia for the sake of a peaceful society. Only the political catastrophe of the Crimean War changed the attitudes of the officials in power. The weak transport system compared with those of the West was also found to be a factor that contributed to the wartime losses. The St Petersburg-Moscow railway was opened in 1851, but exports remained decisively dependent on water routes long afterwards. In any case, the high population and the overwhelmingly agrarian economy of the country ensured that the consumption of basic raw materials and real incomes per capita were the lowest in Europe.³³

Several different indices, chronologies and models have been used to measure the industrialization of Russia. Thomas C. Owen claims that “fundamental cultural and economic changes”³⁴ were visible already a decade before the Crimean War. By contrast, M.E. Falkus claims that the country remained behind the West proportionally all through the 19th century. He considers the country “industrially extremely backward” as late as during the

³¹ Kirchner 1975, 215.

³² See e.g. Trebilcock 1981, 209-212; Blackwell 1970, 81; Owen 1991, *passim*.

³³ Kemp 1985, 118-119, 190; Bairoch 1975, 273-340; Platt 1984, 46-47; see Aer 1995, 36-37. In 1840 the consumption of raw cotton in Russia was 0.3 kg per head, when in Britain it was 7.3 kg. In 1860 the corresponding figures were 0.5 and 15.1 kg. In the corresponding years the consumption of pig iron was 3 and 54 kg, and 5 and 130 kg. The increase in real incomes per head in Russia was, according to Bairoch, the slowest in Europe in the 1850s but by far the quickest in the next decade.

³⁴ Owen 1983, 66. Arcadius Kahan (1989, 13) shows Russian industrialization to have been a slow process that began in the 1840s and the 1850s and that was complicated by the lack of domestic capital and scarcity of modern entrepreneurial and managerial skills.

Emancipation.³⁵ Yet Olga Crisp states that industry based on modern technology started to appear in the 1840s. However, mechanization affected only cotton textiles and the sugar industry. About 85 percent of sugar and 90 percent of cotton yarn was produced domestically by 1861.³⁶ Privately-owned factories that used wage labour, for example in the cotton sector, can be considered signs of a qualitative change, but the innovations applied to such narrow sectors of the economy that the so-called industrial revolution could not be in question. In spite of the imperfections of the statistics, it seems obvious that manufacturing industry had come to life already before the Emancipation. Calling the country's industry stagnant and inflexible does not portray the entire truth. The number of manufacturing plants increased between 1830 and 1860 from 5300 to 15,300. More than half of the total value of Russian manufacturing output was concentrated in the provinces of Moscow, St Petersburg, Vladimir and Perm.³⁷

Russian exports tripled from 1802 to 1820 and again from 1820 to 1860. Despite its growth, Russian foreign trade did not play a significant role either in the country's own economy or in world trade. Around 1825 the value of foreign trade was a quarter of the value of domestic trade, and its proportion of international commerce was 4-5 percent. Trade was mainly in the hands of foreign merchants and trading houses.³⁸ Russian foreign trade was calculated to amount to barely a fifth of British foreign trade in the mid-1840s.

Although Russia supplied considerable amounts of products to the West, its own consumption of imported goods was relatively limited. At the end of the 18th century, it was common for Americans who started to establish relations with Russia to be warned of the small demand of colonial products.³⁹ At the turn of the century, a Salem merchant, Thomas Ward, estimated that the inhabitants of St Petersburg lived "chiefly on black bread and salt, except officers and merchants".⁴⁰ According to the American Secretary of Legation, John Randolph Clay, American imports to St Petersburg were, however, "necessary of the support of mankind". Thus, they differed significantly from such products as wines and silks that, for example, the French imported and that were exclusively for the upper classes.⁴¹ At least in theory, Russia was a

³⁵ Falkus 1972, 43.

³⁶ Crisp 1978, 308; Crisp 1991, 262.

³⁷ Falkus 1972, 35, 43-43; Appendix, table 12.

³⁸ Appendix, table 7. According to Owen (1983, 62), the Russians controlled only 3 percent of the trade in the mid-19th century. On the other hand, Platt (1984, 39) calculates that in 1847 Russian firms had a 3 million rouble share in the 13 million rouble total value of exports; see also Blackwell 1970, 81-82; Florinsky 1953, vol. II, 790; Falkus 1972, 32.

³⁹ E.g. Brothers Blandow to Elias Hasket Derby, 7 November 1794, EI, DFP, vol. 5.

⁴⁰ Thomas Ward's Journal of the voyage of the Pallas to Cronstadt, 1801-02, PM (quoted in Crosby 1965, 51). A decade later U.S. Minister John Q. Adams estimated that the cargo capacity of about fifty vessels could meet the demand for colonial products in St Petersburg; Crosby 1965, 51.

⁴¹ Clay to Louis McLane, 16/28 February 1834, NA M-35/12/19; see Blackwell 1968, 82.

huge potential market for consumer goods, with a population of 35 million around 1800, and already 74 million by 1860.

The records show that Russia enjoyed a favourable balance of trade in the 18th and 19th centuries. In 1856-60 the imports amounted to 148 million silver roubles on average, but at the same time exports attained a level of 166 million silver roubles. Russia's western trading partners paid at least a part of this by imports of bullion. Massive smuggling was another factor that contributed to figures that showed surpluses.⁴²

At the beginning of the 19th century, cotton accounted for approximately half of Russian imports, in the form of raw cotton, yarn, or manufactures. Sugar, coffee, fruit, dyestuffs and wine were among products whose share remained relatively steady, except for the first of these. In the decade 1826-35, the major individual import articles, cotton twist and raw sugar, each accounted for about 16 percent of the rouble value of imports. It was essential for the American trade that, for instance in 1830, almost 80 percent of the sugar, more than 70 percent of the coffee and almost 60 percent of the raw cotton that Russia bought was imported via St Petersburg.⁴³

In principle the structure of Russian exports at the beginning of the 19th century was similar to what it was a century earlier. Flax, hemp and tallow constituted a third of the exports until the 1850s. Only in the 1840s did grain become the major export article.⁴⁴ Britain became the major purchaser of Russian products in the 18th century, and remained one in the 19th century. At the end of the 18th century, the British bought three quarters of Russian iron, three quarters of its hemp and flax, four fifths of its tallow and nine tenths of its timber products.⁴⁵ In 1849-53 Britain's share of Russian exports was almost half and of imports a third. The British influence in Russia foreign trade was so substantial that it inevitably provoked reaction. There were circles in Russia that would have considered it desirable as well as quite possible, for example, for the Americans to have transported their own products without the intervention of British brokers. In the five years before the Crimean War, 2.5 percent of Russian exports went to the United States, while America's proportion of imports was 10.1 percent.⁴⁶

⁴² See Appendix, tables 7 and 9; Mitchell 1978, 301; Attman 1986a, 98; Johansen 1983a, 135-140; Blackwell 1970, 82. – Attman (1981, 177-178, 201-202) states that a great part of the bullion balanced the deficits caused by the Asian trade. The British Consul Gisborne reported even in 1833: "The immense quantity of gold and silver which has been for years importing into Russia remains in circulation. None worth mentioning goes to Asia, on the contrary some silver is received from China in payment to Russian products. Spanish dollars and Napoleons circulate throughout Russia . . . at a fixed value without any ukaze"; Gisborne's report, 3 March 1833, PRO, FO 65/209.

⁴³ Appendix, table 9; PRO, FO 65/194, 236. Almost 90 percent of the indigo and logwood that Russia bought was imported via St Petersburg.

⁴⁴ Attman 1981, 194. According to Falkus (1972, 36), grain constituted 15 percent of exports in the period 1836-45, but in the period 1846-60 averaged roughly one third.

⁴⁵ Attman 1981, 190. Thus almost all of Britain's imported hemp and three-quarters of its flax was of Russian origin; cf. Bolkhovitinov 1975, 81.

⁴⁶ Appendix, tables 7, 8, and 10; de Tegoborski 1855, vol. II, 467; Kirchner 1975, 63. – According to Attman (1981, 185, 201), Britain's share of Russia's total trade was 43

While Moscow served as the centre of the domestic wholesale trade of the Russian Empire, St Petersburg was the centre of the country's foreign trade until massive grain exports started to shift the focus to the Black Sea. In 1802 78 percent of exports went via the Baltic Sea, and in the decade 1826-35 84 percent of imports and 76 percent of exports were transported by this route. In 1845 approximately 64 percent of the foreign trade of European Russia was carried across the Baltic Sea. Britain took the lion's share of the foreign trade of both St Petersburg and Russia as a whole, and in 1845 the British market took about 70 percent of the city's exports and supplied 37 percent of its imports. The latter proportion approximately equalled imports from the area recorded as "America and the West Indies".⁴⁷

After a liberal period of almost a quarter of a century, Catherine the Great returned to strict protectionism at the end of her reign. In the aftermath of the Congress of Vienna, Russia lowered its import duties in 1816 to such an extent that it can be considered to have shifted from the prohibitive system of the wartime to a protectionist one. A further move in the same direction came in 1819, when Russia virtually adopted free trade. It led to a flood of English manufactures on the Russian market and reductions in export duties did not stimulate the export of domestic products as much as expected. The policy adopted was almost catastrophic for the Russian national economy and the industries that emerged during the war period. As a consequence the tariffs adopted in 1822 were strictly protectionist and included a great number of prohibitions. Furthermore, high taxes were added to customs duties. A description of these arrangements by the British consul, Daniel Bayley, could equally well have come from many another supporter of free trade:

"The greatest evil against which foreign trade has to contend in Russia – consists in the vicious system of prohibition & exorbitant duties on imports, established with the view of protecting internal industry".⁴⁸

The tariffs of 1822 remained in essence almost unchanged until 1857. For example the import duties on non-prohibited manufactures were 50-75 per cent ad valorem in the tariff of 1851. In the tariff of 1857 they were lowered to 35-50 percent. Count E.F. Kankrin, who served as head of the Ministry of Finance in 1823-44, kept the level of customs duties high for fiscal reasons. Perhaps the industry that was born in Russia was partially a by-product of this policy.⁴⁹ It is interesting that the United States minister to St Petersburg, James Buchanan,

percent, and the share of "America and West Indies" was 3.3. percent of exports and 8.7 percents of import; Bayley's report, 15 May 1847, PRO, FO 65/337; Bolkhovitinov 1975, 81.

⁴⁷ Appendix, tables 11 and 13. - 62 percent of export hemp, 22 percent of flax (Riga 52 percent), 87 percent of tallow and 52 percent of iron was transported via St Petersburg in 1830. The corresponding figures in 1849-53 were: hemp 65 percent, tallow 91 percent and flax 19 percent; Blackwell 1968, 170; Attman 1981,195; PRO, FO 65/194, 236, 337 (no. 3896, annex C).

⁴⁸ Bayley's report, 28 January 1841, PRO, FO 65/274.

⁴⁹ See Falkus 1972, 37; Owen 1983, 6-7; Bairoch 1989, 18, 31; Florinsky 1953, 72; Wittschewsky 1905, 49-52; Mavor 1914, 558-560.

who could hardly see anything positive in the political system of the country of his posting, considered the economic policy of his own country and that of Russia surprisingly similar. In 1833 he commented, "The American system prevails here in all its vigor".⁵⁰

The stringently protectionist trade policy was not extended to mercantile shipping. It was not necessary and perhaps not even possible, as the country's own merchant navy was so insignificant. To illustrate this, of the 14,031 vessels which entered Russian ports in 1847, only 12 percent were Russian, and most of those were in Greek or Finnish ownership.⁵¹ All foreign vessels that entered Russian ports were treated equally with respect to tariffs, and the country's own merchant vessels received virtually no privileges. Finland and the Baltic provinces that were within the Russian sphere of influence were in a slightly different position: the home mercantile marine was clearly favoured there. It is notable that a great number of vessels on the Baltic Sea bound for Russian ports were in ballast since the Russian export products required significantly larger freight capacity than the imported articles.

From the perspective of the United States, Russia was a distant trading partner. Knowledge of it remained relatively limited and its significance with respect to America's own export products can be considered marginal. However, the picture changes when American merchant shipping and its carrying trade are also considered. Moreover, the Russian market became significant even in terms of trade as a whole for instance during the Napoleonic Wars. The situation resulting from the Crimean War led the U.S. minister Thomas H. Seymour to aver that trade between the countries "may be said to have only just begun". Only American initiative and some adjustments in customs policy would be required to make Russia a significant trading partner.⁵² According to Secretary of State William L. Marcy, the opportunities for that were excellent, since the countries were not political rivals.⁵³ William H. Seward, who became Secretary of State in 1861, regarded both countries as "improving and expanding empires" that had their own directions of expansion: one was bringing culture to the East and the other to the West. Seward even outlined a schedule to bring the countries closer to one another. He emphasised particularly the favourable reception of American technology in Russia, although "vicious adventures too often abuse this generous encouragement by fraudulent practices".⁵⁴

⁵⁰ Buchanan to Louis McLane, 31 July 1833, NA M-35/12/21. For another similar judgement see: Clay to Louis McLane, 16/28 February 1834, NA M-35/12/19.

⁵¹ Blackwell 1968, 82.

⁵² Seymour to Marcy, 23 January/4 February 1856, and 16/28 May 1857, NA M-35/16/65, 114.

⁵³ Marcy to Seymour, 1 October 1855, NA M-77/20.

⁵⁴ Seward to Cassius Clay, 6 May 1861, NA M-77/5.

3 THE BEGINNING OF AMERICAN-RUSSIAN TRADE RELATIONS

3.1 From Salem to St Petersburg via Copenhagen

According to Norman E. Saul, the beginning of direct trade relations between America and Russia can be dated back to the beginning of the 1760s at the latest.¹ Due to the illegal nature of these connections, there is a lack of information about them. The Navigation Acts made it very difficult, if not impossible, for Americans to use continental ports north of Cape Finisterre. Of course, Russian products were transported to the colonies just like other continental products, but, in most cases they were shipped from British ports. Most export products were also shipped to the mother country. Trade between America and Russia was constricted, but perhaps this was not a serious problem.²

The brig *Wolfe* owned by Nicholas Boylston, a prominent Boston merchant, was perhaps the first North American vessel that sailed directly to Russia. She carried West Indian products (sugar, indigo, rum, mahogany and sassafras) to St Petersburg, and hemp, iron, ravenduck and sheeting back to New England in the spring of 1763. Her journey became public knowledge when the English minister to St Petersburg disclosed this obvious offence against the Navigation Acts. It is highly probable that several other voyages of a similar type were made since in Russia Americans were regarded as being British: the local authorities had no reason to distinguish between them.³ In Europe, Amsterdam was a prominent

¹ Saul 1969, 596-97.

² See Tyler 1986, 124; Nash 1982, 368; Crosby 1965, 7; Nettels 1962, 4; Bolkhovitinov 1975, 87.

³ Saul 1991, 3-4; Saul 1969, 595-601; Griffiths 1970, 391-393. According to Rabuzzi (1998, 180), altogether 15 American vessels sailed to the Baltic Sea through the Sound in 1741-76.

centre of American trade, and Russian goods were imported from there to North America at least from the 1750s onwards.⁴

There is no reason to assume that American links with St Petersburg would have totally collapsed during the War of Independence. Among other things, complaints by British diplomatic agents over Americans visiting St Petersburg under the Dutch flag indicate that direct connections existed. However, the majority of Russian products that ended up in North America were handled by intermediaries. For example, Beekmans of New York and Elias Hasket Derby of Salem went on to obtain such products from Amsterdam.⁵ John and Nicolas Brown of Providence also bought hemp and iron from Amsterdam, and from Bordeaux and Gothenburg as well. Already by 1770 they had handled substantial quantities of goods including raw hemp transported via England.⁶ Significant amounts of hemp were also imported by French and Dutch vessels. The Swedes too sold and supplied Russian-bought products to American markets.⁷

One of the first vessels to reach St Petersburg by way of the Sound under the flag of the United States was sailed to Riga by the Boston Captain Daniel McNeill in spring 1783. The 500-ton ship the *Commerce*, was probably a former privateer, owned by George Cabot of Beverly.⁸ In Elsinore on 26 May the captain reported that Lisbon was his port of departure, and salt, wine, fruit, rice and sugar his cargo. Just under four months later, on 20 September, McNeill returned to Elsinore and reported carrying bar iron and hemp from St Petersburg to Boston. It is striking that McNeill's vessel was registered as

⁴ See Hedges 1968 vol. I, 153, 180-182; Saul 1969, 598; Tyler 1986, 13, 197; Harington 1935, 166, 173, 198-199.

⁵ Griffiths 1970, 393; White 1956, vol. III, 985-86, 1179-1181; EI, DFP, vol. 2 (Brig Fame); see Kiiskinen 1996, 391-411, 428-429.

⁶ Hedges 1968, vol. I, 180-182, 236-237, 255, 257; cf. Henretta 1988, 69.

⁷ Griffiths 1970, 393; Crosby 1965, 40. At least one Russian merchant, the Sweden-born Russian consul in Bordeaux, Arvid Wittfooth, arranged Russian products to be sent to the United States via his posting; Bolkhovitinov 1975, 92-94; Minutes of a session of the Commerce-College, 8/19 August 1778, Wittfooth to the College of Foreign Affairs, 18/29 January 1782, and Wittfooth to the Commerce-College, 19/30 July 1782, USR 1980, 54-55, 134-135, 159-160; see Kiiskinen 1996, 433-452. The international adventurer Stephen Sayre is also connected with the beginning of Russian-American trade relations: his attempts included building vessels for direct trade between the United States and Russia and founding a base for American privateers in Archangel; Sayre to John Adams, 21 October/ 1 November 1780, and Adams to Sayre, 25 November/6 December 1780, USR 1980, 89-90, 93-94, 103; Alden 1983, 127ff.; Saul 1991, 13-14; Griffiths 1970, 386-389.

⁸ Phillips 1941, 686; McKey (1961, 155-156) mentions that the vessel left Salem in 1783 for Newfoundland and that it arrived in Russia. The vessel was already back in Salem 36 months later. Kircher (1975, 13-14) mentions that the brig *Anne* visited St Petersburg in 1782; see USR 1980, XVII, note 20, and Wittfooth to the Commerce-College, 19/30 July 1782, USR 1980, 159-160. Captain Daniel McNeill had served as a commander of the American privateer *General Mifflin* in 1778 on the North Sea; Kiiskinen 1996, 186-193; Bolkhovitinov 1976, 34.

English in the Sound on her return journey.⁹ Another ship, the *Kingston*, under Captain Thomas Norwood working for Jeremiah Allen of Boston, visited Riga and St Petersburg in summer 1783.¹⁰

The bark *Light Horse* (300 tons), owned by the Salem merchant Elias Hasket Derby and commanded by Captain Nehemiah Buffington, passed Elsinore on 17 July 1784 on her way to St Petersburg.¹¹ The vessel is often mentioned as having “opened” American-Russian trade.¹² However, this is questionable, as three other American vessels had already sailed to the Baltic Sea through the Sound in June.¹³ The *Light Horse* was a pioneer in Russian trade: her three voyages to St Petersburg in 1784-86 embody the typical characteristics of the early phase of American-Russian trade contacts. The vessel left Salem on 25 June 1784 for her first voyage to St Petersburg and her cargo, valued at £8400 and consisting of sugar, cotton, ginger, rosin and rum, was consigned to the captain so that he was free to choose the best trading partner among the merchants of St Petersburg. Buffington left the cargo with Cram & Cazalet, recommended by his employer (“if equal to any other”), but some products had

⁹ STA 1783 (907/2414, the latter is a running number of British vessels); Francis Dana to Robert Livingston, 13/24 June 1783, USR 1980, 196-198.

¹⁰ According to Crosby (1965, 42), the vessel was probably in English possession and sailed under the Russian flag. Francis Dana returned from his unsuccessful mission to St Petersburg on this ship and was in Boston on 18 December (see chapter 4.1); Francis Dana to Robert Livingston, 13/24 June 1783, and Dana to John Adams, 18/29 July 1783, USR 1980, 196-198, 201-201, 206 (note 7); Bolkhovitinov 1975, 91; Griffiths 1970, 392; Cresson 1930, 317-318. The third vessel that visited the Baltic Sea in 1783 was sailed from Amsterdam to Copenhagen in ballast by Captain Henry White and returned “to America”; STA 1783 (2854/3038). According to Bang’s printed list, McNeill’s craft was the only American vessel that sailed to the Baltic Sea in 1783. According to the same list two American vessels and one English vessel sailed from Russia to the United States. Cargo information is different from the figures in the original STA. According to Phillips (1941, 688) the Salem captain John Little also sailed twice to St Petersburg via Charleston in the brig *Hector* in 1783-84 and 1786-87. STA includes only his voyage from Rotterdam to St Petersburg in 1785 with a small cargo of rice, and a 1786 voyage from Rotterdam to St Petersburg in ballast and from St Petersburg to Salem carrying cargo; STA 1785 (1217); STA 1786 (491/916).

¹¹ STA 1784 (1104/1845); see Bryant 1967, 115; USR 1980, 215, note 2; McKey 1961, 156-157; Osgood & Batchelder 1879; HMM 1837, vol. 36, 165.

¹² E.g. McKey 1961; Peabody 1912; Phillips 1939; Hunt 1858.

¹³ Captain William Tuck of Boston arrived in the Sound from Amsterdam with a small cargo of rice, Captain Joseph Moseley of Boston or Beverly from Salem with sugar, indigo and rum, and Captain Jean de Coureill of Philadelphia from Cadiz with sugar and indigo. All the vessels were bound for St Petersburg; STA 1784 (1104/1845); see Bryant 1967, 115; USR 1980, 215, note 2; McKey 1961, 156-157; Osgood & Batchelder 1879; HMM 1837, vol.36, 165. Moseley’s vessel was probably formerly Cabot’s privateering ship the *Sebastian*; see Phillips 1941, 686; East 1938, 253; cf. McKey 1961, 156. Morison (1921, 154) mentions that George Cabot sent two ships, the *Bucanier* and the *Commerce* to St Petersburg in May 1784. The *Maria*, mentioned by USR (1980, 215, note 2), that arrived from London for Cram & Cazalet in May, was registered as English in Elsinore; STA 1784 (no. 444 in the running number of British vessels). The captain of the vessel, Nathaniel Goodwin, sailed to St Petersburg via Le Havre at least within the next three years; STA 1786 (146/741), STA 1787 (274/820), STA 1788 (812/1191).

to be sold at a loss. Thus, the voyage did not come up to Derby's hopes. The *Light Horse* returned to Elsinore on 2 October and Buffington reported that he was returning to Salem. The vessel arrived there on 28 November with a cargo of iron, hemp, tallow and manufactures.¹⁴

Derby sent Captain Buffington and the *Light Horse* to Martinique in February 1785. The vessel then took a cargo of sugar and indigo to St Petersburg, where the cargo was traded for a return cargo similar to that of the previous year.¹⁵ In spring 1786 Derby instructed Buffington to leave a cargo of colonial products in Gothenburg and take on a cargo of iron and hemp. Gothenburg was chosen as the iron and hemp was needed in Salem as soon as possible, and Derby estimated that he could make a profit of at least \$2000 by saving time. However, the hemp Derby wanted was not to be found in Gothenburg. So Buffington took his vessel to St Petersburg to be loaded by the firm of Gale, Hill, Cazalet & Co. Gothenburg proved a poor choice also in that some of the products offloaded there had to be transported to Copenhagen to be sold. In August 1786 Buffington returned to the Sound from St Petersburg and carried on to Salem with a cargo of iron, hemp, sailcloth, ravenduck and diaper.¹⁶

Elias Hasket Derby (1739-99), "America's first millionaire", is perhaps one of the merchants that New York firm LeRoy and Bayard was referring to when it declared in 1787 that only a few American trading houses had enough capital for trade with Russia. This trade offered a "very great advantage" for those who were could take it on.¹⁷ The claim is difficult to prove, and it does not even hold with respect to Derby. On the other hand, the shipping lists of the U.S. consul in Elsinore relating to American vessels in 1792-93 do support the claim. They identify the major owners of 49 vessels that visited the Baltic. Most of them were prominent and obviously also the most wealthy merchants of Massachusetts. According to the records, by far the most prominent shipowner and merchant was William Gray of Salem. At least nine of his ships visited the

¹⁴ STA 1784 (1104/1845); EI, DFP, vol. 5 (Ship Light Horse); Derby to Buffington, 15 June 1784, USR 1980, 213-215; see Peabody 1926, 42; Phillips 1941, 686; McKey 1961, 157, 213.

¹⁵ STA 1785 (1124/1775); Derby to Buffington, 2 February 1785, Buffington to Derby, 11 June 1785, EI, DFP, vol. 5; see McKey 1961, 212.

¹⁶ STA 1786 (442/924); Derby to Buffington, 12 April 1786, Buffington to Derby, 14 June 1786, Henry Greig to Buffington, 16 August 1786 and Gale, Hill & Gazalet to Derby, 17 Juli 1786, EI, DFP, vol.5, 10; McKey 1961, 215-217; see Phillips 1941, 681. Derby also sent the fast ship *Astrea* (360 tons) commanded by Captain Benjamin Hodges to St Petersburg in 1786. She was claimed to be Derby's favourite vessel and had sailed under letters of marque for some time. Later she was used for sailing to Canton and Batavia. She visited St Petersburg in 1787 after leaving a cargo in Marstrand. She was probably the first American vessel to bring iron from Stockholm; STA 1786 (408/820); John Little to Derby, 19 June 1788, EI, DFP, vol. 1; McKey 1961, 220-221; HMM 1857, vol. 36, 169; Hunt 1858, vol. I, 3ff.

¹⁷ LeRoy & Bayard to William Bayard, 3 April 1787, NYPL, Bayard-Campbell-Pearshall Collection, Correspondence 1786-1791; see East 1938, 253-254; Nettels 1962, 222. LeRoy & Bayard, founded in 1784, concentrated on the East Indies after 1815. The firm closed down after one of its founders, William Bayard, died in 1826; Albion 1961, 204, 236, 248, 253.

Baltic during the years in question.¹⁸ Though Derby had up to twenty vessels in different parts of the world, his vessels no longer visited St Petersburg in the 1790s, with just one exception. "Opening" the trade with St Petersburg did not produce the desired results. Derby concentrated on sailing to India, China and Batavia, which was clearly more profitable for him. He purchased from Britain or Sweden the iron and hemp he needed for building vessels in New England.¹⁹

Salem, which changed from a fishing port into a centre of foreign trade during the War of Independence, played a significant role in voyages to the Baltic and Russia in the 1780s. However, it was no more important than Boston or Providence in Rhode Island. The most prominent Providence company sailing to the Baltic Sea in this period was Brown, Benson & Ives, which had five vessels east of the Sound in 1792-93. Welcome Arnold and Stephen Dexter from the same town were other shipowning merchants almost as significant. Rhode Island's hold on the trade with the Baltic is further revealed by the fact that the Champlins of Newport had four vessels on the Baltic Sea and Gibbs & Channing another three, whereas Ebenezer Parsons and Thomas Russell were the only Boston merchants to have more than one vessel on the Baltic in the years under consideration.²⁰ – According to STA, New England and Massachusetts in particular dominated the trade with St Petersburg in the first decade. In 1783-92, 65 of the 88 vessels that sailed east through the Sound directly to Russia were from Massachusetts.²¹

3.2 The unknown markets in the East

American merchants were not familiar with Northern Europe and the Baltic region. The best-known markets were probably in Bremen and Hamburg, which were permitted destinations for rice exports from the 1750s on. Several

¹⁸ CR 1792-93, NA T-201/1. The shipping lists were presumably drawn up by H.R. Saabye who was appointed consul in Elsinore in 1792, and they include American vessels that went through the Sound in the latter part of the years in question.

¹⁹ The export of Swedish and Russian iron to Batavia and Canton via Salem did not prove profitable. Derby still had three vessels "in the North" still in 1788: the brig *Three Sisters* (Capt. Benjamin Hodges) visited Gothenburg and Copenhagen, the brig *Astrea* Stockholm and the schooner *Peggy* Hamburg. The heyday of Derby's firm was over by around 1800. For a while John Derby (d. 1831) was a partner in the firm of John Derby & Benjamin Pickman, which was interested in trade in the Baltic; McKey 1961, 169, 220-223, 232-239, 273; Morison 1921, 30; HMM 1857, vol. 36, 165-184; Osgood & Batchelder 1879, 188.

²⁰ CR 1792-93, NA T-201/1. Only two Rhode Island vessels sailed to St Petersburg, whereas in the 1780s the vessels of Champlin and Brown, or Benson & Ives, for example, often unloaded their cargo in Copenhagen before they went on to the Gulf of Finland. The Russo-Swedish war of 1788-90 reduced shipping through the Sound, but the number of American vessels increased; see Johansen 1982a, 11, 18, and Appendix, tables 24 and 25.

²¹ Appendix, table 2.

merchants in New England, for example the above-mentioned George Cabot and E.H. Derby, seem to have first encountered Russian products somewhere west of the Sound or in Copenhagen, and they became customers of houses in St Petersburg only later on. E.H. Derby confessed in 1784 that he was “quite unacquainted in the [Russian] trade”. Derby considered St Petersburg more or less an alternative port to Gothenburg; and the eastern part of the Gulf of Finland was sailed to when iron and hemp were not available at reasonable prices west of the Sound.²²

The Newport firm of Christopher and George Champlin, which played a part in the opening up of trade with Russia, is a good example of a firm that ended up on the St Petersburg scene by way of Hamburg, Copenhagen and Gothenburg. It purchased Russian iron, Riga hemp and ravenduck in Gothenburg in 1783-84.²³ The Champlins traded tobacco for Russian products with Caspar Voght of Hamburg. Moreover, they sent the schooner *Enterprise*, commanded by Captain Benjamin Peirce, with a cargo of tobacco and rice to Gothenburg and Copenhagen. Peirce managed to trade a full load of Russian products at T.T. Frolich & Co. in Copenhagen.²⁴ The following year the Champlins instructed Peirce to head directly for St Petersburg. Two major factors usually prompted such a course of action: Russian products were cheaper in St Petersburg and the choice was larger.²⁵

In subsequent years the Champlins alternated between Copenhagen and St Petersburg. In 1787 the *Elizabeth* stayed in Copenhagen, and Peirce purchased from Niels Ryberg goods ordered from St Petersburg especially for the Champlins.²⁶ In the next two years Peirce visited both Copenhagen and St Petersburg. He transacted business with Ryberg in Copenhagen and with Edward James Smith in St Petersburg.²⁷ Approximately 25 vessels crossed the Baltic for the Champlins in the years 1785-1800. They most often carried colonial products taken on at or transported via Newport, or else rice taken on in Charleston to Copenhagen, and from there the ships went on to St Petersburg in ballast.²⁸

²² Derby to Buffington, 15 June 1784, USR 1980, 213-215; Derby to Henry Elkins, 6 December 1785, and 28 March 1787, EI, DFP, vol. 2; see East 1938, 253; McKey 1961, 215, 218, 221-222; Rabuzzi 1998, 180. - East (1938, 7) claims, perhaps on the basis of Derby's proceedings, that Americans ended up in the new Russian market via Sweden.

²³ E.g. Carl Söderström to Christian Champlin, 1 September 1783, and John Greene to Christian Champlin, 25 June 1784, MHS, WCRIC, 1783-84.

²⁴ Christian Champlin to Peirce, 19 April 1785, Peirce to Samuel Fowler & Son, 8 June 1785, and Peirce to Christopher Champlin, George Champlin and Samuel Fowler & Son, 20 June 1785, MHS, WCRIC, 1785; STA 1785 (751/1129); see USR 1980, 224, note 4.

²⁵ Christopher and George Champlin to Peirce, 8 April 1786, USR 1980, 223-224; STA 1786 (395/1024).

²⁶ STA 1787 (480/1016); Thirink to Peirce, 6/17 July 1787, USR 1980, 229-230.

²⁷ On the arrangements in 1788, e.g. Smith to Christian and George Champlin, 21 July 1788, MHS, WCRIC, 788.

²⁸ MHS, WCRIC, 1792-1801; e.g. STA 1788 (438/977); STA 1789 (276); STA 1790 (489/1016).

Another Providence firm, Brown, Benson & Ives, reached St Petersburg in the same way as the Champlins. The *Hope* carried rice, rum and tobacco to Copenhagen in 1788-89, but in 1790 Captain James Brown was instructed to sail to St Petersburg to purchase hemp, iron and manufactures at E.J. Smith & Co. The trading house had purchased them at Niels Ryberg in previous years, but the prices and quality of the products did not meet all the demands of the Providence merchants. In 1792 Brown, Benson & Ives sent two vessels to St Petersburg. The solution that apparently suited all parties was for the firm's vessels to leave the colonial products in Copenhagen and purchase a return cargo in St Petersburg with a letter of credit from Ryberg.²⁹

The trading houses in Copenhagen and Hamburg were pleased to supply Russian products to the Americans. Thus they obviously aimed to slow down their advance to St Petersburg. Berenberg & Gossler, a firm that had long dealt with Stephen Girard of Philadelphia, tried to discourage their good customer from going to St Petersburg. The Hamburg firm stated that hemp and sailcloth could be purchased from them, and that there was no sense in carrying colonial products to St Petersburg. Moreover, it insisted that Girard's ship the *Voltaire* (305 tons) was too large and impractical for sailing the Baltic Sea. Berenberg & Gossler still had their customers in 1796, despite some difficulties in supplying hemp and iron. Nevertheless, the *Voltaire* was sent to St Petersburg to Bulkeley, Russell & Co. at the beginning of the following year.³⁰ William Rodman, the captain working for Brown, Benson & Ives, broke away from Ryberg & Co. in 1794 in a somewhat similar manner and sailed to St Petersburg. He calculated that the Russian products were at least 15 percent cheaper there than in Copenhagen.³¹

Lack of information about markets on the Baltic and in Russia led the Americans to try to export similar products east of the Sound to those that were sold in Western Europe. The Champlins tried to sell tobacco from Virginia and Maryland to Sweden, while Brown, Benson & Ives, and Derby also, took it to St Petersburg. The results were poor.³² Derby was also very interested in exporting rum from his own distillery to the Baltic. Rum sold, but not in such quantities as the firm had expected.³³ Rum had its day later on. It was also

²⁹ Brown, Benson & Ives to Edward James Smith & Co., 3 April 1790, USR 1980, 275-276; Hedges 1968, vol. II, 40; STA 1788 (837/1268), STA 1789 (1013/1312), STA 1790 (597/1104), STA 1791 (414/871), STA 1792 (280/1033, 1121/1383), STA 1793 (85/356, 596/978, 157), STA 1795 (548/913).

³⁰ STA 1797 (206); Berenberg & Gossler to Girard, 16 and 20 December 1796 and 24 January 1797, Ezra Bowen to Girard, 8 May 1797, APS, GP, mf -reels 14 and 16. The ship *Voltaire* entered the Baltic on 17 April, but became icebound in the Gulf of Finland. The ship was the second vessel that arrived in St Petersburg that spring.

³¹ Hedges 1968, vol. II, 44; STA 1794 (1145). – According to STA, Captain Rodman sailed from Marstrand to “the Baltic Sea”.

³² E.g. Carl Söderström to Christian Champlin, 16 June 1784, MHS, WCRIC, 1784; Peabody 1926, 140-141.

³³ Hedges 1968, vol. II, 40.- Henry Grieg, Derby's agent in Gothenburg, warned against sending rum to the North since the countries around the Baltic Sea were “corn countries and the Rum is disguise”. Exporting rum would be as stupid as trying to

difficult for the Americans to believe that it was not profitable to export tea purchased in the East Indies or China to Russia via the United States.³⁴

The Americans were newcomers in Russia, and this can be seen in the market reports the merchants in St Petersburg sent across the Atlantic. Usually they recommended that Russian products should be purchased. Quality and prices were discussed in great detail. Moreover, most St Petersburg houses warned against attempts to import North American or colonial articles.³⁵ According to the trading house Blandow Brothers, the consumption of, for example, spices was rather low, and the market was dominated by the Dutch and the *Asiatisk Kompagn* from Denmark. Trade in other colonial products was so tightly controlled by the Dutch and the British that there was no room for newcomers. Blandow Brothers emphasized the significant differences between Russian commercial practices and those of Western Europe, pointing out for example difficulties in getting credit and the necessity of advance payments. Russian customs formalities and bureaucracy formed a chapter of their own. According to the firm, business would be advanced by furnishing several copies of ship's papers and "big seals would not be forgotten".³⁶

In the early years, William Cramp was Derby's trading partner in St Petersburg, as he was of several other American merchants. He was probably favoured because of his connections with Lisbon. Unlike many of his colleagues, Cramp, of whom Derby was later for some reason suspicious, recommended the import of colonial products. He also advised Americans to buy Russian products in advance like the British, who controlled the market, because iron, hemp and manufactures would be considerably cheaper in the winter than in the navigation season.³⁷

Another merchant who traded with several Americans, Anthony Thiringk, recommended that sugar, coffee, rice, cochineal and indigo should be imported from Santo Domingo, as the Americans knew the markets of Hispaniola better than anyone else. Thiringk emphasized that the products should be "of the best sorts in their respective kinds, as our people are very nice and won't touch any indifferent ones". As Americans were generally unfamiliar with the market, they could start by sending to merchants in St Petersburg consignments to the value of £4000-5000, consisting of as many different articles as possible. Thiringk returned to the question the next year. He still suggested that West

sell American butter in Sweden, which was supplied from Finland at the lowest prices in Europe; Grieg to Derby, 9 May 1787, EI, DFP, vol. 2.

³⁴ E.g. Benjamin Shreve to Meyer & Brüxner, 31 May/ 12 June 1810, and Shreve to Samuel Williams, 6 June 1810, PM, BSP, vol. 5.

³⁵ E.g. E.J. Smith & Co. to Christopher and George Champlin, 23 June and 27 June 1788, CRI 1915, 372-373.

³⁶ Brothers Blandow to E.H. Derby, 7 November 1784, EI, DFP, vol. 5.

³⁷ Gale, Hill, Cazalet & Co. to Derby, 4 December 1786, and 25 September 1789, EI, DFP, vol.11; USR 1980, 215, note 2; McKey 1961, 214-215.

Indian products should be imported, but he considered no North American products to be suitable, except "Furrs Leather and Cotton".³⁸

Cargoes shipped to the Baltic at the wrong time or to the wrong place could cause surprising losses, as the market was relatively limited. Brown, Benson & Ives claimed that they had to sell rice from Charleston at below the purchase price in Copenhagen in 1792, as two similar cargoes had arrived there already earlier in the spring. The same happened again in 1796 when the trading house carried three shipments of rice to Copenhagen and St Petersburg after trying to sell them in France. Ryberg & Co. were said to have paid only half of the purchase price in Charleston. These striking losses sustained by Brown, Benson & Ives were compensated for by simultaneous, very profitable sailings to Canton and India.³⁹

3.3 The Russian triangle

New England merchants tried to trade their colonial products for Russian products in St Petersburg at the beginning of the 1780s, but this practice did not prove very profitable. After a few years it became usual to unload cargoes shipped across the Atlantic at Dutch and German ports on the North Sea, and in Copenhagen. The vessels then went on to St Petersburg either in ballast or short-loaded. Another practice was to take on a suitable cargo for Russia at Southern European ports or in Madeira and the Azores. Some Americans carried freight. For instance in 1791 two Virginian captains, Aaron Jeffrey of Norfolk and Daniel Bragdon of Portland, carried British products to St Petersburg and returned with iron, tallow and lumber to the markets of Amsterdam.⁴⁰

It is very revealing that none of the nine American vessels that sailed to St Petersburg in 1786 arrived in Elsinore direct from the United States. Instead they sailed from Western European ports more or less in ballast. Soon after St Petersburg was "opened" to trade it became clear that the market in, for example, dyewood and spices, was not at all as profitable as expected. According to STA, 99 vessels sailed to Russia in 1786-93, and only seven of them had their port of departure in the United States. Moreover, even in those cases the composition of the cargo makes it improbable that they all entered the Sound directly from the America.⁴¹

³⁸ Thiringk to Christopher Champlin, 1/12 October 1787, USR 1980, 235-236; Thiringk to Christopher Champlin, 30 November 1787; Thiringk to Christopher and George Champlin, 28 July 1788, CRI 1915, 346-347, 381-382.

³⁹ Hedges 1968, vol. II, 41, 53-56.

⁴⁰ STA 1791 (368/757, 369/786).

⁴¹ Appendix, tables 25-26. In 1787 nine vessels sailed to Russia, none of them directly from the United States to the Sound. In 1788 the Champlins' brig *Elizabeth* was one of nine vessels that went to St Petersburg, but she probably left her cargo of rice in Copenhagen. In 1789 11 vessels sailed for Russia in ballast. One of them was from Boston, and her return cargo consisted of iron from Stockholm. One of the 14 vessels that sailed to Russia in 1790 was registered as sailing in ballast from Philadelphia to

Of 172 American vessels that sailed into the Baltic Sea via Elsinore in 1783-92, 88 were bound for St Petersburg, one for Riga and two for Reval.⁴² It was characteristic of American trading practices that, according to the captains' reports, only ten of the vessels sailing to Russian ports reached the Sound directly from the United States. This meant that sailing to St Petersburg came to involve a trade triangle: products left in Western or Southern Europe financed purchases in St Petersburg. Thus a new instance emerged of a trading pattern that with various different permutations was prevalent during the colonial era. For example, exports to South Europe had been used to purchase English manufactured goods. The aim of the Russian triangle was to purchase hemp, iron and manufactured goods in St Petersburg. Vessels sailed there in ballast. For example in 1794, only 14 of the 67 American vessels that sailed to the Baltic Sea were fully loaded. 12 reported Copenhagen as their port of destination, one Stettin and only one St Petersburg.⁴³ The vessels that sailed to Russia from ports anywhere else but in Portugal or Spain were in ballast. As the vessels that sailed from Western Europe to the Baltic Sea carried at least small amounts of fruit and wine, Lisbon became the major "export port" for American trade with St Petersburg.

In 1783-92, 55 vessels that sailed eastward reported Copenhagen as their port of destination at Elsinore. However, there were only 38 vessels recorded that sailed westward from Copenhagen. Where did the rest vanish? They were ships that went on from Copenhagen to St Petersburg and usually from there directly to the United States. Thus Copenhagen came to be an alternative point on the Russian triangle and this lasted for almost thirty years. A great number of American vessels turned back from there after purchasing hemp and iron.⁴⁴ Russian products were also still purchased in Hamburg and Gothenburg by, for example, Ebenezer and Gorman Parsons, who had as many as five vessels on the Baltic Sea at one time 1790s.⁴⁵

Although vessels sailing to St Petersburg were in ballast, those heading for Copenhagen were not. Most American-carried cargoes presumably ended up in Niels Ryberg & Co.'s house, which had specialized knowledge of the market for

St Petersburg at the beginning of May. Altogether 26 vessels sailed to Russia in 1791-92, only one of them from a port of other side of the Atlantic. 24 vessels sailed to Russia in 1793. One of them was William Gray's ship *Union*, but she carried only 49,000 lbs sugar and 550 lbs coffee taken on in New York. The vessel had left the bulk of her cargo somewhere in western Europe before she sailed to the Baltic; STA 1788 (438/977); STA 1789 (615/1344); STA 1790 (360); 1793 (319); CR 1793, NA T-201/1.

⁴² Appendix, tables 25-26. Captain John Green of New York, who had been sailing to the Baltic Sea for several years, reported carrying 90 lasts salt (1620 barrels) from Liverpool to Reval in 1791. After that Green took hemp and iron from St Petersburg to Ostend; STA 1791 (703/830).

⁴³ In 1791 all 12 vessels that sailed directly to St Petersburg were in ballast, except one that carried sugar from Lisbon; see Appendix, table 26.

⁴⁴ However, a few American captains reported sailing from Copenhagen to North America in ballast; e.g. STA 1788 (330,893).

⁴⁵ Parsons traded mostly with Widow Black & Co. (Blacks enke & Co.) and Ryberg in Copenhagen, and with Brothers Blandow (Blandow & Co.) in St Petersburg; HUBL, EGPP.

colonial products. According to Anthony Thiringk, Ryberg was a “perfect master to judge” which products were suitable for Russia.⁴⁶ This may be true, but Ryberg had difficulties in convincing Americans of this.⁴⁷ For the Americans, the major export articles to the Baltic Sea in 1783-92 were rice, tobacco and rum. Only ten per cent of the wine shipped and a few percent of the tobacco ended up in St Petersburg. On average 2300 gallons of rum were exported to St Petersburg, but 39,000 gallons to Copenhagen.

The Russian triangle, as with triangular trade in general, required financing arrangements that could not be based on barter alone. The basic problem on the new American trade routes in the 1780s was finding a suitable export cargo. St Petersburg is a perfect example of this: even when the cargo sold, the money raised was not enough to purchase a return cargo. Elias Hasket Derby, whose vessels were “constantly busy in all parts of the world”, sold cargoes of rice and tobacco to Lane, Son & Fraser in London who issued the captains with letters of credit for St Petersburg.⁴⁸

The captains who went on eastwards from Copenhagen often purchased at least a part of their cargo with letters of credit received from Ryberg & Co. For example the above-mentioned Brown, Benson & Ives, one of Ryberg’s major customers, proceeded in that way. After using Ryberg’s letters of credit for several years the house started to procure extra finance in London. One reason for that was that the rice, rum and tobacco left for Ryberg was not always enough to purchase a return cargo in St Petersburg. Ryberg was not totally forgotten, but the firm’s vessels unloaded their cargo more and more often in Amsterdam or Rotterdam. The captains or supercargoes who sailed to St Petersburg had bills of exchange and letters of credit for Daniel Crommelin & Son in Amsterdam or Dickason & Co. in London.⁴⁹ A very large number of Americans’ financial dealings in London in some way or another involved the American Consul, Samuel Williams. He also considered Ryberg the best expert on the Baltic and so directed those captains seeking advice to Copenhagen, where Ryberg, for his part, directed them to Brothers Blandow.⁵⁰

Not all merchants used letters of credit. The Champlins, at least, depended on cash sales in Copenhagen and Gothenburg in the mid-1780s. Christopher Champlin declared that he bought and sold “principally my own bottom, of course the stock in circulation not large compared with those acting upon the credit of others”.⁵¹ He used Spanish silver dollars as extra finance to purchase

⁴⁶ Thiringk to Christopher Champlin, 30 November 1787, CRI 1915, 346-347. – Ryberg itself had unsuccessfully tried to create direct trade connections with the United States in 1783; see Rasch 1964, 143.

⁴⁷ E.g. Ryberg & Co. to Benjamin Goodhue, 9 August 1800, EI, GFP, vol.1.

⁴⁸ Lane, Son & Frazer (Lane, Sons & Frazer) to Derby, 25 May 1786, EI, DFP, vol. 1; McKey 1961, 210, 212, 214, 381-382.

⁴⁹ Hedges 1968, vol. II, 40-41. Dickason & Co. financed trade in Swedish iron, particularly in the 1820s. The firm closed probably in 1832, and its customers changed over to Baring Brothers & Co.; Adamson 1969, 92, note 70.

⁵⁰ E.g. Williams to Richard Wheatland, 13 July 1798, EI, GFP, vol.1.

⁵¹ Champlin to William Green, 20 September 1787, MHS, WCRIC, 1787.

Russian products.⁵² The need for extra finance depended, of course, on the type of return cargo involved. It was not needed at all if only iron and hemp were bought or if the vessel carried freight. In March 1795 Ebenezer and Gorman Parsons of Boston advised Captain Thomas Hopkins to sail the brig *Sarah* to St Petersburg with a cargo of rice and to purchase iron with all the money thus raised. The remaining cargo space was to be filled with hemp and duck carried as freight.⁵³ Advice of a similar type was also later given to some of the captains who sailed for Parsons.⁵⁴

From the very beginning from the 1780s U.S. imports from St Petersburg concentrated on Massachusetts. According to the customs accounts of the Sound, 177 vessels sailed from the Baltic to the North Sea in the first decade in question, and 134 of them had departed from Russia. Almost all vessels from Russia passed Elsinore fully loaded, and 123 reported that they were sailing directly to the United States. Of these 77 sailed to Massachusetts (47 to Boston and 20 to Salem), 18 to Newport and Providence, Rhode Island.⁵⁵

The early phase of trade relations in the 1780s did not seem very promising for American exports. There seemed few opportunities of penetrating the Western European-controlled import market of St Petersburg. The situation was different with Russian exports: the Americans were keen to purchase iron, hemp and manufactures. At least according to Anthony Thiringk, the fact that the Americans had entered the St Petersburg market led to increases in the prices of commodities in the summer of 1787. This explained the low level of exports. By contrast, American purchases increased the following summer after a fall in the value of the rouble in relation to the sterling.⁵⁶

The first sketchy American foreign trade statistics, which are available from 1789 on, do not show any exports to Russia in that year. America did export a few small consignments of sugar and tobacco in 1790-93, valued at \$2000 each on average. In the fiscal year 1791, which closed at the end of September, 105 hogsheads of tobacco were exported, which is only a fraction of the total exports of \$17.6 million. Import figures were somewhat different: in 1791, commodities subject to ad valorem duty were imported to the value of \$233,000 (Massachusetts \$190,700), and hemp and cordage, products subject to

⁵² E.g. Benjamin Peirce, captain of the schooner *Enterprise*, traded in London 9000 silver dollars brought from Newport for Hamburg silver marks for purchases in St Petersburg; Peirce to Samuel Fowler & Son, 8 June 1785, MHS, WCRIC, 1785.

⁵³ Parsons to Hopkins, 3 November 1795 and Hopkins to Parsons, 6 June and 25 June 1796, HUBL, EGPP. – However, Hopkins left the major part of his cargo of rice in London and sailed to Brothers Blandow in St Petersburg with a letter of credit and 35,400 lbs of rice. The return cargo to Boston consisted of iron and cordage; STA 1795 (837/1895).

⁵⁴ E.g. Parsons to Ignatius Webber, 9 June 1798, HUBL, EGPP.

⁵⁵ Appendix, table 26.

⁵⁶ Thiringk to Benjamin Peirce, 6/17 July 1787, USR 1980, 229-230; Thiringk to Christopher Champlin, 30 November 1787, and to Benjamin Peirce, 21 March 1788, CRI 1915, 346-347, 360-361; Cramp & Bulkeley to Derby, 7 January 1788, and Hill, Gzalet & Co. to Derby, 31 October 1788, EI, DFP, vol. 11.

specific duty, for \$26,000 and \$5000, respectively.⁵⁷ The pattern of American trade at the turn of the 1790s seems fairly clear: ships sailed to St Petersburg in ballast, and returned to America with a small selection of commodities - iron, hemp and manufactures, which every vessel carried as part of its return cargo. Other commodities that were occasionally imported were cordage, flax, tallow and feathers.

⁵⁷ ASPCN 1789-91. In 1791 Rhode Island's share of the items taxed ad valorem was \$6000, that of New York \$8500 and that of Pennsylvania \$6100. The imports are itemised by state only in 1790-91. Soap also belonged to this group: according to STA, 33,400 lbs was imported from St Petersburg in 1785 and 137,000 lbs in 1793. Flaxseed and hempseed, barley and wheat were also occasionally carried; e.g. STA 1785 (1707).

4 THE POLITICAL FRAMEWORK OF TRADE: RUSSO-AMERICAN COMMERCIAL DIPLOMACY

4.1 Dana's mission

Preliminary diplomatic contacts between the United States and Russia were established in the same years as the merchants of Salem, Boston and Providence had their first direct trading connections with St Petersburg. The starting point of Russo-American commercial diplomacy is not difficult to identify. It is Francis Dana's mission to St Petersburg in 1781-83. Different interpretations exist of the reasons for sending the Boston puritan diplomat to the court of Catherine II. Whatever else, Dana was one of the many American diplomats who tried to get money, armed assistance or at least sympathy for the new republic from the European courts.¹ The Continental Congress gave Dana, who travelled from Paris to St Petersburg as a private person in the autumn of 1781, two main tasks: to make Russia recognize the independence of the United States and to conclude treaties of amity and commerce between the two countries. The treaty of commerce was, like the treaty with France in 1778, to be based "on the terms of the most perfect equality, reciprocity, and mutual advantage".²

The great American interest in St Petersburg and the instructions that were given to Dana stemmed from the fact that the 1780 Russian Declaration of Armed Neutrality, joined also by Denmark, Sweden and Prussia, was almost totally misunderstood in Philadelphia: it was considered to be an alliance against the British. This was due in particular to the inclusion of points about the right for neutral shipping similar to those the Americans themselves had outlined when defining their objectives in the "Plan of 1776", and that was partially incorporated in the treaty with France of two years later. According to the principles of armed neutrality, neutral vessels could sail in wartime to the ports of countries at war, and the property on board belonging to those at war

¹ See Paterson et al. 1983, 17; Saul 1991, 14.

² Huntington to Dana, 18 December 1780, USR 1980, 98-100; Saul 1991, 14; Cresson 1930, 143.

would be safe (free ships, free goods). However, neutral vessels were not to be used to carry contraband for military purposes. The American view was that only arms and ammunition were such. It was considered important that blockade without adequate controls was useless. However, the objective of Armed Neutrality was not to fight against the British but to secure the undisturbed flow of foreign trade. In any case, Dana's mission was to bring the United States into this alliance.³ It is known that Dana's unprepared mission failed, but the principles of armed neutrality lived on. During the ensuing decades, the Americans often took them to be objectives of Russian foreign policy, and the Russians were continuously reminded of this.

It seemed uncertain right from the beginning that American political objectives could be achieved. Therefore Dana concentrated on the problems of trade between Russia and the United States as the Secretary of Foreign Affairs, Robert Livingston, had advised him to do. Dana seems to have made himself remarkably well-informed about them.⁴ He considered that the future of Russo-American trade looked bright for three main reasons. First of all, the United States was a stable market for the most important Russian export commodities - iron, hemp, sailcloth and cordage, and there was demand for American rice and tobacco in Russia. Secondly, the countries no longer needed to trade via Britain as the United States had become independent. Thirdly, the ending of English bounties on American shipbuilding materials created new markets for Russian commodities. Dana also sketched for the Americans the role of brokers of colonial commodities from the West Indies.⁵

Dana tried to find counterarguments against British war propaganda, and his interest in the commercial relations between the United States and Russia was partially caused by this. This propaganda represented the colonies in revolt as a threat to trade, making out that intensified exportation from North America would overturn established European trade connections. According to this propaganda Russia in particular, but also Sweden, Denmark and the Mediterranean region would suffer from the new commercial situation.⁶

³ Griffiths 1970, 382-383; Cresson 1930, 266; see Bolkhovitinov 1975, 13-24. The American privateer *General Mifflin* (Capt. Daniel McNeill), that had preyed on British vessels returning from Russia in northern waters, also contributed to the declaration of 1780; Catherine II to the Admiralty College, 26 January/ 6 February 1779, USR 1980, 65-66; see Kiiskinen 1996, 188-197.

⁴ Livingston to Dana, 2 March 1782, USR 1980, 136-139. On his way to St Petersburg, Dana called at several ports, but except for Riga he considered them unimportant for American trade; Dana to Thomas McKean, 4/15 September, 1781, USR 1980, 123-126.

⁵ Dana to Livingston, 17/28 June 1782, USR 1980, 152-157; Griffiths 1970, 398; Crosby 1965, 11. Stephen Sayre, who was active in St Petersburg and Archangel, planned to start the exchange of goods between Russia and the United States via the West Indies around the same time (1780-81); Alden 1983, 128; Griffiths 1970, 386ff.

⁶ This reasoning seems to have had an effect at least on the Russian Minister in London, Ivan Simolin: "The most important and enlightened people" convinced him of the American threat: commerce between Britain and Russia would decline, and grain exports from the United States would cut the demand for Baltic grain in southern Europe; Simolin to Ivan Osterman, 7/18 December 1781, and 18/29 April 1783, USR, 132-133,188; Bolkhovitinov 1976, 35; Bolkhovitinov 1975, 89; Griffiths 1970, 396-399.

St Petersburg paid a great deal of attention to the conflict between England and the colonies with a special concern for its influence on international commerce in particular. For example a Committee of Foreign Affairs estimated in a memorandum sent to Catherine II in August 1779 that the war had been very profitable to Russia, since a part of the British trade that had earlier been directed to the United States was now coming to St Petersburg. It was also expected (and also Dana emphasized this) that as American hemp growers would no longer get bounties they would give up growing the crop and thus demand for Russia's major export commodity would increase.⁷

Dana strove to disprove the claims about the threat posed by the Americans. According to him, the English were nervous at the idea that they were about to lose their old and advantageous monopoly as brokers in the trade between North America and Russia. He claimed that British intervention had increased the prices of American commodities in St Petersburg by at least a quarter. The countries around the Baltic could hardly suffer if the Americans were to buy iron and hemp directly from the growers and producers. Dana wanted to convince the Russians that trade with America was advantageous and in no way risky, and though his reasoning was somewhat theoretical, Dana considered himself to have succeeded.⁸ Yet he failed in almost everything else: Russia did not recognize the independence of the United States, it did not welcome him as a minister, and it was not interested in a commercial treaty. N.N. Bolkovitinov, however, considers that Russia de facto recognized the independence of the United States during Dana's mission.⁹

There are several reasons for the failure of Dana's mission: the Russians were suspicious of the republican revolution. Moreover, the puritan politician was not familiar with Russian diplomacy, "complex boudoir politics", and, without support from the French, he was pushed into the background by British diplomacy.¹⁰ David Griffiths argues that the failure was caused by wide gap which existed from the start between Russia's and the United States' expectations of a treaty. Moreover, the rebellious colonies did not in fact have very much respect for the politics of St Petersburg. The major objectives of Russia's foreign policy were focussed upon Turkish questions, and good relations with London were a condition for making headway there. This underlying situation may have remained obscure to Dana.¹¹

Several political leaders in the United States were influenced by revolutionary ideas, and thus had ambitious plans for the new republic to assume an important role in commercial politics.¹² Their starting point was the

⁷ Report of the College of Foreign Affairs to Catherine II, 5 August 1779, USR 1980, 69-74; Bolkhovitinov 1975, 11, 87-89.

⁸ Dana to Livingston, 17/28 June, 18/29 September, and 10/21 December 1782, USR 1980, 152-56, 165-67, 171-72.

⁹ Bolkhovitinov 1975, 25, 28.

¹⁰ Bolkhovitinov 1975, 26-27; Cresson 1930, 251.

¹¹ Griffiths 1970, 379-80, 400-01, 408.

¹² Eckes 1995, 2ff. However Silas Deane, for example, stated that the Americans had nothing to offer to Russia but rice and indigo. Deane suspected that Russia and the

understanding that the free exchange of goods liberated from mercantilist regulations would benefit all parties. Commercial treaties were needed to guarantee this freedom. On the other hand, there were those who emphasized that the United States was essentially a producer of agricultural crops and raw materials and thus its future was also agrarian. Yet it would not be a threat to Europe, and the Russians need not worry about their grain markets. There would be no competition as the Atlantic Ocean prevented efficient large-scale freight carrying. John Adams, for example, contended that he found it difficult to imagine that commercial competition could arise between two countries so far apart as the United States and Russia. Two continents would offer enough markets for both.¹³

Though the members of Congress with trading interests in iron, hemp and rice would have liked Dana to stay in St Petersburg, the Continental Congress invited him back home at a point when the Minister himself believed that he was close to concluding a treaty. Also Robert Livingston, who was in charge of the foreign policy of the Continental Congress, would have still waited, as the peace treaty between England and the United States lacked only signatures. Thus, Russia would not have needed to fear London's indignation if the Russo-American treaty of commerce had been concluded. Justified or not, the fact that some bribes were necessary to start the negotiation in the Russian Court became a threshold question. This could not be accepted. Dana left St Petersburg frustrated in August 1783.¹⁴

The upset to Russo-American trade relations at the beginning of the 1780s was because of the political repercussions of the war. There was no further contact with St Petersburg, particularly as the Continental Congress wished to stay outside European politics. Indeed the assistant superintendent of finance of the Confederation, Gouverneur Morris, who usually considered foreign trade important for his country, had already concluded by the autumn of 1783 that there was no point in developing relations with Russia:¹⁵

"We have nothing to do with the Empress of all the Russians. We cannot conveniently carry any traffic with her dominions for various reasons which much be assigned, such as for instance: that we produce commodities similar to hers and very few to exchange with her, none indeed of consequence but rice; that the distance is too great; that the poverty both of their subjects and our own requires an advance of capital to each, etc."

After Dana's mission, the question of a commercial treaty between Russia and the United States was not officially discussed for another fifteen years. There was an attempt to explore the possibilities for such a treaty in the 1780s

United States were competing with each other for the same markets for tobacco and several other products; Deane to Jesse Root, 20 May 1781, USR 1980, 116-117; see McCoy 1980 ff.; Spivak 1985, 33-34; Setser 1937, 4ff.

¹³ Adams to John Jay, 4 August 1779, and to Jean Luzack, 15 September 1780, USR 1980, 67, 86-85; see Griffiths 1970, 392.

¹⁴ Dana to Robert Livingston, 17/28 June 1782, USR 1980, 152-57; Saul 1991, 16-17; Griffiths 1970, 406.

¹⁵ Morris to John Jay, 25 September 1783, USR 1980, 212-213; see McCoy 1980, 96.

through the Russian Embassy in Paris, but no response was forthcoming.¹⁶ There was no real commercial need for the treaty, as the equality or reciprocity the Americans sought, however it was understood, was effectively practised in Russia: foreign merchants, vessels and commodities were treated in an equal way regardless of their nationality. The differential duties of the United States were not a problem for Russia as ships of its own sailing to North America were virtually nonexistent.

4.2 The gains and losses of neutrality

The outbreak of war between England and France in February 1793 marked the beginning of an exceptional period of trade for the United States and also for Russo-American trade relations. The United States, which declared its neutrality in April 1793, was able to make use of the situation commercially right from the beginning, and it attempted to avoid all political commitments. However, political isolation and expansion of trade were not possible simultaneously in the long term.

The neutrality of trade was the cornerstone of American commercial and foreign policy. However, during the war, both Britain and France and their allies either denied neutrality or interpreted it in ways suitable for their own purposes. In 1793, France opened its colonies to the trade of neutral countries, while the British Orders in Council aimed at restricting it. The French responded by adopting the English interpretation that the produce of a hostile country even on a neutral ship gave the right to seizure.¹⁷

The British accepted the so-called broken voyage principle up until the Essex Decision in 1805. Before that produce carried, for example, from the French West Indies to the United States that had paid import duties there could be carried to the port of destination as neutral cargoes. This practice made massive re-export possible. The United States made probably the biggest concessions as far as demands for neutrality are concerned in the contentious Jay's Treaty concluded with the British on 19 November 1794. At least according to the French interpretation, the Americans abandoned the principle of free ships – free goods in the treaty for the benefit of the British.¹⁸

The situation that prevailed from the beginning of 1793 onward is illustrated in story of what happened to Brown, Benson & Ives' ship the *Hamilton*.

¹⁶ Griffiths 1970, 409; Bolkhovitinov 1976, 94-95.

¹⁷ See e.g. Clauder 1932, 30-31; Bruchey 1956, 78-79; Bryant 1967, 119; Graebner 1993, 46; Setser 1937, 146, 190. The French seized a hundred American vessels in 1793, and the British more than two hundred vessels that had carried foodstuffs from the French West Indies.

¹⁸ Jay's Treaty removed the threat of Anglo-American naval war, but the Americans had to accept among other things the British view that French property on American vessels constituted a fair prize and that shipbuilding materials were contraband of war. Jay's Treaty did not come into effect until 1797; see e.g. Paterson et al. 1983; Spivak 1985, 41-42; Rutland 1985, 62.

Captain William Rodman first sailed the ship with a cargo of fish from Boston to Lisbon for Bulkeley & Son. He was to carry a cargo of fruit purchased in Lisbon to St Petersburg as soon as possible, so that he would be the first American there. But as the prices of shipbuilding commodities had risen significantly in Massachusetts because of the war, the *Hamilton* was also wanted back to be the first ship in from the Baltic that year. Captain Rodman was perhaps the first American captain sailing to St Petersburg to experience the arrests, inspections and seizures that were repeated in several forms over the next quarter of a century. After leaving for St Petersburg with the cargo of fruit the ship was arrested first by the French and after that by the British. In both cases the ship was released as it was difficult to interpret a cargo of fruit and wine as contraband of war, regardless of where it was bound for. These adventures lasted about three months, after which the cargo of fruit was only fit to be thrown overboard. On being released, Rodman carried on to St Petersburg in ballast. However, the cargo sold in Lisbon had been so profitable that it was not even possible to spend all the money thus raised on the new cargo of hemp and iron from Russia. Rodman returned to Providence late in the autumn, and he was then almost immediately sent to Bordeaux with a cargo of whale oil and tobacco.¹⁹

In general, the risk of confiscation was small for the commodities that were carried from the United States to the Baltic, irrespective of their country of origin. However, Brown, Benson & Ives did, for example, advise the captain of the brig *Three Friends*, John Warner, to take as northerly a passage to Elsinore as possible as a precaution, since the chances of encountering cruisers would not be so great. The rum, and probably also the tobacco and rice that Warner carried, were of American origin, but the coffee and sugar, which probably had both a French and an English colonial background, were expected to cause trouble.²⁰

Though it is not literally true that "Each declaration of war in Europe increased American trade and prosperity"²¹, the European wars created new possibilities for trading with Russia. Dealings with St Petersburg were significantly influenced, among other things, by the fact that the American prices of hemp, duck and iron increased rapidly immediately after the outbreak of war. As early as 1794 the new prices attracted 43 vessels to St Petersburg and at least four to Riga. This was the point when American navigation started to become important for St Petersburg too. In 1795 exports from St Petersburg

¹⁹ Rodman to Brown, Benson & Ives, 8 February 1793, 26 March 1793, and 3 February 1794, Brown, Benson & Ives to Rodman, 2 March 1793, 11 March 1793, and 14 December 1793, BUJCBL, BIP V H15; STA 1793 (596/978); Hedges 1968, vol. II, 42-43.

²⁰ Brown, Benson & Ives to John Warner, 31 August 1793, BUJCBL, BIP V-T45 (Brig Three Friends). – The vessel sailed to Copenhagen via New York and was the last American vessel to pass the Sound that year. Captain Warner did not, however, continue to St Petersburg, but returned to Elsinore from Copenhagen in January of the following year. He reported that he was carrying Russian hemp, iron and sailduck taken on in Copenhagen to "North America"; STA 1793 (1517); STA 1794 (16); CR 1793, NA T-201/1.

²¹ Smith & Cole 1969, 14; Gregory 1975, 14. The re-exports of the United States amounted to \$1.8 million in 1793, but in the subsequent year they already totalled \$6.5 million.

were calculated at 30.7 million roubles, and the American share of this amounted to 1.9 million roubles.²²

The resumption of contact and private trade interests were a reason for the United States to send its first Consul, John Miller Russell (1768-1840), to St Petersburg. The initiative came from Thomas Russell of Boston, who had at least as early as 1786 traded between Boston, Lisbon and St Petersburg. In November 1794 he arranged in Washington for his son, who had probably acquired experience in trade as a supercargo, to be appointed consul.²³ No advance preparations had been made, probably because the Americans were not experienced at handling their foreign affairs, and so John Russell arrived in St Petersburg via Lisbon in summer 1795 to find himself in an odd situation. He asked for help from the British Minister Sir Charles Whitworth in getting his status recognized. He gave Russell to understand that according to Catherine II the issue should be or should have been arranged "with the etiquette and formalities of the Court of Russia". According to the British Minister it meant in this case negotiations "through the medium of the British Cabinet".²⁴ The State Department does not seem to have reacted to the issue in any way, and Sir Charles was in no hurry to strengthen the position of the American newcomer. According to a later account, which is perhaps unfair to Russell but not without some truth, Russell "managed to make himself ridiculous" in the diplomatic circles of St Petersburg.²⁵

Although John Miller Russell did not gain recognition as consul by Russia, he stayed in St Petersburg and established jointly with John Matthew Bulkeley the firm Bulkeley, Russell & Co. in August 1795. The fathers of both men, Thomas Russell of Boston and John Bulkeley of Lisbon, were backers of the firm; both of them were heavily involved in American merchants' export of fruit and wine from Portugal to St Petersburg. Russell was evidently the first merchant from the United States to settle permanently in St Petersburg. Bulkeley, Russell & Co. announced that it specialized in trade with America, and to give one example, Stephen Girard from Philadelphia became a customer. However, the firm does not seem to have proved very profitable, and it was dissolved in 1799.²⁶

²² Rasch 1965, 63. A total of 917 vessels visited St Petersburg that year, 529 of them English. The British share of exports was worth 18 million roubles.

²³ Thomas Russell to Robert Morris, 25 October 1794, USR 1980, 289-290 and note 1; John Miller Russell to the Secretary of State, 17 December 1794, NA M- 81/1; see East 1938, 253-254. Thomas Russell, who was interested in converting the Indians, considered the fact that the future consul "has had a liberal education and speaks the French language pretty well, and has improved his mind by reading" a recommendation, as well as the fact that he had often before travelled to St Petersburg.

²⁴ John Miller Russell to Rufus King, 25 July/5 August 1795, USR 1980, 291-292.

²⁵ Joseph Allan Smith to Rufus King, 28 September 1802, USR 1980, 356-358.

²⁶ John Matthew Bulkeley & Co. to Girard, 1/12 August 1795, USR 1980, 293; Girard to Bulkeley, Russell & Co., 10 November 1796, USR 1980, 308; Bulkeley, Russell & Co. to Derby, 20 June 1796, EI, DFP, vol.11; Bulkeley, Russell & Co. to Girard, 20 November 1795, and June 4 1798, APS, GP, Correspondence 1769-1831, mf-series 2, reels 14 and 19; USR 1980, 1137.

A new phase in the Atlantic trade war began in summer 1798 with the “quasi-war” between the United States and France. The French commanded that all American vessels that carried English commodities or had stopped at English ports were liable to confiscation. This led to Americans sailing to the Baltic using the protection of British convoys, and some ships being armed. Ebenezer and Gorham Parsons of Boston advised Captain Ignatius Webber, who was to sail to Copenhagen and St Petersburg on the ship *Reliance*, which was armed with ten cannons, as follows:²⁷

“... your property being neutral and United States at peace with all nations no power on earth has any right to molest or hinder you in the prosecution of your voyage... you will therefore defend your ship as a gentleman agreeable to the established law and customs of neutral nations.”

In the United States the threat of full-scale Franco-American naval war in 1798 brought up the question of setting up diplomatic relations with Russia. After some informal discussions on the subject, President John Adams appointed his Minister in London, Rufus King, to negotiate with the Russian Minister in London, Semen Vorontsov.²⁸ The Americans handled the issue again in a manner which prompted Vorontsov to declare that “they are still inexperienced in political affairs”.²⁹ Tsar Paul accepted the idea of an alliance with the United States, a country that had good relations with Britain, “our sincerely”, in spring 1799, but the treaty had to be negotiated in St Petersburg and not in London. Rapprochement between the United States and France in summer 1800 and the Treaty of Morfontaine of 30th September removed the issue from the agenda.³⁰

Sailing the Russian triangle that the Americans set up in the 1780s carried on to the end of 1807. Different sorts of blockade and the logic of trade drove the Americans into the Baltic area, but entering the Russian market with colonial commodities was almost as difficult as before. This was even truer with respect to the United States’ own exports as long as purchasers could be found in Western Europe. For example in 1794 altogether 68 American vessels sailed to the Baltic Sea, but only three directly from the United States to St Petersburg, and only one vessel, which departed from Philadelphia, carried a full load of sugar, rice and coffee to St Petersburg.³¹ Only two of the 40 vessels that sailed to St Petersburg through the Sound in 1804 had departed from North America: the

²⁷ Parsons to Webber, 8 June 1798, HUBL, EGPP. – The *Reliance* visited both Copenhagen and St Petersburg in autumn 1798 and returned to Boston; STA 1798 (1184/1734).

²⁸ Rufus King to Timothy Pickering, 10 November 1798, USR 1980, 319; Bolkhovitinov 1976, 105; see Setser 1937. King’s instructions required that the most-favoured-nation clause be included in the agreement. The treaty concluded between Russia and England in 1797 was to be used as a model, and the treaty’s function was to guarantee Americans the same rights in Russia as the British.

²⁹ Vorontsov to Tsar Paul I, 15/26 March 1799, USR 1980, 330-331.

³⁰ Paul I to Vorontsov, April 23/ May 4 1799, and King to Pickering, 5 June 1799, USR 1980, 335, 338-339 and note 2; Saul 1991, 33; see Bolkhovitinov 1976, 107; Paterson et al. 1983, 56.

³¹ STA 1794 (1015).

brig *Acorn*, which had left from Salem, sailed via São Miguel, and the ship *Elizabeth* from New Bedford sailed to St Petersburg via Dieppe. Both of them apparently carried in their cargo only a small proportion of commodities taken on in the United States.³² It was still the rule that the merchants of St Petersburg warned the Americans against carrying their cargoes directly to St Petersburg.³³

United States' exports to Russia were rather insignificant, but the imports from there carried on to increase. For example according to the export statistics in 1797, only 236 tierces of rice valued at \$3500 were exported from the United States to Russia. In the same year, more than 2700 tons of hemp were imported, valued at about \$250,000 on the American market.³⁴

As most of the American vessels that sailed to the Baltic Sea were in ballast, and as most of the orders laid down by the English or French did yet not apply to Russia, it is understandable that the Atlantic trade war did not have its full impact on trade with St Petersburg. Yet the repercussions of the war were experienced for some years. The politically uncertain situation – the “quasi-war” and the disputes between Denmark and England as well as those between Russia and England – resulted in, only a small number of vessels, twenty-two of them, reaching St Petersburg in 1800, for example. The years 1799 and 1800 were good years for U.S. foreign trade, but American trade on the Baltic dropped to a level that prevailed for ten years for the reasons discussed. The high prices of Russian commodities at the ports of the Baltic may also have had an influence on the situation. At least Ryberg & Co. claimed so to his Salem trading partner Benjamin Goodhue.³⁵ By contrast, the year of the Peace of Amiens (1802), when American neutrality had no commercial significance, a year that was almost catastrophic for U.S. foreign trade, was normal with regard to the trade with the Baltic, though the prices of Russian commodities fell sharply in New England.³⁶

When Anglo-French hostilities resumed in May 1803, the number of American vessels sailing through the Sound increased. Approximately a hundred American vessels visited the Baltic in one year, the highest number since 1796. The American share of the total trade of St Petersburg was estimated one eighth, although exports there were still small.³⁷ The Baltic Sea itself was not greatly affected by the war, but it was as difficult as before to reach it. For example New York merchant Isaac Hicks' ship, the *Thames*, which was sailing from Le Havre to St Petersburg, was seized by an British frigate in June 1803. According to the Captain Judah Paddock, who was thoroughly annoyed by the

³² STA 1804 (356,601); CR 1804, NA T-201/1.

³³ E.g. William Jones & Co. to Benjamin Pickman, EI, BPP, vol. 1, Letterbook 1801-1820 (printed in USR 1980, 419-420).

³⁴ ASPCN 1797.

³⁵ Ryberg & Co. to Benjamin Goodhue, 9 August 1800, EI, GFP, vol.1.,

³⁶ See Smith & Cole 1969, 16-17; Gregory 1975, 19; Bruchey 1956, 237. The considerable decline in cargo rates caused problems to the Americans sailing across the Atlantic. If the freight index for 1796-1800 is taken as 100, in 1802 it was only 66, but the “activity index” of the merchant marine was the highest of the decade; see North 1960, 595.

³⁷ Harris to Nikolai Rumiantsev, 13/24 January 1804, USR 1980, 387-391.

incident, “two ignorant Lieutenants, one foolish Midshipman, six lousy Mariners and four fagged Sailors” inspected the vessel and took her to Cowes. The English suspected that the ship’s cargo of wine was French property. Hicks’ agents in London got the vessel released, as the cargo documents, which had been specially prepared for this kind of situation, showed that the wine was American property.³⁸

At first the course of the war, with its various prohibitions and blockades, was reflected only in the fact that the ports of departure of vessels sailing east of Elsinore changed as the blockades and prohibitions changed. This had only minor commercial significance, since most of the Americans sailed in ballast anyway. For example, in 1796 none of the American vessels that aimed to sail to St Petersburg reported departing from France or Holland: the Russians had blocked their ports to such vessels.³⁹ E. H. Derby, for instance, learned from London that “Russians will not suffer any ship to load” that previously unloaded cargo in France or the Netherlands.⁴⁰ In 1796, a significantly larger number of vessels reached the Sound from Hamburg than before. When the British blockaded Dutch ports from March to November 1799, no American vessel that sailed eastwards from the Sound reported having departed from these ports, but several vessels had left the neutral ports of Altona and Emden.⁴¹

In the first years of the 19th century numerous American merchants and captains took advantage of the situation at sea as they shuttled to and from across the Atlantic. They bought, sold and carried cargo according to the market situation. St Petersburg was one possible port for acquiring commodities not only for the United States, but also often for Southern Europe. According to the Danish consul in St Petersburg, the Americans purchased so much that they started to have an effect on the price levels of Russian commodities.⁴²

One of the American captains was Josiah Orne, who shared ownership of the brig *Exchange* (185 tons) with four other Salem merchants. Early in 1801 Orne carried a cargo of sugar purchased earlier in Havana from Salem to Copenhagen, and traded it for Swedish iron and Russian manufactures with Ryberg & Co. Still in the same summer the brig went back to Havana to get a new cargo of sugar and left Salem “for Cowes and a market” at the turn of the year. Following instructions probably received from Samuel Williams in London, Orne carried on to Copenhagen with his cargo of 221,000 lbs of sugar. He was the first American to sail east of the Sound in 1802. Ryberg & Co. took the sugar in exchange for cordage for Lisbon. As the whole cargo did not sell

³⁸ Paddock to Rathbone, Hughes & Duncan, 10 June 1803 and Paddock to Hicks, 13 June 1803, NYHS, IHP, “Paddock”. According to STA, the vessel had departed from Rouen and carried 258 hogsheads of wine and 560 boxes of figs to St Petersburg. Her return cargo to New York consisted of hemp, iron and manufactures; STA 1803 (1219/2045).

³⁹ One of the two vessels that sailed from Amsterdam to the Baltic Sea in ballast visited Danzig and the other Copenhagen; STA 1795 (1515/1985, 1839/2070); see Appendix, table 25.

⁴⁰ Lane, Sons & Frazer to Derby, 26 April 1796, EI, DFP, vol.4; McKey 1961, 396.

⁴¹ See Faber 1988, 108; see Appendix, table 25.

⁴² See Rasch 1965, 62.

for the desired price in Lisbon, Orne carried on to Leghorn. The brig *Exchange* plied the Mediterranean in the summer of 1802 mainly taking advantage of the markets for iron and Russian sailcloth. Orne sailed to Malaga in the autumn to take on fruit for St Petersburg. But then, after calling at Bordeaux, for some reason he changed his plans and returned to Salem. A year later the *Exchange* appeared in Copenhagen again, now under Sam Prince. Her cargo from Salem, valued at \$20,000 and consisting of coffee, pepper, rum and rice, was left with Ryberg & Co., from whom Prince received a letter of credit for St Petersburg. In St Petersburg Prince took on the usual cargo of hemp, iron and manufactures at Thomson, Bonar & Co. for shipment to Salem. Additional return cargo was obtained from Ryberg & Co. In 1805-06, the *Exchange* mainly sailed routes between the West Indies, Salem and the Mediterranean, but late in the autumn of 1806 she departed from Salem for Copenhagen via Zante (Zakynthos) and London. Josiah Orne served again as the captain, and the ship was loaded with sugar, coffee and rice. The vessel was in the Sound at the beginning of April 1807, and when Orne returned westward after a month, he reported being on the way to North America. The cargo of cordage was, however, mainly disposed of in Lisbon where it sold very well.⁴³

Russia remained a bystander of the Revolutionary Wars until December 1798, when the Anglo-Russian treaty against France was concluded. During the next fifteen years Russian foreign policy had a significant influence on both American commerce with St Petersburg and the foreign policy of the United States. This showed for the first time in autumn 1800 when Tsar Paul I suddenly withdrew from the anti-French treaty, took over command of League of Armed Neutrality of the North and abandoned commerce with the British.⁴⁴ The situation caused such problems to American sailors in St Petersburg that John Q. Adams, Minister of the United States to Berlin, recommended that a consul should be sent to St Petersburg in May 1801.⁴⁵ The question was under discussion for two years, and Thomas Jefferson appointed Levett Harris of Philadelphia to the post only on 4 April 1803. This time there was no confusion over reception and arranging credentials in St Petersburg.⁴⁶

A network of American commercial representatives took shape in Russia after Harris arrived. Taking the powers of Consul General, Harris appointed John Brooker the first American consular agent in Kronstad and Dietrich Rodde

⁴³ EI, OFP, vol.21/2 (Brig Exchange); CR 1801-07, NA T-201/1 ja M-41/2/12; STA 1801 (70/296), 1802 (10/50), and 1804 (845/1517).

⁴⁴ Russia and Sweden formed a league of neutrality in December 1800, with Prussia and Denmark also joining. The agreement came to an end in spring 1801 when Tsar Alexander I and the British forced Denmark to withdraw from the alliance. However, an exceptionally large number of American vessels sailed from the British Isles to St Petersburg; see Anderson 1958, 198-199; Appendix, table 25.

⁴⁵ It is probable that the Russian Minister to Berlin, Baron Aleksei Krüdener, had proposed this practice to Adams; Adams to Madison, 21 March 1801, USR 1980, 347-348; Saul 1991, 36.

⁴⁶ Commission for the United States Consul-Designate at St Petersburg, Levett Harris, 4 April 1803, USR 1980, 361-362; Ukase from the Governing Senate to the College of Foreign Office, 29 October/ 10 November 1803, USR 1980, 378-379.

vice-consul in Reval in spring 1805, and Christian Rodde vice-consul in Riga in 1808.⁴⁷ The latter served as vice-consul probably until 1813, to be succeeded by “free lance merchant adventurer” Edward Wyer, who represented himself as consul from 1813-16.⁴⁸

Levett Harris, who arrived in St Petersburg in October 1803, aimed primarily to found his own trading house. However, he remained a partner of other commercial houses throughout his ten-year stay in St Petersburg. One of his first observations was that the Americans should have excellent opportunities to succeed in the competition over the trade in colonial produce. Though the English had managed to develop their trade with the Baltic Sea into “the most lucrative branch of their unlimited commerce”, Harris considered it both right and logical that part of this commerce should go over to the Americans, as they knew the West Indian markets thoroughly. Selling their own manufactures would suit the English best.⁴⁹

The ideas Harris expressed were not new, but the chances of putting them into effect were better in the first years of the 19th century than before. Russia started to seek a counterweight to British dominance of its foreign trade, also for political reasons. Harris sought to conclude an Russo-American treaty of commerce in the autumn of 1803. The initiative came apparently from Tsar Alexander, but Harris was given to understand that an official proposal was expected from President Jefferson.⁵⁰ Such a proposal was not in fact forthcoming, but Harris tried to keep discussion of the issue open. In his report to the Minister of Commerce, Count Nikolai Rumiantsev at the beginning of 1804, for instance, he suggested several means the Russian could use with the help of the Americans

⁴⁷ The consular district of Riga included Livonia, Courland and Estonia for almost the whole period discussed. Vice-consul Friedrich Küsel (1806-09) was appointed the first American representative in Archangel, and he was followed by Samuel Hazard (1811-14). The terms used for commercial representatives vary: the same person can be simultaneously called vice-consul, consular agent and vice-agent; Francis Dana, Jr. to Francis Dana, Sr., 9/21 September 1809, Harris to Robert Smith, 18/30 May 1811, NA M-81/2; Adams to Monroe, 21 July/ 2 August 1811, NA M-35/3 (all printed in USR 1980, 1111-1139). John Sparrow, who was appointed the vice-consul of Kronstadt, and Dietrich Rodde, vice-consul of Reval, were later sentenced for smuggling; Cambell to Adams, 21 April / 3 May 1819, NA M-35/6/ 2, 6.

⁴⁸ Saul 1991, 58; see USR 1980, 1112. In the autumn of 1811 Special Minister George Erving organized an appeal by about twenty merchants and captains in Copenhagen that Hugh Wilson of New York should be appointed consul in Riga. The appeal perhaps came too late as Mordecai M. Noah was appointed the consul in the same summer. He did not turn up at his post. Moses M. Russell was appointed as Wyer's successor, but apparently he did not turn up in Riga, either. Only in March 1834 Alexander Schwartz, who had earlier been active in Hull, appointed consul in Riga. He held the post until 1847 with some short interruptions; Erving to Adams, 12 November 1811, NA M-41/2/11; Wyer to Monroe, 12 May 1816; Russell to Adams, 28 October 1817, and 15 September 1819; Noah to Monroe, 2 July 1819; Schwartz to Forsyth, 31 December 1834, NA M-481/1; Bayard Taylor to Seward, 10 October 1862, NA M-35/19; Kirchner 1974, 22-23.

⁴⁹ Harris to Madison, 25 October 1803, and 5/17 November 1803, NA M-81/1 (printed in USR 1980, 377-382); Harris to Girard, 8/20 August 1804, APS, GP, Mf-series 2, reel 13 (printed in USR 1980, 417-418); Saul 1991, 39; Bolkhovitinov 1975, 108.

⁵⁰ Harris to Madison, 5/17 November 1803, NA M-81/1 (printed in USR 1980, 379-380); Crosby 1965, 99; Saul 1991, 41 and note 21; cf. Setser 1937, 180.

to destroy the English and German stranglehold on their foreign trade. Rumiantsev, who strongly disliked the British, was amenable to such arguments, since his objective was to make Russia a great commercial power.⁵¹

After Trafalgar and Austerlitz, the struggle for supremacy over Europe also entailed a full-scale naval war. Britain put the continent, controlled by the French, under a blockade from Brest to Elbe on 26 May 1806.⁵² This diverted American traders to the north, and more than two hundred vessels passed Elsinore in 1806. Yet only two of the 54 vessels that sailed directly to St Petersburg came straight from the United States, and more than 40 sailed in ballast. The structure of the trade remained unchanged: 70 of the 76 vessels that departed from Russia reported in Elsinore that they were sailing to North America. According to printed shipping lists, 73 vessels left St Petersburg for the United States.⁵³

Napoleon's best-known response to the British policy of blockades was the Berlin Decree of 21st November 1806, which put the British Isles under a blockade and aimed at closing off the continent from the English. London responded with several Orders in Council in 1807, which expanded the blockade of the continent and subjected neutral traders to licensing. Napoleon's Milan Decree of 17th December 1807 in turn declared any who had acquired such licences or visited British ports to be a lawful booty for the French. The Continental System came into being and the war started to affect the Baltic too, as Russia joined the Continental System at the Peace of Tilsit. This marked the end of British trade with Russia. The Americans were hardly very upset at that.⁵⁴ However, Danish privateers started at this time to prey on vessels that did not respect the orders of the Continental System on the Baltic Sea, and they caused real trouble. The war also affected the total volume of traffic through the Sound, causing transit traffic, which had exceeded 10,000 vessels by the middle of the 1780s, to decline to 7000 vessels in 1806 and only 4000 in 1807.⁵⁵

Despite all the edicts emerging from the warring parties opportunities seemed to be opening up for American trade, at least in theory. The English did not prevent trade with Russia, partly because British goods could be carried to St Petersburg in the guise of American ones. More than 80 American vessels

⁵¹ Harris to Rumiantsev, 13/25 January 1804, USR 1980, 387-391. In 1804 63 percent of the exports and 35 percent of the imports of St Petersburg were reckoned to go through the hands of the British trading firms; Oddy 1805, 132.

⁵² Adjustments to the so-called Fox Blockade allowed neutral trade at several ports of the Baltic Sea; see Crowhurst 1989, 17-19.

⁵³ PM, BSP, vol. 3. According to Bolkhovitinov (1975, 97), 78 American vessels arrived at and 72 departed from Russian ports. According to him altogether 456 vessels arrived at the Russian Baltic ports in 1802-07, 259 of them without any cargo. According to STA and the Consul in Elsinore, 310 American vessels sailed to Russia but as many as 438 departed from there in the years discussed; see Appendix, tables 22, 25-27.

⁵⁴ See Harris to Madison, 18/30 September 1807, NA M-81/1; Crosby 1965, 283; Clauder 1932, 116; Nettels 1962, 238; Anderson 1967, 71. Trade between hostile ports by neutral vessels was abandoned. Thus the American merchant shipping between southern and northern Europe became almost impossible; see Crouzet 1964, 57.

⁵⁵ Johansen 1983a, 11; Faber 1988, 105; Appendix, table 22.

visited St Petersburg in 1807.⁵⁶ The chances of a thriving American trade collapsed because of the policy of the U.S. government itself with the Embargo Act, which became effective on 22nd December 1807. This “self embargo” was Jefferson’s weapon of retaliation against the violations of trade neutrality.⁵⁷

The embargo year of 1808 meant a difficult situation in St Petersburg. Imports from the United States were in principle illegal, but several other opportunities existed. Consul Harris therefore expected to meet several of his fellow countrymen in Russia. He found, however, that the Russians meticulously followed the regulations of the Continental System, and so American chances to carry, for example, British goods were minimized.⁵⁸

Only about twenty American vessels visited St Petersburg while the embargo was effective. According to an American merchant who had settled down in the city during the war, John D. Lewis, altogether 16 American vessels were permitted entry to St Petersburg, ten of them in ballast.⁵⁹ According to Brothers Cramer, six vessels that had visited either English or Swedish ports had been turned back by the beginning of September.⁶⁰ Yet the Russians’ attitude to the Americans was relatively tolerant in Harris’s opinion: the U.S. prohibition on exportation and compliance with the prohibitions was seen as the Americans’ own business.⁶¹ The French and the Danish privateers interpreted the matter differently, however. As exports from the United States were prohibited, all Americans on the seas were taken to be working in one way or another for the British. Napoleon issued his Bayonne Decree on 17 April 1808, which interpreted the matter similarly: all American vessels entering ports controlled by the French should be seized.

Alliance with Napoleon cost Russia dear. The country’s foreign trade was worth 94.6 million silver roubles on an average in 1802-06, but it dropped to 36.1 million as a result of the Continental System and the American embargo. Trade on the Baltic suffered most, and dropped to only a sixth of what it had

⁵⁶ Appendix, table 26. According to the shipping list of the consul in Elsinore, 63 American vessels sailed to St Petersburg and 78 returned (CR 1807, NA T-201/1). According to Rasch (1965, 37, 41), 97 vessels sailed to the Baltic Sea and 102 returned. After Alfred Crosby (1965, 109), 88 American vessels visited St Petersburg. According to Bolkhovitinov (1975, 97), 91 vessels arrived in and 90 departed from Russian ports. In Brothers Cramer’s printed shipping list (e.g. PM, BSP, vol. 3), the number of vessels that departed from St Petersburg was 81.

⁵⁷ See e.g. Spivak 1985, 43-50; Bemis 1959, 82; Paterson et al. 1983, 66; McCoy 1980, 216ff.

⁵⁸ Harris to Madison, 22 February/4 March 1808, NA M-81/1; Crosby 1975, 114. British trade with Russia continued via Riga and Archangel in particular.

⁵⁹ HSP, LNP, Letters 1810-41; cf. USR 1980, 1115. According to Lewis, one vessel carried coffee from Santo Domingo and three wine from São Miguel. In spite of the embargo, the ship *Edward & Charles*, owned probably by Cobb & Clark (of Portland), arrived laden from Philadelphia. According to Consul Abraham Gibson, 12 American vessels were in St Petersburg; Gibson to Buchanan, 1/13 January 1846, NA M-81/4. The consul of Elsinore recorded only four vessels that sailed through the Sound, all of them in the latter part of 1808: two ships sailed in ballast from London to Riga, and two other ships sailed in ballast from Copenhagen to “America”.

⁶⁰ Brothers Cramer to Brown & Ives, 4 September 1808, BUJCBL, BIB, P-C68.

⁶¹ Harris to the Secretary of State, 5/17 1809, NA M-81/1.

been in the years 1802-06. The French were not able to make up the deficit by overland trade. New carriers were needed for Russia's exports and the neutral Americans were those best placed to meet this requirement.⁶²

4.3 "The Age of Universal Robbery"⁶³

The new situation that emerged in 1807 meant that the United States and Russia were becoming allies to some extent, with Great Britain their common enemy. The Americans were growing impatient with the British because of repeated violations of their neutrality and the impressment of their seamen. Meanwhile Russia was at least officially coming to terms with Napoleon for her own reasons. Perhaps it was these political considerations which led to President Jefferson's initiative in trying to establish diplomatic relations between the United States and Russia in the summer of 1807. After elaborate preparations, Jefferson sent William Short to St Petersburg, but the Senate rejected the nomination. Jefferson's successor, James Madison, appointed John Quincy Adams for the post. Adams had experience as a Minister both in the Netherlands and in Berlin, and Madison gained the Senate's approval for his decision on 27th June 1809. Tsar Alexander I sent his first minister, Andrei Dashkov, to the United States at the same time.⁶⁴

On his arrival in St Petersburg in October 1809 Adams found himself in the middle of American trade problems. Already prior to his journey to Russia he had been concerned to familiarize himself with his major task.⁶⁵ The Embargo Act, which was concluded in the political debates of the time and in later research to have proved an inefficient commercial and political weapon, was abandoned after 15th March 1809 and replaced by the Non-Intercourse Act. It allowed American exports to all regions except those controlled by France or England. Trade in French or British products was also prohibited. Martin Page, captain of the ship *Robert Hale*, owned by Brown & Ives, summarized: "*The Danes take all American Ships bound to Sweedland and the Sweeds Take all bound to Russia, Russians stops all in their Ports.*"⁶⁶ The coming years marked continuous balancing. Trade with the English was officially permitted for only 15 months during the period between the end of 1807 and the beginning of 1815.⁶⁷ It was

⁶² Blackwell 1970, 84; Bolkhovitinov 1975, 190; cf. Grimstedt 1969, 178; see e.g. Brothers Raimbert, Nephew & Co. to Stephen Girard, 7/19 October 1810, USR 1980, 707-710.

⁶³ The expression of Minister Adams; Adams to William Gray, 6 April 1811, Gray 1914, 68-69; Fairburn 1955, vol. I, 556.

⁶⁴ Saul 1991, 48-50; Bolkhovitinov 1975, 197; Crosby 1965, 51; Clauder 1932, 218. Adams's appointment was seen as a reward for supporting the President's embargo policy.

⁶⁵ Adams to Smith, 4 August 1809, NA M-35/2 (printed in USR 1980, 588-589); Saul 1991, 54-55.

⁶⁶ Page to Brown & Ives, July 7, 1809, BUJCBL, BIB, V R6; see Hedges 1968, vol. II, 128-129; Nettels 1962, 328; Rutland 1985, 67-69.

⁶⁷ See Bryant 1967, 157; North 1966, 35. On different interpretations of embargo policy; e.g. Frankel 1982, 291-308.

impossible to do anything about the regulations that restricted commerce, but the effect of these combined with the French and English prohibitions was to shift the focus of American trade with Europe further north. Tönningen and Gothenburg became centres of neutral trade, and according to John D. Lewis, fifty American vessels ended up in St Petersburg in 1809. It was something new that ten or so vessels sailed fully loaded directly from the United States.⁶⁸ A great number sailed through the Great Belt under the protection of the English, but Consul Harris identified only two pretending to be American and using forged documents.⁶⁹

In 1809 sixty-one American vessels fell prey to privateers in Danish waters. Most of them were apparently trying to reach Russia. Adams sought Russian aid in tackling the problem of privateering, but with little result. N. N. Bolkhovitinov does, however, give Adams credit for the release of American property worth five million dollars sequestered in the Holstein ports, an achievement which surprised Adams himself at the time.⁷⁰ Initially Adams was clearly interested in commercial issues, but at least on the official level, he seems to have been rather passive compared with the energetic and widely active Consul Levett Harris. Adams thought the general political outlook rather bleak in the autumn of 1809. He considered the peace between Russia and Sweden a sign that the whole of Northern Europe would join Napoleon's Continental System. He asked for a transfer from St Petersburg in 1810.⁷¹ John Spear Smith regards Adams as "an unfortunate appointment"⁷² to St Petersburg. Whether or not this is true, he was certainly a figure on the sidelines until it came to the peace negotiations in Ghent.

In 1810 American exports ceased to suffer restrictions, but room for manoeuvre in the Baltic Sea was reduced. Exports to Tönning had to be halted,

⁶⁸ HSP, LNP, Letters 1810-41; According to Crosby (1975, 128) the number of vessels was 55, but according to USR (1980, 1116), only 39. According to the shipping list of George W. Erving, and the Consul in Elsinore, 45 American vessels sailed through the Sound, 29 of them bound for St Petersburg and five to Riga. Erving completed his list later, adding that five of the 45 vessels were condemned and twenty sailed in ballast from western Europe. Only twenty vessels returned westward through the Sound; Erving to Monroe, 23 December 1811, and 12 February 1812, NA M-41/2/12,14. Because of the war between Russia and Sweden, most of the vessels arrived in St Petersburg only late in the autumn, and about twenty American ships had to spend the winter there; Harris to the Secretary of State, 23 August/4 September 1809, NA M- 81/1; Adams to the Secretary of State, 27 October 1809, NA M- 35/2/6; Crosby 1965, 137-138, 146. According to printed shipping list of Brothers Cramer, only 14 vessels sailed to the United States in 1809; PM, BSP, vol. 3.

⁶⁹ Harris to Robert Smith, 1/13 June 1810, NA M-81/2; Adams to the Secretary of State, 27 November 1809, NA M-35/2/6. Harris, like Adams, considered the forgeries excellent, and Harris suspected that in spite of all he had been deceived by some ships' papers. The cargoes of altogether 49 vessels that played neutral with forged documents were seized in 1809 in St Petersburg; Crosby 1965, 143.

⁷⁰ Bolkhovitinov 1975, 230-231.

⁷¹ Adams to Smith, 4 October 1809, NA M-35/2; Madison to Adams, 16 October 1810, USR 1980, 706-707; Saul 1991, 53-54, 68-69.

⁷² Smith to Samuel Smith, 9 June 1810, USR 1980, 666; Saul 1991, 61. John Spear Smith was a nephew of Robert Smith, who served as Secretary of State in 1809-11. He was one of quite a number of Americans who travelled in Russia around 1810.

and from 19th July on the Americans were turned back from the ports of Prussia. Adams considered the latter restriction an intolerable result of English plotting: the British probably envied the great profits the Americans had been making.⁷³ About 2000 vessels that in French eyes were working for the British entered the Baltic Sea in the year in question. George W. Erving, who had been sent to Copenhagen to defend American trading rights, listed 133 American vessels that sailed east of Elsinore, 110 of them having set out from the United States.⁷⁴ According to Anthony Naht, who traded with the Americans, 120 American vessels visited St Petersburg.⁷⁵ Approximately 200 American vessels visited Russian ports in 1810, about 60 of them sailing to Archangel.⁷⁶ It reveals something about the nature of the trade that, according to Erving, only 16 vessels returned west through the Sound.⁷⁷ Whatever the exact number of vessels, it was clear that the structure of the trade had changed: export from the United States to Russia had begun as a result of Napoleon's Continental System. In 1810, Russia's share of the exports of the United States was worth about four million dollars, constituting six percent of total exports and twelve percent of re-exports.⁷⁸

The American rush to St Petersburg in the summer of 1810 had its effect on the prices of Russian export commodities. According to Miers Fisher of Philadelphia, who was resident in St Petersburg, the Russians liked dealing with

⁷³ Adams to the Secretary of State, 31 July, 14 August, and 16 August 1810, NA M-35/2/18,20,21; Erving to the Secretary of State, 23 June 1811, and 28 July 1811, NA M-41/2/5,6.

⁷⁴ The number includes most of the vessels that used the route through the Sound. According to Erving, 51 vessels were detained and 19 of them condemned. According to him only 38 vessels sailed to St Petersburg. The number does not include those that sailed through the Belts; Erving to Monroe, 23 December, 1811, NA M-41/2/12; see Crosby 1965, 182. John D. Lewis's shipping list covering the period until the end of September includes 106 vessels that arrived in St Petersburg. Among them are 48 vessels that do not appear in Erving's record; HSP, LNP, Letters 1810-41. According to Harris, 98 American vessels arrived in St Petersburg around the same time; Harris to Robert Smith, 13/25 September 1810, NA M-81/2.

⁷⁵ USR 1980,116, note 7. This number probably does not include about twenty ships that sailed to the Baltic Sea among a convoy of about 600 vessels late in the autumn under British protection. They could not enter Kronstad because the port was ice-bound but dispersed to other Russian ports. 23 American vessels stayed at the Russian Baltic ports over the winter 1810/11, and they were allowed to unload their cargo only in February or March 1811; Adams to the Secretary of State, 1 December 1810, NA M-35/2/33; Harris to Smith, 12/24 December 1810, NA M-81/2; Crosby 1965, 179, 182, 190. Crosby (p. 190) mentions that the total number of vessels arriving in St Petersburg was 107, and of those departing 105. This information was given by Adams, and it was based on the figures in the *St. Peterburgische Gazette* (6/18.12.1810), Adams to the Secretary of State, 15/27 December 1810, NA M-35/2/36. – According to export lists, altogether 100 American vessels visited St Petersburg in 1810; Erving to Monroe, 12 April 1812, NA M-41/2/16.

⁷⁶ Crosby 1965, 190-191; Adams to the Secretary of State, 15/27 December 1810, NA M-35/2/36. According to the Russian consul in Philadelphia, about 250 vessels departed from the United States for Russia; Bolkhovitinov 1975, 223.

⁷⁷ Erving to the Secretary of State, 23 December 1811, NA M-41/2/12; Crosby 1965, 163. The powers of the Danish privateers were expanded in May 1810, when they got the right to seize vessels that had carried British products or that had sailed under British protection on the Atlantic or the Baltic.

⁷⁸ ASPCN 1810; Pitkin 1816, 196; Pitkin 1835, 232; see Crosby 1965, 191.

the Americans since they favoured cash transactions and paid exorbitant prices when they were in a hurry.⁷⁹ On the other hand, the prices of colonial goods remained advantageously high for the Americans, as the Russians still did not allow vessels that had taken on a cargo at British ports to enter St Petersburg. However, French privateers, active also in the western parts of the Baltic Sea, caused problems. According to Consul Harris, seventy vessels that came from “Teneriffe”, or in fact from England, had been seized in St Petersburg by the end of September. The strict Russian controls also resulted in thorough inspections of American vessels.⁸⁰ Even so Harris reported only one American vessel in St Petersburg getting into trouble over forged documents in 1810.⁸¹ The Americans obviously had a central role in the maintenance of Russian foreign trade in 1810. According to figures in the *St. Peterburgische Gazette*, only 520 vessels altogether arrived in St Petersburg. Thus, a quarter of them were American, but their share of the value of the trade was significantly higher.⁸² Exports from Russia were boosted by the slump in the value of the rouble. On the other hand, the falling prices of the Russian commodities in New England from the end of the Embargo until the latter part of 1811 led to reduced profits.⁸³

TABLE 1 The f.o.b – prices of the main commodities purchased by Americans from St Petersburg in 1806 and 1810 after Miers Fisher.

Articles	Unit	1806		1810	
		roubles	£	roubles	£
Clean hemp	ton	49:00	45:10:6	76:00	30:18:10
Iron (O.S.)	ton	2:00	18:12:7	3:50	13:10:0
Bristles	cwt	22:00	9:17:11	45:00	8:09:0
Sailcloth	piece	28:00	4:0:0	55:00	3:07:0
Ravenduck	piece	16:00	2:7:0	31:00	1:18:0
Sheeting	piece	26:00	3:15:0	40:00	2:10:10

Source: Miers Fisher & Co. to Josiah Orne 12/24 July 1811, EI, OFP, vol. 27/1.

⁷⁹ Fisher & Co. to Josiah Orne, 1/13 July 1810, EI, OFP, vol. 27/1. The merchant William Moxton of Philadelphia stated to Daniel Adgate, who had visited St Petersburg as a supercargo of Girard’s ship *Helvetius*: “There has been a good deal of jostling among the Americans here for the American business”; Moxton to Adgate, 19 September/1 October 1810, USR 1980, 701-702.

⁸⁰ According to George Goggeshall, 23 vessels stayed over the winter of 1810-11 in the ports of the Baltic Sea, because the documents of the vessels that arrived in, for example, Riga or Reval were sent to St Petersburg for inspection; USR 1980, 748-749.

⁸¹ Harris to Robert Smith, 13/25 September 1810, NA M-81/2. According to John D. Lewis, only nine American or purportedly American vessels of the more than 300 vessels that visited in St Petersburg in 1808-11 were condemned. Four vessels were confiscated by the Russian government and five were bought to sail under the Russian flag; HSP, LNP, Letters 1810-1841. However, Abraham Gibson, who was appointed consul in 1819, calculated that at least 46 American vessels arrived unlawfully in St Petersburg directly from British ports in 1807-12 while the Continental System prevailed; Saul 1991, 58, note 50.

⁸² Adams to the Secretary of State, 6/18 December 1810, enclosure: *St. Peterburgische Gazette*, 6 December 1810, NA M-35/2/35. – The first American vessels visited Black Sea ports probably in 1810. The brig *Calumet* of Baltimore sailed to Odessa, and she was followed by a vessel commanded by a Ropes of Salem; Morison 1921, 194.

⁸³ Smith & Cole 1969, 15, 19. – According to *Niles’ Weekly Register* (vol. I, 163), there were “Russian manufactures of immense quantity of sail cloth and linen” in American ports in 1811.

Tsar Alexander I took the first steps towards disengaging Russia from the Continental System at the end of 1810, at the same time as the French were planning to stop up the gaps in the system by means of the Trianon Decree and the Fontainebleau Decree. The declaration of neutral trade, which the tsar announced at the end of the year, and which was, according to William L. Blackwell, a “commercial catastrophe”⁸⁴, marked disengagement from the Continental System and expanded the possibilities for neutral trade. Promoting Russian exports was the main objective, since as Adams saw it even the Emperor’s position might be in danger if the export incomes of the nobility were to be endangered for too long a period of time.⁸⁵

As in previous years, the numbers of American vessels visiting St Petersburg and Russia in 1811 changed according the calculators. According to John D. Lewis, altogether 131 American vessels arrived in St Petersburg. The revolution in the structure of the trade, which had already been visible in the previous year, was still more obvious. Sixty-four of the vessels - almost half - arrived from the United States fully loaded.⁸⁶ The trading house Balfour, Ellah & Rainals reported observing the change in the situation. It estimated that about 350 Americans had plied the Baltic. However, whereas American vessels used to sail to the Baltic in ballast, they now carried colonial goods in such quantities that the value of the return cargoes (fully laden with iron, hemp and manufactures) was only two-thirds or three-quarters of the eastward cargoes.⁸⁷ According to Alfred W. Crosby’s characterization, the Americans came “like lemmings to the ports of Russia”.⁸⁸ Levett Harris put the size of the fleet at 230 vessels.⁸⁹

⁸⁴ Blackwell 1970, 84. According to Blackwell, the catastrophe resulted in two positive changes in Russian foreign trade: it expanded commerce with the United States and made Odessa a significant port; see Anderson 1967, 72; Buist 1974, 234; Hartley 1995, 258. The new regulations allowed neutral vessels to carry products from England and its colonies to Russia. Export from Russia was permitted to the British also. The import duties on several raw materials were removed, but they were kept for such semi-finished goods as cotton yarn. Some restrictions for manufactured goods remained even after Britain and Russia had concluded peace on 18 July 1812; Anderson 1967, 72-73.

⁸⁵ Adams to the Secretary of State, 16 October 1811, NA M-35/3/72; see Bolkhovitinov 1975, 235-237.

⁸⁶ HSP, LPN, Letters 1810-41. Minister Adams reported the number of American vessels as being 139 and Consul Harris 138. The four vessels that Adams mentions and five that Harris names that were condemned as English pretending to be American must be deducted from both numbers; Adam to the Secretary of State, 2 November 1811, NA M- 35/3/74; Harris to James Monroe, 14/26 October 1811, and 1/13 May 1812, NA M-41/2/12; cf. Crosby 1965, 212.

⁸⁷ Balfour, Ellah & Rainals to Erving, 7 December 1811, NA T-201/1. According to Erving, 148 American vessels sailed east through the Sound in 1811; Erving to the Secretary of State, 23 December 1811, NA M-41/2/12.

⁸⁸ Crosby 1965, 209, 224. – Crosby puts the total number of American vessels at 225, 138 of which went to Kronstadt, 65 to Archangel and 30 to Riga and Reval combined. Not even the rumours of the outbreak of Anglo-American war and the British plans to close the Baltic Sea which were published in British newspapers in summer 1811 slowed down the Americans; Adams to the Secretary of State, 3 April 1811, NA M-35/2/44. Samuel Eliot Morison (1921, 195) writes about the importance of the Americans in breaking Napoleon’s Continental System in a dramatic manner: “Thus Baltic trade of Massachusetts played an important if unconscious part in the chain of events that led Napoleon to Moscow and to St. Helena”.

Some 102 of the 130 vessels that visited St Petersburg in 1811 sailed through the Sound, and reported that they were returning to the United States, while the rest claimed they were returning "to Sundry ports", probably to England.⁹⁰ A third of the Americans had sailed under British protection on their way to St Petersburg, and most of them also used the same protection on their return through the Great Belt or the Little Belt. According to Adams, it was an open secret that the Americans that sailed in ballast to the Baltic were attracted by the high freight rates and were interested in dealing with the British. Several captains had unloaded their original cargo in the British Isles, irrespective of whether or not it was permitted by American regulations.⁹¹

In Russian trade the year 1811 was in many respects a repeat of the previous year. A great deal of the American trade went again to Archangel because of the privateers. According to Consul Harris, sixty-five vessels ended up there, about a half as many as arrived in St Petersburg.⁹² To take one example, the Crowninshields of Salem were keen on using the Archangel route. The colonial products they carried were welcome in Moscow, and Russian shipbuilding materials were in demand both in the British Isles and in New England.⁹³ The foreign trade statistics of the United States in 1811 show exports to Russia at \$6.1 million, a figure not exceeded until the Civil War. This was true of re-exports too, which increased to \$4.5 million in the year in question. The values for the export of domestic products to Russia were exceeded only in the 1850s owing to cotton.⁹⁴

The increased demand for colonial products in St Petersburg in 1810-11 was to a great extent caused by the fact that Russia became ended up as possibly the biggest loophole in the Continental System, and goods poured through Russia into the heart of Central Europe. Prices varied significantly. Harris estimated early in 1811 that the prices of colonial products were so low

⁸⁹ Harris to Monroe, 14/26 October, and 10/22 December 1811, NA M-81/2.

⁹⁰ The 102 vessels carried more hemp (11,145 tons) from St Petersburg than ever before or afterwards. The amount of bar iron (13,199 tons) was exceeded only once, in 1832; Harris to Monroe, 10/22 December 1811, NA M-81/2; Erving to the Secretary of State, 23 December 1811, NA M-41/2/12; Appendix, table 27.

⁹¹ Adams to the Secretary of State, 26 September 1811, NA M-35/3/69; Clauder 1932, 224. – According to NWR (1812, vol. II, 199-200), 102 Americans sailed to the Baltic Sea through the Sound and about 80 through the Belts. The value of the cargoes carried through the Sound was calculated at \$15 million, and a third of it was American property. The value of the cargoes transported through the Belts was on the same scale. According to the printed shipping lists that Erving sent, 127 American vessels left St Petersburg, 29 of them bound for European ports; Erving to Monroe, 12 April 1812, NA M-41/2/16.

⁹² Harris to Monroe 10/22 December 1811, NA 81/2; Crosby 1965, 224. -NWR (1812, vol. II, 42) mentions that 48 vessels arrived in the United States from Archangel; 15 of them in Boston, 11 in Salem, 7 in New York and 7 in Philadelphia. According to the magazine, the import totals were 168,400 poods hemp, 7100 poods flax, 154,740 poods iron, 12,500 poods tallow, 22,200 poods cordage, 5530 poods bristles, 13, 500 pieces flems, 21,000 pieces ravenduck, 14,000 pieces sailduck, 20,800 arshines diaper, and 90,300 arshines crash.

⁹³ E.g. Edmund Lewis to John Crowninshield, 8 September 1810, EI, CFP, vol. 2/9; see Reinoehl 1956, 229-249.

⁹⁴ Appendix, tables 42 and 43.

that trading them was not profitable.⁹⁵ According to Adams, the Americans had no right to complain as they had saturated the market with their massive imports. Prices rose to a peak at the end of the year, however, because of great demand in Prussia and Austria, and at the same time a threat of shortages coming about because commodities had been piled up in St Petersburg during the summer. According to Adams, the Americans were also to blame for a sharp rise in the prices of Russian commodities.⁹⁶ Miers Fisher agreed: the great level of demand brought about by the Americans increased prices so significantly that exporting to the United States was unprofitable in the summer of 1811, even though rouble prices were relatively low in sterling terms.⁹⁷

Correspondence between American legations, consuls and trading houses gives a picture of trading in the Baltic region as full of dangers and difficulties: unjustified seizures, privateers failing to respect international orders, unavoidable delays, unexpected enemies and unjust officials. Moreover, the market was uncertain. Why then bother to go to the Baltic and to St Petersburg? The answer was simple: the risks were high, but a successful voyage could be extremely profitable. There were plenty willing to undertake the adventure, since there were so many stories of the fabulous prices paid on the Russian market for commodities originally intended for Central Europe.⁹⁸ One cargo carried by Brown & Ives's ship *Asia* was originally purchased in Batavia and brought a profit of more than 300 percent when it was carried from Providence to Tønning in 1809.⁹⁹ The same owners' *General Hamilton* carried a cargo of cotton with an invoice value of \$21,600 to St Petersburg. The cargo was taken on in Wilmington and ended up in Vienna. Although the "net proceeds", a figure that merchants often report, are not known in this case, the trade was profitable, as the money raised was enough to purchase a return cargo with an f.o.b. -value of at least 212,000 roubles, i.e. \$60,000.¹⁰⁰

As maritime trade increased, so did the predations of the privateers operating in Danish waters. Altogether 120 American vessels were seized in 1810, and only 70 of them were released after inspection. Most of the rest were claimed as legitimate spoils of war. Harris reckoned the value of imports from the United States to Russia to be almost four million dollars and exports to the United States 30 million roubles. The figures would have been double without the privateers.¹⁰¹ According to the American interpretation, the privateers had no right to interfere

⁹⁵ Harris to Monroe, 10/22 December 1811, NA M-81/2; Crosby 1965, 224; see Lingelbach 1914, 227.

⁹⁶ Adams to the Secretary of State, 22 July 1811, and 2 November 1811, NA M-35/3/59, 74.

⁹⁷ Miers Fisher & Co. to Josiah Orne, 12/24 July 1811, EI, OFP, vol. 27/1.

⁹⁸ E.g. Balfour, Ellah, Rainals & Co. to Ruben Randall, 28 April 1810, HUBL, WFP, vol.4.

⁹⁹ Hedges 1968, vol. II, 125. – Morison (1921, 194) mentions, for example, the ship *Catharine* of Boston, which on a successful voyage to St Petersburg in 1809 "cleared \$11,500 net in one voyage". (The vessel is not mentioned in the shipping lists of either the consul in Elsinore or John D. Lewis.)

¹⁰⁰ BUJCB, BIB, V-G34 (Ship *General Hamilton*); Hedges 1968, vol. II, 131.

¹⁰¹ Harris to Robert Smith, 28 October/ 9 November 1810, NA M-81/2; see Crosby 1965, 166, 215-218; Adams to the Secretary of State, 16 October 1811, NA M-35/3/72.

with neutral vessels, irrespective of their cargo. The Danish, who were in alliance with France, saw things differently: not only English vessels but also those that had visited the British Isles and had sailed the Atlantic or the Baltic under English protection were legitimate spoils of the naval war.¹⁰²

The activities of the Danish and Norwegian privateers in the narrow channels into the Baltic Sea were so perturbing that George W. Erving was sent to Copenhagen to defend the rights of the Americans in May 1811 – mainly because of events in 1810.¹⁰³ John Quincy Adams, who had only been half a year in his posting in St Petersburg and who was not considered to be of warlike disposition, already in the spring of 1810 considered sending frigates to the passages between the North Sea and the Baltic as the only means of guaranteeing American neutrality.¹⁰⁴ The Danes seized altogether 160 American vessels in 1809-10, of which 42 of them were confiscated.¹⁰⁵

The French, and the Danish privateers regarded as British any American vessels that sailed with forged documents. In many cases suspicions were justified and they were not dispelled by the fact that the Americans often carried several sets of documents including bills of lading in case of incident. A considerable number of captains heading for the Baltic tried to obliterate from their documents any reference to British ownership or financing.¹⁰⁶ This was in vain if the captain had purchased a British licence in anticipation of the English but then the vessel was inspected by Danish privateers or the French. Stephen Girard of Philadelphia solved the problem by giving his captains a strict command: they were to sail to the Baltic Sea only in ballast.¹⁰⁷

¹⁰² See Tønnessen 1955, 167-215.

¹⁰³ Crosby 1965, 106. Hans Rudolph Saabye was appointed the consul of United States in Denmark in 1792, but he was reckoned to be mainly interested in his own purse and the interests of the Danish. He was a shareholder in Ryberg's trading company, and he was claimed to be deeply involved in equipping Danish privateers. It was mainly the Kristiansand Consul, Peter Isaacsen, who helped the seized Americans. The Hamburg Consul, John M. Forbes, was from time to time active in Copenhagen because of the "extreme apathy and indifference of Mr. Saabye", but his achievements were not great either. Forbes was one of those who demanded that the Secretary of State, Robert Smith, should appoint a special delegate in Copenhagen in 1810. Smith appointed Erving, who had served as a manager of commercial affairs in London. The appointment obviously put Forbes out, although he denied having sought the position for himself; Forbes to the Secretary of State, 4 September 1812, Forbes to Monroe, 7 September 1812, 12 October 1812, 30 December 1812, NA T-195/2; Adams to Smith, 4 October 1809, NA 35/2; Crosby 1965, 133.

¹⁰⁴ Adams to the Secretary of State, 10 May 1810, NA 35/2/15.

¹⁰⁵ Bolkhovitibov 1975, 230-231; see Cushing 1826. The United States later claimed \$2,262,000 in damages from the Danish government for the confiscated property. Erving's estimate was \$1,750,000. Denmark agreed to reimbursement of \$650,000 in 1830.

¹⁰⁶ E.g. Josiah Orne to Samuel Williams, 7 May 1810, EI, OFP, vol. 20/2; Saul 1991, 57.

¹⁰⁷ Girard to Captain Myles McLeveen, 12 February 1810, USR 1980, 640-641.

4.4 The end of neutral Baltic trade: the War of 1812-14

The political situation that emerged in 1810 brought to the fore once again the question of an Russo-American treaty of commerce. Count Rumiantsev, now Minister of Foreign Affairs, took the initiative. He wanted to “cement by a treaty of commerce” relations between the two countries. Adams considered the moment “eminently favourable, and such occasion, once lost, may not occur again for many years”.¹⁰⁸ No matter how important American trade may have been to Russia, Russo-American rapprochement was only a small affair in terms of the Great Power politics carried on between France, Britain and Russia. It is against this background that the Russian initiatives should be understood: the markedly friendly attitude towards Adams, and the release of twenty-three American vessels that had stayed in the ports of the Baltic over the winter of 1811.¹⁰⁹ At least in the light of later developments, these can be interpreted as signs of a new foreign policy for Tsar Alexander I, seeking to distance Russia from France.

At the end of May 1811 Adams was authorized to conclude a treaty of commerce and given instructions by the Secretary of State, Robert Smith, as to 11 clauses to be negotiated. Adams was to demand “nothing more than just reciprocity” and to conclude the treaty on the basis of the most-favoured-nation principle. The main objective was, however, to settle the question of neutrality. Adams was bidden to acquire treaty-based acceptance for the principle opposed by the British of free ships- free goods.¹¹⁰

Count Rumiantsev still showed interested in a trade – if not a political – treaty in June 1811. Adams appears to have given up pursuing the matter as he considered that the “extraordinary uncertainty” of the international situation and his own plans to depart St Petersburg made the negotiations otiose. Adams claimed that Rumiantsev agreed; anticipation of an outbreak of war between America and Britain cast a shadow over everything.¹¹¹ Premonition became reality only a year later when Congress approved a declaration of war against Britain on 18th June 1812. At the same time Adams stated in St Petersburg: “The political Drama in North Europe is drawing towards catastrophe”.¹¹² In his war

¹⁰⁸ Adams to Robert Smith, 24 August/ 5 September 1810, NA M-35/2 (printed in USR 1980, 691-697); Bolkhovitinov 1975, 237-238.

¹⁰⁹ Adams to Robert Smith, 5/17 December 1810, and 14/26 March 1811, NA M-35/2 (printed in USR 1980, 716-717, 745-746); cf. Bolkhovitinov 1975, 237-238.

¹¹⁰ Smith to Adams, 13 February 1811, USR 1980, 735-738. Conditional reciprocity meant “same favour freely if the concession was freely made, or allowing the same compensation, if the concession was conditional”. For a while Adams was interested in the treaty because in the spring of 1811 he was worried about commercial arrangements between Russia, Portugal and Brazil. He was afraid of the possible import of cheap rice, tobacco and indigo from Brazil to Russia. The threat disappeared the following summer; Adams to the Secretary of State, 29 April 1811, 15 June 1812, and 25 June 1812, NA M-35/2/47, and M-35/3/87/88.

¹¹¹ Adams to Monroe 2 June 1811, June 1811, NA M-35/3/52, 53; Adams to Monroe, July 28/ 9 August 1811, NA 35/3 (printed in USR 1980, 774 -776).

¹¹² Adams to the Secretary of State, 11 June 1812, NA M-35/2/86.

message, President Madison accused the British of violations of neutral trade and impressment of sailors. These issues did not especially arise in the summer of 1812, and besides, if violations of neutral trade constituted a reason for war, then war could have been declared against France as well as against Britain, for the French had confiscated 558 American vessels in 1803-12. Even so the British had outdone them by making 917 seizures in the same period.¹¹³

Before the outbreak of war, early in the summer of 1812, commercial opportunities for the Americans were good despite the fact that the threat of an Anglo-American war may have made it less enticing to sail to the Baltic controlled by the British in the winter of 1812. The opportunities were improved by the fact that Russia had disengaged from the Continental System, had concluded an alliance with Sweden and Britain in July 1812, and still had a very positive attitude towards American trade.

News of the U.S. declaration of war was passed to American captains at the ports of the Baltic Sea before the British, who controlled the Danish channels, were aware of it. Thus, some Americans managed to avoid British confiscations by hurrying to St Petersburg.¹¹⁴ Altogether 66 American vessels managed to sail to St Petersburg, and 32 of them carried colonial products directly from the United States.¹¹⁵ There is no reliable information about the adventures of the American vessels that in one way or another managed to get to and stay in Russia. The number of vessels in St Petersburg was reported at 34 in August 1812, but it dropped to eighteen within a few months. Many American vessels probably contrived somehow to register as British or Russian. The vessels that remained American had to wait for three years.¹¹⁶ STA shows that in the first the summer of peace at least fourteen captains from among the 66 who had been stranded there in 1812 sailed from St Petersburg to Elsinore.¹¹⁷

¹¹³ Paterson et al. 1983, 69; cf. Nettels 1962, 234.

¹¹⁴ Crosby 1965, 257; John M. Forbes to Monroe, 9 July, 4 September, 9 October, and 12 October 1812, NA T-195/2.

¹¹⁵ HSP, LNP, Letters 1810-1841; Harris to Monroe, 15/27 October 1812, NA M-81/2 (printed in USR 1980, 894). According to the Russian consul in Philadelphia, 65 vessels departed from the United States for Russia in 1812, with 30 of them planning to sail directly to St Petersburg, 14 to Archangel and two to Riga; Bolkhovitinov 1975, 305-306.

¹¹⁶ Harris to Monroe, 20 February 1813, NA M-81/2; Crosby 1965, 248-259. The British Consul, Daniel Bayley, reported 17 American vessels staying in St Petersburg; Bayley to Castlereagh, 5/17 January 1815, PRO, FO 65/99. About 70 sailors stayed in St Petersburg over the war, and 176 in Copenhagen. Some of the latter group were sent to their home country via France; Saabye to the Secretary of State, 25 February 1814, NA T-195/2. In the early phase of the war, there were plans for American privateering on the Baltic Sea. The maintenance of trade links using overland routes to St Petersburg was also planned; see Forbes to Monroe, 7 September, and 12 October 1812, NA T-195/2. For privateers on the Archangel route, see Crowhurst 1977, 75.

¹¹⁷ In addition STA records 11 captains sailing west from the Baltic Sea who had not sailed east in the same summer (six from Copenhagen, four from Karlskrona and one from Stettin); STA 1815. Some of those that had stayed in St Petersburg had managed to get away during the war in one way or another. One of them was Captain Tobias Davis of Boston, who early in spring 1815 carried a load of sugar from Boston to St Petersburg on the ship *Minerva* and returned with a cargo of iron and manufactures he declared he was carrying to Martinique; STA 1815 (1249/1524); HSP, LNP, Letters

The conflict between the United States and Great Britain in 1812 brought the Americans and the Russians into different warring camps. Considering Russian commercial interests, it is understandable that Count Rumiantsev, at first tried to prevent the break between the British and the Americans, and when he did not succeed, he suggested in 1812 that Russia should mediate in the war that had already broken out.¹¹⁸ London rejected the offer since the British disliked Alexander I's apparent friendliness towards the Americans, and suspected that they would be confronted with a united Russo-American stand on questions of maritime rights. As far as Russian trade alone was concerned, there was no hurry to make peace, as since the summer of 1812 the English had quickly made up for the losses they sustained under the Continental System.¹¹⁹ British diplomacy had a clear objective: to define the war in such a way that it had as little to do with the fight against Napoleon as possible. They wanted to isolate the United States from its allies and deprive the Americans of background support in any joint negotiations. The unpleasant question of maritime rights would then not play a major role.¹²⁰

The State Department once again acted quickly. Madison did not wait a reply for the Russian mediation offer from London, which was given only in autumn 1813. Instead, he appointed a team of negotiators in April 1813, who were expected to meet their British counterparts in St Petersburg. Adams, Treasury Secretary Albert Gallatin and Senator James Bayard of Delaware were appointed American negotiators. The instructions from Secretary of State Monroe to the negotiators is evidence that the British had estimated the aims of the Americans correctly. Monroe stressed that the rights of neutrals in particular were to be discussed in the peace negotiations, as they were a reason for the Anglo-American war. Both Monroe and President Madison apparently had a strong belief in the prospects for some kind of breakthrough provided that Russia would support the Americans. However, the American policy of non-intervention, shows up clearly in the instruction: "*on the subject of neutral*

1810-1841. Brown & Ives's ship *Asia*, which had carried a highly profitable cargo of tea to Copenhagen early in spring 1812, was one of the American vessels that was caught in a trap in 1812. Captain John H. Ormsbee considered it too dangerous to continue to St Petersburg because of rumours of war, and so the vessel brought iron, steel and lumber from Stockholm. The planned voyage to Lisbon was delayed so long that the vessel had to stay in Copenhagen. The *Asia* visited the Baltic Sea three more times in the years that followed. The ship *General Hamilton* belonging to the same owners (Capt. Charles Holden) spent the war years in St Petersburg; Hedges 1968, vol. II, 127-128, 132, 146. According to STA, the vessel commanded by Ormsbee passed Elsinore on 8 July 1815 carrying hemp and iron for Providence; STA 1815 (721). Captain Holden is not among the American captains mentioned in STA. According to STA, 53 American vessels sailed eastwards in 1815, but according to the British consul in Elsinore, there were 128 of them among altogether 8816 vessels; Consul Charles Fernwick's report, 10 January 1816, PRO, FO 22/75.

¹¹⁸ Saul 1991, 71; Bolkhovitinov 1975, 307-310; Stagg 1983, 298-299.

¹¹⁹ Adams to Monroe, 18/30 September 1812, NA M-35/3 (printed in USR 1980, 878-880); Saul 1991, 72; Paterson et al. 1983, 73; Bolkhovitinov 1975, 310-312, 315; Anderson 1967, 73.

¹²⁰ A detailed description of the process of the peace mediation: Bolkhovitinov 1975, 304-333.

*rights you will be careful not to commit the United States in any way to maintain and enforce those rights on other powers".*¹²¹

The delegation sent to St Petersburg was also given the task of concluding a treaty of amity and commerce with Russia. The formulation of the treaty was left open and the instructions on the subject were rather loose, but Adams was specifically appointed to head the negotiations.¹²² The Americans arrived in St Petersburg in July 1813, but they remained idle since Britain rejected Russia's offer of mediation. The negotiators grew impatient with each other and their unclear position in St Petersburg. Bayard and Gallatin left St Petersburg at the beginning of 1814 without knowing whether peace terms would be negotiated in Gothenburg, London or elsewhere. Before this Adams, Gallatin and Bayard had jointly and severally shown Rumiantsev their interest in concluding a treaty of commerce.¹²³ However, the issue had become rather a peripheral one for Russian foreign policy. A crucial factor in the failure of both peace negotiations and the treaty of commerce, was the fact that Rumiantsev, who was considered American-minded, ceased to control foreign policy and his views were of no account by the autumn of 1813. The German-born Count Karl Robert Nesselrode, a very competent bureaucrat, "honest, loyal, hardworking, and willing to oblige"¹²⁴, became Minister of Foreign Affairs, a post he was to occupy for almost half a century.

The peace treaty ending the Anglo-American war was finally negotiated far away in the Flemish city of Ghent at the end of 1814. The American delegation consisted of almost the same members as in St Petersburg.¹²⁵ The secretary of delegation Consul Harris, who was mentioned as a friend of the Tsar, travelled to London to ask for Russian support from Alexander I. Harris left without it.¹²⁶

4.5 The Treaty of Commerce and Navigation of 1832

Firm belief in the central importance of trade and treaties of commerce in the conduct of international relations is one of the strongest traditions in the foreign policy of the United States. This holds good with respect to relations

¹²¹ Monroe's instructions to Bayard, Gallatin, and Adams, 15 April 1813, USR 1980, 949-953; Monroe to Gallatin, Adams, and Bayard, 27 April 1813, USR 1980, 959-60; Bolkhovitinov 1975, 312; Saul 1991, 72; see Stagg 1983, 301-302.

¹²² Monroe to Adams, 26 April 1813, USR 1980, 956-959; Adams in his diary, 23 July 1813, USR 1980, 984-986; Saul 1991, 72; Bolkhovitinov 1975, 313-314, 456 (note 43).

¹²³ Rumiantsev to Alexander I, 24 June 1813, and 14 July 1813, USR 1980, 981-982, 986-987; Bolkhovitinov 1975, 320.

¹²⁴ Grimstedt 1969, 198. Rumiantsev, who was considered francophile, resigned in February 1814; Bolhovitinov 1975, 354; USR 1980, 1046-47, note 2.

¹²⁵ The American delegate was complemented by war-hawk Henry Clay, and by the U.S. Minister to Sweden, Jonathan Russell. The official leader of the group was Adams, but Gallatin was probably its most powerful member; Bolhovitinov 1975, 330.

¹²⁶ Bolkhovitinov 1975, 330-331.

with Russia at least at the end of the 18th century and the beginning of the 19th century: drafts of treaties of trade and maritime law were constantly under discussion until thirty years after Dana's mission. By contrast, the Russian attitude was almost the very opposite: when it came to international relations priorities were rarely seen in terms of Russia's commercial interests.¹²⁷ When the European wars came to an end the State Department of the United States for its part maintained its established policy towards St Petersburg. William Pinkney arrived in St Petersburg as American Minister at the beginning of 1817 with instructions to contact Nesselrode, the Russian Minister of Foreign Affairs. However, not only did Nesselrode not encourage him to begin negotiations on the treaty of commerce, but for some reason the envoy himself was also rather doubtful about the enterprise. He revealed in his rambling memorandum to Secretary of State John Q. Adams that he considered the treaty unimportant for commerce. Russian customs, port and tonnage duties were similar for all foreigners, irrespective of the origin of the goods or the nationality of the vessel. Nor were customs a reason for protest, since their level was considerably lower in Russia than in the United States. A treaty which gave the United States the most-favoured-nation status it sought would be "perfectly nominal": it could not result in any special position. Moreover, concluding such treaties was not typical of Russian politics. Besides, according to Pinkney, Russia's foreign trade was so tightly connected to Britain that any advantages the Americans might gain would be also conceded to the British.¹²⁸

Pinkney discussed each article of Russian-American trade separately in his memorandum of September 1817. He concluded that the export of American produce to Russia meant "carry[ing] coals to Newcastle", and the same applied in part to re-exports. For example, the Russians obtained tea from the east overland, and it was both better and cheaper than the tea the Americans carried to Russia via the United States. The Americans carried quite large quantities of sugar and coffee to St Petersburg, but these commodities originated in the West Indies or South America. Thus it would be rather strange to demand customs allowances for them. Pinkney's pessimism was reinforced by Nesselrode's interpretation of the ideas of Alexander I. According to the Minister of Foreign Affairs, the Tsar considered treaties of commerce to be harmful, as the ideal would be to abolish restrictive practices in international trade. On this view, treaties of commerce had a "tendency to discourage rather than promote the advancement and permanent establishment of a sound universal policy in commerce."¹²⁹ George W. Campbell, who arrived as Minister in St Petersburg in the autumn of 1818, drew the same conclusion as his predecessors at the beginning of 1820: the Russians approved of American trade, but they were unwilling to conclude any treaties.¹³⁰

¹²⁷ Grimstedt 1969, 43.

¹²⁸ Pinkney to the Secretary of State, 10/22 June 1817, and Pinkney to Adams, 13/25 September 1817, NA M-35/6; Setser 1937, 220.

¹²⁹ Pinkney to Adams, 13/25 September 1817, NA M-35/6; see Saul 1991, 83; Hildt 1906, 92-112; Setser 1937, 20.

¹³⁰ Campbell to Adams, 6/18 February 1820, NA M-35/6.

During the crisis in the Balkans in the autumn of 1821, "a person close to the Tsar" suggested to the U.S. Minister Henry Middleton that negotiations on a treaty could be started. This person gave him to understand that an American initiative would be welcomed, although it could be expected that Count Nesselrode would oppose it. The proposal was based on the fear that Britain and Russia would end up at war over the question of Greece, thus endangering American trade in the Baltic. The threat could be prevented by the Russo-American treaty. Moreover, the United States could advance Russia's cause by sending a squadron to the eastern Mediterranean to protect American trade.¹³¹

On the basis of his experience of Russia, Secretary of State John Q. Adams was suspicious of the proposal Middleton passed on. He saw a commercial treaty as a bait, since Alexander I had opposed commercial treaties for several years. Adams suspected that the proposal was political, since "*...we can really obtain nothing from Russia of any importance in a commercial treaty. She had no discriminating duties, no colonial monopolies to remove. All the trade between us is carried on our vessels*".¹³² In fact Adams seems to have had similar thoughts about the question of a treaty as William Pinkney: the commercial benefits would be at best slight tariff reductions for sugar, coffee and raw cotton. Following Adams's directions, Middleton turned down the Russian offer.¹³³

Disputes about the commercial rights of a Russian-American Company founded in 1799 in the Pacific Northwest played an important role in the Russo-American relations in the 1820s. A treaty on Northwest coast trade was concluded on 1st April 1824, but disagreements about its interpretation carried on for several years.¹³⁴ The question of a general commercial treaty between the countries was not pursued any further at the time. Problems of reciprocity did not exist, as Russia followed an even more liberal policy in foreign trade than the United States. As soon as the Reciprocity Act of 1815 was enacted, the Russian Minister in United States, Andrei Dashkov, notified Secretary of State James Monroe that Russia meets the act's conditions for carrying reciprocity into effect. The relative insignificance of the issue is well shown by the fact that the question was not returned to before 1823, when the request was repeated. Russia was one of the countries whose vessels were allowed to carry commodities from so-called third countries to the United States, since American vessels had the same rights in Russia. American reciprocity was further extended in 1828, but it did not have any real effect on trade with Russia.¹³⁵

¹³¹ Middleton to Adams, 30 August/11 September 1821 (confidential memorandum), NA M-35/7.

¹³² Adams 1874, vol.V, 429-32; Saul 1991, 116-117, note 61. The proposal was probably made by a young aristocrat from Corfu, Ionnes Antonius Capodistriasis, who was close to Alexander I; see Grimstedt 1969, 226-232.

¹³³ Kirchner 1975, 17.

¹³⁴ See Saul 1991, 96-104, 126-128; Owen 1991, 9; Bergquist 1977, 30.

¹³⁵ Setser 1937, 193, 220-221; Oeste 1966, 62. However, "discrimination" continued in Russia: foreign vessels had to pay a small tonnage duty every time they entered a Russian port. Russian vessels had to pay only once a year.

The treaty issue came to the fore again in the summer of 1830 when Senator John Randolph of Roanoke, appointed Minister to St Petersburg the previous year, received instructions to conclude a treaty of commerce from the Secretary of State, Martin Van Buren. Why did the issue come up again, although the situation had not changed since Pinkney's day in 1817? The reason was probably either an initiative by Baron Paul A. von Krüdener, Russian Minister to Washington, in August 1828,¹³⁶ or Van Buren's desire to include Russia in the group of countries with which the United States had treaties based on the most-favoured-nation principle. In any case, John Randolph was also assigned the task of negotiating a maritime convention on the basis of the principles of 1780. The American interpretation was that Russia had therein accepted the principle of neutrality of the seas. Van Buren drew up a detailed draft of 26 articles to base the negotiations on.¹³⁷ John Randolph's short spell of forty days as Minister in St Petersburg has unanimously been judged a fiasco. Even the Secretary of State, who was responsible for the appointment, admitted that Randolph had made a fool of himself at the Russian Court, handing over the draft treaty and his secret negotiating instructions to the Russians.¹³⁸ Responsibility for the negotiations was left to 22-year-old Secretary of Legation, John Randolph Clay, who had arrived in St Petersburg as the envoy's protégé. His attempts failed because of Count Nesselrode's delaying tactics.¹³⁹

The negotiations forged ahead when James Buchanan, whom President Jackson had appointed Minister to Russia and who was a Democratic member of Congress, arrived in St Petersburg in the summer of 1832. Buchanan was not very enthusiastic about his appointment, but he had studied the problems of Russian politics and trade thoroughly before setting out. He was given the same instructions as John Randolph two years earlier. Shortly after the initial formalities Buchanan started negotiations with Nesselrode. The breakthrough may have been caused by the fact that the Russians wished be able to count on international goodwill over the Polish Question.¹⁴⁰ There was no more

¹³⁶ James Buchanan also considered that the process that led to the treaty had originated with Krüdener's initiative; Buchanan to Livingston, 19/31 October 1832, NA M-35/12/8.

¹³⁷ Bolkhovitinov 1981, 25-26. It was planned that the representative who arrived in St Petersburg in August 1830 should have concluded the treaty by the beginning of October so that it could be announced in President Jackson's annual report to Congress; Oeste 1966, 61-65.

¹³⁸ John Randolph Clay to Van Buren, 1 October 1830, NA M-35/12; James Buchanan to Livingston, 12 June and 29 June 1832 (and enclosure: Buchanan to Nesselrode, 4/16 June 1832) NA M-35/12/2,4; Wilkins to Forsyth, 27 December 1834, NA M-35/13/3; see Bolkhovitinov 1981, 20-21, 30-37; Saul 1991, 118-119; Oeste 1966, 71-75, 84-88. Oeste (51, note 3): "Randolph was about as well fitted for diplomacy as a blacksmith is for embroidery". Randolph served as Minister to Russia from London until James Buchanan was appointed to the post.

¹³⁹ Clay to Van Buren, 31 December 1830, 15/27 January 1831, 10/22 March 1831 (enclosure: Clay to Nesselrode, 22 January/3 February 1831), NA M-35/12; Bolkhovitinov 1981, 36-37. Clay served as head of the Legation for almost two years before Buchanan, and another year after him. He handled affairs more efficiently and competently than any other minister after Buchanan; see Saul 1991, 168.

¹⁴⁰ See Kirchner 1975, 29-30; Saul 1991, 117; Bolkhovitinov 1981, 46-47.

commercial incentive for concluding a treaty than earlier. The fact that the major Russian negotiator was the Minister of Foreign Affairs, Count Nesselrode, and not the Minister of Finance, Count Kankrin, who was mainly responsible for commercial issues, also indicates that the objectives were political. The Americans too had political objectives: Jackson's cabinet had an obvious desire to prove themselves in foreign policy. This is shown in Jackson's references to the start of the negotiations for a trade treaty with Russia in his third presidential address to Congress of 1831, when in fact the negotiators had not yet even gathered around the same table in St Petersburg.¹⁴¹

The negotiations began with Buchanan raising the problem of sailors who fled from Russian ships to the United States, and the question of American tariff policy. The Russians considered the high duties on hemp and iron, set in 1828, a reason for the decline in trade between the two countries.¹⁴² Buchanan did not want to nor was able to promise the reductions the Russians demanded because they would have been exceptions to the general tariff and only Congress had the right of decision in tariff issues. The Americans had adopted a single-schedule tariff which did not allow special customs duty concessions for individual trade partners.¹⁴³ This was only one of the several questions that bothered Buchanan: the Russians did not understand or pretended not to understand the American tariff system. It was embarrassing to Buchanan personally that he had gained a reputation as a passionate protectionist during tariff discussions in 1824 and 1828 when he had demanded additional tariffs on hemp, flax and iron so that U.S. shipping would no longer be dependent on the "Czar of Russia and King of Sweden". Buchanan had used Russia as an example of an unprofitable trade partner, and its unprofitability was due to low American tariffs.¹⁴⁴

James Buchanan was in obvious trouble in the negotiations when he tried to find concrete commercial grounds for the treaty: how could the Russians gain anything from reciprocity when in practice it already existed in both direct and indirect trade. So Buchanan spoke about the importance of trade with America in general terms. It would bring "a most powerful impulse both to the agriculture and manufactures of Russia".¹⁴⁵ Buchanan was also convinced that Russia was extremely interested in advancing commercial relations, but as N. N. Bolkhovitinov observes: "It proved considerably more complicated, however, to prove this to the Russian Government itself".¹⁴⁶ At any rate, Buchanan tried to convince the Russians of the stabilizing effect of the treaty on relations between

¹⁴¹ Richardson 1896, vol. II, 551; Kirchner 1975, 30. However, Jackson had little to say about the actual conclusion of the treaty two years later; Richardson 1896, vol. III, 22.

¹⁴² Buchanan to Livingston, 12 June and 29 June 1832, NA M-35/12/3-4; Saul 1991, 122; Thomas 1930, 76. In 1828 the duty on hemp rose from \$35 per ton to \$45 per ton.

¹⁴³ Buchanan to Livingston, 9 August 1832, NA M-35/12/6; see Thomas 1930, 79; Eckes 1995, 12, 14, 27.

¹⁴⁴ Bolkhovitinov 1981, 47-49, 52; Kirchner 1975, 31; Stanwood 1903, vol. I, 217; see Curtis 1883, vol. I, 36-37, 78-80.

¹⁴⁵ Buchanan to Livingston, 29 June 1832 (and enclosure: Buchanan to Nesselrode, 14/26 June 1832), NA M-35/12/4; Bolkhovitinov 1981, 49.

¹⁴⁶ Bolkhovitinov 1981, 46-47.

the countries. He also claimed that it would result in active American merchants settling down in Russian ports. The treaty would also increase American trade on the Black Sea and thus the poorly developed southern parts of Russia would benefit from it.¹⁴⁷ Buchanan seems to have been convinced by his own arguments:¹⁴⁸

"Our trade is of great importance to these people and they will do every thing they can to maintain and extend it. I have succeeded in directing their attention to the subject, and the more they consider it the brighter will come our prospect of success. Nothing but a deep and prevailing sense of their own interest can overcome the prejudices they entertain against Commercial Treaties."

Buchanan was an experienced politician, and he made himself at home in the diplomatic circles of St Petersburg. On the other hand, he formed a bad impression of the Russian nobility and of serfdom, and he abhorred censure of the press and the "calm despotism" of Russia.¹⁴⁹ Experience gained in the domestic politics of the United States did not always help: Russian politics and the cabinet struggles between the ministers were not always clear to him, at least not at the beginning. This showed when the treaty drafts, which Buchanan had considered finished already in June and which had been presented to the tsar in July, were suddenly rejected in October 1832. Baron de Krüdener for one, who had returned to Russia and participated in the negotiations, had considered the conclusion of both treaties clear. Or at least that is what Buchanan understood.¹⁵⁰

Why were the treaties rejected at the final stage? Buchanan was more or less clearly given to understand that the Minister of Finance, Count Kankrin, opposed the treaty of commerce. He was said to be suspicious of all treaties of this kind because he feared that they would reduce customs revenue, which constituted a fifth of the state's income. As trade between Russia and the United States was in practice only carried by American vessels, neither Russian trade nor its merchant shipping would suffer even if discriminatory duties existed on both sides of the Atlantic.¹⁵¹ According to Bolkhovitinov, the treaty of commerce was a good example of "double-dealing" and plotting in the

¹⁴⁷ Buchanan also put forward some rather contrived arguments based on the similar treaties the United States had with Sweden and Prussia. He claimed that if the treaty was not concluded articles imported from those countries would displace Russian products in the American market; Buchanan to Livingston, 29 June 1832 (enclosure: Buchanan to Nesselrode 14/26 June 1832), and 9 August 1832, NA M-35/12/4, 6; Buchanan to Jackson 22 June 1832, Moore, vol. II, 198-203.

¹⁴⁸ Buchanan to Livingston, 9 August 1832, NA M-35/12/6.

¹⁴⁹ See Ahonen 2002; Baylen 1953.

¹⁵⁰ Buchanan to Livingston, 29 June, 9 August, 2/14 September 1832 (enclosure: Buchanan to Nesselrode, 8/20 August 1832), and 19/31 October 1832, NA M-35/12, 4, 6-8; Bolkhovitinov 1981, 44-45. Buchanan himself had started to fear disappointment in the end when his announcement of American reductions in customs duties on iron and sailcloth got no reaction from Russia. The question of a reduction in duties had initially been considered vital for the treaty.

¹⁵¹ Buchanan to Livingston, 9 August and 19/31 October 1832, NA M-35/12/6,8; Bolkhovitinov 1981, 56; Saul 1991, 121; Oeste 1966, 114.

Russian court. In this case, they were mainly a result from the power struggle between Nesselrode and Kankrin.¹⁵² Even Buchanan recognized this.¹⁵³

When Count Nesselrode announced the tsar's decision, he also advised Buchanan to make a new proposal that he would personally present to the emperor. The proposal was to be made in such a way as not to show the initiative of the Foreign Minister. As Nesselrode was negative about including questions of maritime rights in the treaty and Buchanan too had doubts about the question, the subject was left out of the new proposal. By contrast, Buchanan emphasized again the importance of trade with the Black Sea, and the fact that the treaty would neither reduce Russia's customs revenue nor restrict the country's freedom of manoeuvre with respect to trading arrangements with other countries.¹⁵⁴

Buchanan presented the new proposal in October 1832 and quickly received a positive response, but the real negotiations were delayed until the end of November. He armed himself with a mass of statistics compiled by the U.S. consul, Abraham Gibson, showing that the United States bought two-thirds of St Petersburg's hemp, sailcloth and ravenduck and more than a half of its bar iron. According to Buchanan, these figures surprised Nesselrode, who was not very well aware of foreign trade issues. These data may have contributed to the fact that the most-favoured-nation principle, which the Russians disliked and the Americans considered crucial, became the fifth article of the treaty. Buchanan claimed that it was the most important issue for Russia since, for example in 1830, American commodities had been carried to Russia worth \$35,000, but Russian produce worth \$1,622,000 had been imported into the United States, i.e., worth almost 50 times as much. Buchanan aimed to prove with these data that although the Americans controlled the shipping between the two countries, the balance of trade was extremely favourable for the Russians.¹⁵⁵

The real negotiations on the treaty of commerce were rapid and easy. All the essential questions were agreed upon at a meeting on 26th November. The 1828 treaty of commerce between the United States and Prussia, without the articles on neutral navigation, formed the basis for the negotiations. Only certain details were actually discussed. Buchanan demanded equal harbour dues for American and Russian vessels in all Russian ports. The practice existed in St Petersburg and Archangel, but in the Baltic countries and the Black Sea ports the dues were slightly higher for foreigners than for the Russians.

¹⁵² Saul (1991, 121) sees Ludwig von Stieglitz as the key figure behind the scenes the negotiations. He persuaded both Kankrin and Nesselrode to support the treaty. Nesselrode's personal economic interest in the issue remained hypothetical; see Bolkhovitinov 1981, 27, 49-50, 56; Kirchner 1975, 30-31, note 63; Thomas 1930, 81.

¹⁵³ Buchanan to Livingston, 19/31 October 1832, NA M-35/5/8. When Buchanan left St Petersburg the next summer he stated that internal struggle in the Imperial Council had cast a shadow on the negotiations. It was fortunate for the Americans that reaching agreement had become a point of honour with the Minister of Foreign Affairs, Count Nesselrode; Buchanan to Livingston, 31 July 1833, NA M-35/12/21.

¹⁵⁴ Buchanan to Livingston, 19/31 October 1832, NA M-35/12/8.

¹⁵⁵ Buchanan to Livingston, 20 December 1832 (and enclosure C), NA M-35/12/9; Bolkhovitinov 1981, 60-61; cf. Thomas 1930, 86.

Buchanan renounced the demand for perfect equality after Nesselrode raised the spectre of Kankrin, who, according to the Minister of Foreign Affairs, was not aware of the newly opened negotiations.¹⁵⁶

Buchanan was anxious to prevent possible further delay, and came up with the idea of trying to have the treaty ready for signing on the birthday of Tsar Nicholas I. In the event the treaty was brought to the emperor's notice on his birthday and it was signed three days later on 6th/18th December 1832.¹⁵⁷ Bolkhovitinov interprets the treaty as being "acceptable and advantageous to the United States"¹⁵⁸. However, Walter Kirchner does not give much weight to the arrangements of 1832 and it is easier to agree with the latter.¹⁵⁹ Neither party benefited from the treaty nor lost anything because of it – at least with respect to commerce. By the terms of the treaty, most-favoured-nation treatment was confirmed in a conditional form, and so was reciprocity of tonnage duties, in other words equality. Coastal trade was entirely outside the scope of the treaty.¹⁶⁰

The clause with respect to most-favoured-nation status was not comprehensively applied. The Russians demanded a separate article which defined the position of the Kingdom of Poland and the Grand Duchy of Finland within the general treaty. This article stated that the special arrangements that Finland had with Sweden, and Poland with Prussia did not apply to the Americans. These questions were discussed a few times in the negotiations, but as the restrictions were unimportant to the Americans and the Russians were not willing to give way on them, Buchanan did not insist.¹⁶¹

According to the major architect of the treaty, James Buchanan, the treaty had opened "a new era in Russian diplomacy".¹⁶² The claim was couched in florid diplomatic language, which was hardly meant to be taken literally,

¹⁵⁶ "Discrimination" against non-Russian vessels in Odessa resulted in an extra charge of five dollars for a vessel of 200 tons. All such levies were significantly higher in American ports than in Russia. Buchanan was referring to these when he stated: "... no reciprocity can exist between the two countries except upon paper. In this respect the treaty is solely for the benefit of the United States"; Buchanan to Livingston, 20 December 1832 (enclosure: Buchanan to Nesselrode, 14/26 November 1832), NA M-35/12/9; Bolkhovitinov 1981, 59, 62.

¹⁵⁷ The political nature of the secret negotiations was stressed when the treaty was declared. Tsar Nicholas announced the treaty in his morning reception and asked the British Chargé d'Affaires, who was present and surprised at the announcement, to translate it from French into English. As Buchanan understood it, the event was widely discussed, because it became clear only later that the treaty was in fact a trade agreement and not a political alliance; Buchanan to Livingston, 20 December 1832, NA M-35/12/9; Bolkhovitinov 1981, 63.

¹⁵⁸ J. Dane Hartgrove states in his English preface to Bolkhovitinov's research that the treaty "belongs with the ordinary run of administrative and regulatory conventions".

¹⁵⁹ Kirchner 1975, 82.

¹⁶⁰ Kirchner 1975, 32; Buchanan to Livingston, 20 December 1832, (enclosure A), NA M-35/12/9; Kirchner 1975, 228-231; Malloy 1910, vol. II, 1514-1519. The text of Treaty in Appendix, p. 00.

¹⁶¹ Buchanan to Livingston, 20 December 1832, NA M-35/12/9; Malloy 1910, vol. II, 1514-1519. The article meant that American vessels did not obtain such favourable treatment in Finland as Swedish or the Grand Duchy's own vessels.

¹⁶² Buchanan to Livingston, 20 December 1832, NA M-35/12/9.

although Russia in fact had no arrangements of a similar type with other countries apart from Sweden and Prussia. At all events, Buchanan had succeeded in gaining something other American diplomats had sought in vain to obtain from St Petersburg for 50 years.¹⁶³

The U.S. Senate ratified the treaty on 27th February 1833, and the terms of the treaty were published on the day the instruments of ratification were exchanged, 11th April.¹⁶⁴ The corresponding announcement took place in Russia only in the February of the following year, and even then without the separate article. The Secretary of Legation, John Randolph Clay, noted that fact, but Nesselrode gave rather evasive answers to his questions. The Russian Foreign Minister considered it sufficient that the separate article was announced in the United States; it prevented misunderstandings.¹⁶⁵

The treaty of commerce hardly featured in Russo-American relations before the Civil War. Only in 1845 with the sugar customs dispute did the Minister Charles S. Todd invoke article 11 of the treaty, which he considered was being broken (see p. 296). In 1856 the acting consul of St Petersburg, G. H. Hutton, proposed, among several other things, that the treaty should be reformed: the major export articles of both countries should enjoy reciprocal tariff reductions in the country of destination.¹⁶⁶

4.6 "The Axis of Neutral Rights"

Despite his success, James Buchanan had to give up one of the basic objectives of American treaty policy in the negotiations of 1832: the incorporation of freedom of seas and neutrality of trade in the same document. Russia had played a central role with respect to neutrality since the days of Catherine II and Dana's mission. In the words of the Secretary of State, James Monroe: "Since 1780 Russia has been the axis on which all questions of neutral rights have essentially turned."¹⁶⁷

¹⁶³ Buchanan's political career led him to the White House in 1857. Before that he served, for example, as the Secretary of State in 1845-49, and as Minister to London during the Crimean War. In the former post he was preoccupied with the Sound dues, and in the latter he encountered yet again the problem of neutrality as it affected trade between Russia and the United States.

¹⁶⁴ Malloy 1910, vol. II, 1514; Livingston to Buchanan, 5 April 1833, NA M-77/136/9.

¹⁶⁵ Clay to Louis McLane, 2/14 March, and 7/19 April 1834, NA M-35/12. The "concealment" of the separate article may be due to the fact that early in 1834 Russia and Sweden were negotiating a treaty of commerce. In these negotiations the Russians strove to minimize the privileges the Swedes enjoyed in Finland. The American treaty did not serve these Russian objectives; see Harmaja 1920, 791.

¹⁶⁶ Hutton to William Marcy, 17/29 November 1856, NA M-81/5; Kirchner 1975, 33. The treaty, which was originally concluded for six years, was routinely renewed until 1911.

¹⁶⁷ Monroe to Gallatin, Adams, and Bayard, 15 April 1813, USR 1980, 949-952.

During the European Revolutionary Wars questions about neutrality on the seas had mainly been decided on British terms, essentially because it was the Royal Navy that put forward their arguments. The English had no intention of giving up their doctrine of supremacy on the seas even after the European peace arrangements. Meanwhile the Americans followed their earlier line at least with respect to relations with Russia, though the Treaty of Ghent had "made all questions of maritime rights academic".¹⁶⁸ Russia's position as a great power was even clearer after 1815, and the State Department seems to have expected that a positive stance taken by St Petersburg could be used to put pressure on the British. The question played a significant role in December 1823, when Middleton left a draft of a treaty on neutral rights with Count Nesselrode. The arguments for a treaty were based on the ideas of armed neutrality put forward in 1780, which were regarded as common to the United States and Russia. The "maritime usurpation" of the Napoleonic era had only temporarily obscured these principles.¹⁶⁹

The timing of the American initiative was not badly chosen if the intention was to exploit the differences in views between Russia and Britain in international politics at the beginning of the 1820s. However, Tsar Alexander's view, at least as Nesselrode saw it, was that treaties on maritime rights had to be concluded between several countries. A neutrality agreement between Russia and the United States would only be useful when the countries were at war with each other, and this "ought to be ranked in the number of events the most distant, the most unlikely".¹⁷⁰

The question of maritime rights was taken up again in 1828, once again during Anglo-Russian hostilities. The conflict between Russia and Turkey formed the background, and American interests on the Black Sea were affected. The merchants of New York in particular were said to be interested in the issue of maritime rights, and thus, for example, the question of maritime blockades had to be settled in the form of a treaty.¹⁷¹ The State Department was surprised in the summer of 1828 by an initiative coming from the Russian Minister to Washington, Baron de Krüdener. This initiative was to be discussed several times over the years that followed. Krüdener announced that Tsar Nicholas had

¹⁶⁸ Paterson et al. 1983, 75.

¹⁶⁹ Middleton to the Secretary of State, 5/17 February 1824 (enclosures: Middleton to Nesselrode, 5 December 1823 and 5 February 1824), NA M-35/10/34. The proposal included the widest possible interpretation of "free ships – free goods", and also the "eventual abolition of private war". Shipbuilding materials were removed from the category contraband of war; see Oeste 1966.

¹⁷⁰ Middleton to the Secretary of State, 5/17 February 1824 (enclosures: Middleton to Nesselrode, 5 December 1823 and 5 February 1824), NA M-35/10/34. The initiative, which was drawn up by the Secretary of State John Q. Adams, received – if that were possible – an even colder reception in London: the British refused to discuss the question of impressment, which was included in the draft; Pratt 1965, 67.

¹⁷¹ Bolkohovitinov 1981, 11. The question of the Turkish straits and the right of the Americans to sail the Black Sea had been discussed several times before. For example, in 1810 Adams suspected that several Americans had already visited the Black Sea while claiming to be British; Adams to the Secretary of State, 25 May 1810, NA M-35/2/16.

accepted the American views “in questions of war and neutrality” and was ready to conclude a treaty. The Americans had only to take the initiative.¹⁷²

The consequences of de Krüdener’s letter came to fruition two years later when the U.S. Minister to St Petersburg was replaced. In 1830 John Randolph of Roanoke took over from Henry Middleton, who had been in St Petersburg for ten years and, unlike several other ministers, enjoyed his stay there. He was, moreover, a man of international vision yet without political ambitions. His replacement came supplied with negotiating instructions and a draft agreement on maritime rights. This incorporated a restatement of the principles that had been repeated for 50 years, at the core of which was the principle of free ships – free goods in times of war. Randolph was instructed to invoke the principles of 1780. One new factor incorporated in the draft agreement was the acceptance of privateering, which had been deleted from the proposal of 1824.¹⁷³

Buchanan tried to follow the instructions given to Randolph in 1832, but he too failed to unite questions of maritime rights and of trade in one treaty. Pointing out that de Krüdener had opened the subject in the summer of 1828 was of no help. Buchanan was given to understand that either de Krüdener had exceeded his powers or Washington had misunderstood him. Nesselrode returned to the starting point, which was the reply given to Middleton in 1824: a treaty on neutral navigation was possible, but it should be concluded jointly with the participation of several countries.¹⁷⁴

Apparently the treaty of commerce actually concluded was enough for the Russians to demonstrate their feelings towards London, but a neutrality agreement would be too powerful a weapon for simply registering a protest. Even Buchanan himself had considerable reservations with respect to a neutrality agreement, he believed that it could result in damaging commitments and hazardous situations if Britain and Russia were to go to war with one another. The Russians would demand integrity for their goods carried in American vessels and this would automatically cause a conflict with the British. In fact, though, Buchanan had a solution of his own: in wartime the Americans should themselves purchase the Russian merchandise, which would thus become the property of citizens of a neutral country and thus insure it against

¹⁷² Krüdener to Brent, 6/18 August 1828, NA M-35/2; Bolkhovitinov 1981, 13-14; Thomas 1930, 82. An immediate consequence of what happened in 1828 was a treaty of commerce between the United States and Turkey in spring 1830. The treaty was concluded with the assistance of Russia. It gave Americans most-favoured-nation treatment in and free right of way to Russian ports on the Black Sea. Albert Rhind was appointed Consul of the United States in Odessa at the same time, but he relinquished his post immediately to John Ralli, a prominent local merchant of Greek background, who served in the office until 1859; John Randolph Clay to Martin Van Buren, 31 December 1830, and 10/22 March 1831 (doc. C.), NA M-35/12; Kirchner 1975, 25; Saul 1991, 107; Bolkhovitinov 1981, 17; Bergquist 1977, 35-37.

¹⁷³ Randolph to Van Buren, 7/19 August 1830, John Randolph Clay to Martin Van Buren, 10/22 March 1831 (and enclosure: Clay to Nesselrode, 22 January/3 February 1831), and Buchanan to Livingston, 19/31 October 1832, NA M-35/12; Wilkins to John Forsyth, 27 December 1834, NA M-35/13; Bolkhovitinov 1981, 26-27.

¹⁷⁴ Buchanan to Livingston, 29 June and 19/31 October 1832, NA M-35/12/4,8; Bolkhovitinov 1981, 50, 55-56, 88, note 142; Thomas 1930, 82.

confiscation. Buchanan reckoned that the Americans had enough capital for such a proceeding. By far the best protection for American trade would, however, be the power of the U.S. Navy. The “lawless violence” that had been rife twenty years earlier would not occur again: “the days of our feebleness have passed away”.¹⁷⁵

At the beginning of the 1830s the United States had treaties on neutral navigation with Prussia, Sweden, the Netherlands, Spain, Columbia, Brazil and Central America, but it was obvious that they were not really of vital interest to the United States. In this light it is understandable that Buchanan was advised to continue the negotiations in the spring of 1833. Secretary of State Livingston believed that the minister who had brought about a treaty on commerce would also be able to negotiate a treaty on maritime rights.¹⁷⁶

Buchanan, who was already somewhat familiar with Russian politics, was careful about putting the proposal in writing to guard against that the “extremely jealous and suspicious” representatives of the other side would not officially reject it. Thus, according to his own account, he presented the wishes of his government only by word of mouth. However, he did leave an unofficial letter with Nesselrode in May 1833 before he left St Petersburg. In the letter he hoped the negotiations would be resumed. In addition to the usual arguments he also reminded Nesselrode of the fact that the Russians had largely benefited from neutral American trade during the Napoleonic Wars.¹⁷⁷ However, Nesselrode took a different view of the matter. He could not promise the minister any hope of success. After a discussion with Nesselrode in July 1833 Buchanan believed that the scheme was “definitely crushed”. Yet, he offered to change the day of his departure so that a suitable time for negotiations could be found.¹⁷⁸

In the instructions for Mahlon Dickerson, who was the intended successor of Buchanan, the neutrality agreement was presented as by far most important task of the Legation. However, Dickerson was appointed Secretary of Navy and the instructions were passed on to the next Minister, William Wilkins. Wilkins, who did not enjoy his stay in St Petersburg and spoke poor French, considered the task impossible. He only got a vague undertaking from Nesselrode that he might introduce the question to the emperor. That was all.¹⁷⁹ When no response was received, Wilkins sent Nesselrode a long memorandum on the major points of the agreement the Americans wished to sign in the summer of 1835. Insistence on the principle of free ships – free goods was avoided. Instead agreement was sought only on the principles of neutrality in the case of a naval

¹⁷⁵ Buchanan to Livingston, 19/31 October 1832, NA M-35/12/8; see Bolkhovitinov 1981, 56; Thomas 1930, 81, 84.

¹⁷⁶ Livingston to Buchanan, 30 April 1833, NA M-77/136.

¹⁷⁷ Buchanan to Livingston, 23 May and 4 June 1833 (enclosure: Buchanan to Nesselrode, 18/30 May 1833), NA M-35/12/17,18; Bolkhovitinov 1981, 69.

¹⁷⁸ Buchanan to Louis McLane, 31 July 1833, NA M-35/12/21; Wilkins to Forsyth, 27 December 1834, NA M-35/13/3.

¹⁷⁹ McLane to Dickerson, 26 June 1834, NA M-77/136; Wilkins to Forsyth, 15/27 January, and 4 June 1835 (enclosure Wilkins to Nesselrode, 20 May/ 1 June 1835), NA M-35/13/4,6; Thomas 1930, 90; Oeste 1966, 149-250.

war, agreement on a list of contraband goods of wartime and agreement on what constituted legal blockade. The result was merely polite evasion from Prince Lieven who served as Nesselrode's deputy.¹⁸⁰

Like Buchanan, Wilkins tried to break the Russian "absolute silence" at the end of his three-and-half-month stay in St Petersburg. He quite frankly blamed the Russian Foreign Minister for the delay in 1835 and demanded an official response. Nesselrode replied with the same arguments he had used to Middleton in February 1824 and Buchanan in October 1832. The arguments were formulated slightly more sharply, perhaps in response to Wilkins's words. Nesselrode stated that the real interests of two countries as distant from each other as the United States and Russia could only coincide in theory. He also pointed out that Britain had very different views on questions of neutrality from the Washington cabinet. If the Americans wanted to make progress they should instead negotiate with other Great Powers apart from Russia. Russia would willingly join multinational discussions and an international agreement.¹⁸¹

Nesselrode's reply to Wilkins silenced the Americans until the time of the Crimean War. George Mifflin Dallas, appointed Minister to St Petersburg in the spring of 1837, was not given instructions to seek an agreement on maritime rights. In his opinion the London agreement over the Turkish question in the summer of 1840 marked such a rapprochement between Russia and Britain that a treaty between the United States and Russia might as well be forgotten.¹⁸² Charles S. Todd, on the other hand, who served as Minister to Russia in 1841-46 and took a very active view of his responsibilities, did intend to discuss the issue.¹⁸³ However, nothing of this is mentioned in his reports to the State Department.

4.7 The Limits of American Neutrality: from the Crimean War to the Civil War

The Crimean War, which broke out at the end of 1853, created a new situation in the Baltic. It seemed, at least in principle, to make the problems of neutral trade

¹⁸⁰ Wilkins to Forsyth, 4 June 1835 (enclosure: Wilkins to Nesselrode, 20 May/ 1 June 1835), and 15 August 1835, NA M-35/13/6, 8. Wilkins, an energetic figure who served later as Secretary of War, considered his stay in St Petersburg totally fruitless: nothing he presented made headway against the Russian bureaucracy; Wilkins to Forsyth, 18 July, and 18 August 1835, NA M-35/13/7-8; see Saul 1991, 126; Kirchner 1975, 26.

¹⁸¹ Wilkins to Forsyth, 15 August, 23 November, and 4 December 1835 (and enclosures, especially: Nesselrode to Wilkins, 12 November 1835), NA M-35/13/8, 14, 15; Thomas 1930, 9. Wilkins, like many other ministers to St Petersburg, was nervous about the lack of instructions: "May I ask if you are resolved to leave me here without the aid of any kind of communication from you"; Wilkins to Forsyth 18 July 1835, NA M-35/13/7.

¹⁸² Dallas to Forsyth, 25 November/ 7 December 1840, NA M-35/14/7.

¹⁸³ Todd to Webster, 29/17 November 1841, NA M-35/14/5.

current in the same way as during the Napoleonic Wars. For example the Minister of the United States to London, James Buchanan (former Minister to St Petersburg and the Secretary of State), worried about the potential outbreak of a new trade war at the beginning of 1854.¹⁸⁴ But Britain now acted differently: it declared its acceptance of the principle of free ships – free goods, and as liberal an interpretation of the rights of neutrals as it would have found acceptable even before its declaration of war on Russia in March 1854. What this meant above all was that enemy's property could be carried on neutral vessels, apart from the usual exception of anything considered contraband of war.¹⁸⁵ This solved a potentially dangerous problem by removing the immediate threat of conflict between the United States, which had declared neutrality, and the Anglo-French alliance. Secretary of State William Marcy welcomed the decision as being "extremely satisfactory".¹⁸⁶ Nonetheless, his instructions to Thomas H. Seymour, a former Governor of Connecticut who arrived in St Petersburg as U.S. Minister in May 1854, were still clear: he was to stress the neutrality of the United States and seek to ensure respect for the rights of neutral trade in practice.¹⁸⁷

Uncertainty about British objectives and widespread sympathy with Russia resulted in lively public debate in the United States at the beginning of the war.¹⁸⁸ Seymour was, for his part, rather confused about the fact that the Russians were so American-minded. The sympathies of Seymour, who was even called a "unapologetic Russophile", were clear: he considered the war against Britain and France as causing "tremendous efforts to humble Russia", and his reports were mainly coloured by this view.¹⁸⁹

The British and French naval squadrons blockaded Russia's ports so effectively after the declaration of war that problematic incidents did not really occur. Trade with St Petersburg was mainly directed to German ports. In Seymour's opinion, the position of the United States in international politics, now much stronger than 40 years earlier, had some influence on the issue.¹⁹⁰

"Fortunately, neutral rights are better understood than formerly, and the American flag pretty generally respected, or we might have had to give some effective proof of our claims to the freedom of the seas."

¹⁸⁴ Buchanan to William Marcy, 7 February, and 10 February 1854, NA M-30/61/23-24; see Greenhill & Giffard 1988, 100-101.

¹⁸⁵ Buchanan to Marcy, 17 March, and 31 March 1854, NA M-30/61/25, 26. Marcy esteemed that the American demands would easily become a part of international law after that; see Dowty 1971, 62.

¹⁸⁶ Marcy to Buchanan, 13 April 1854, NA M-77/75/35.

¹⁸⁷ Marcy to Seymour, 14 April, and 9 May 1854, NA M-77/136/4, 6.

¹⁸⁸ See Dowty 1971, 85-105; Saul 1991, 199-200; Pratt 1965, 280-281.

¹⁸⁹ Dowty 1971, 75; see Seymour to Marcy, 31 March, 24 July, 19 August, and 15 September 1854, 2 May 1855, NA M-35/16/1, 6-8, 30.

¹⁹⁰ Seymour to Marcy, 31 March, and 13 April 1854, NA M-35/16/1, 2. Seymour proposed sending a frigate to the Baltic Sea to protect the American commerce. The Secretary of State thought it possible, but only if American neutrality was violated; Marcy to Seymour, 14 April, 9 May, and 15 June 1854, NA M-77/136/4, 6-7; Thomas 1930, 112.

Russia's interest was to maintain trade contacts despite the blockade – at least to as great an extent as possible. According to Seymour, even the tsar set his hopes on the American trade.¹⁹¹ The American-minded attitude was proved in practice when two ships, the *Flying Childers* (1125 tons) and the *Sherwood* (447 tons), belonging to the Boston merchants J. M. Forbes and Cunningham Brothers respectively, were welcomed in St Petersburg early in the spring of 1854 with their cargoes of cotton. The Russian officials, albeit encouraged by extra payments, did all they could to enable the vessels to depart from Kronstadt before the blockade.¹⁹²

The Crimean War gave William Marcy, Secretary of State, an opportunity to proceed further than before with the question of neutrality: the objective was to make the American principles a permanent part of international law. In Marcy's opinion, the Americans could achieve this by concluding as many bilateral treaties as possible. Britain, however, declared that its earlier statement was sufficient. By contrast, Marcy and Eduard de Stoeckl, Russian Minister to the United States, rapidly negotiated an agreement in Washington, which was signed on 22nd July 1854. This treaty of neutrality included all the principles the Americans had been seeking to have recognized in a formal treaty since 1780. A statement on the legality of privateering was incorporated in the treaty.¹⁹³ However, the treaty had no significant practical importance in international terms, and in London it was shrugged off.¹⁹⁴

The tight blockade and Britain's liberal attitude to neutral trade took the sting out of some rather provocative Russian attempts to get the United States involved in the war too. The idea was to inveigle the American captains into breaking through the British blockade and consequently cause a situation similar to that in 1812. The idea of breaking through to the Russian ports was not unacceptable to the Americans, either, but the plans did not come to fruition.¹⁹⁵

The English did not set many restrictions on the trade with the Russians, as long as it took place outside the ports under blockade. Seymour had some comments on the blockade orders themselves. However, he could not prove that closing the Russian ports was a paper blockade such as the Americans abhorred.¹⁹⁶ The British attitude to the situation is revealed in the fact that

¹⁹¹ Seymour to Marcy, 13 April 1854, NA M-35/16/2.

¹⁹² Seymour to Marcy, 8 May, 24 July, and 26 October 1854 (enclosure: Seymour to Nesselrode, 6/18 August 1854), NA M-35/16/3, 6, 10; Buchanan to Marcy, 2 June 1854, NA M-30/62/34; Marcy to Seymour, 30 June 1854, NA M-77/136/8; Marcy to Buchanan, 27 April 1854, NA M-77/75/38.

¹⁹³ The Senate approved the treaty on 25 July and it was ratified three months later; Miller 1942, vol. 6, 796-812; Dowty 1971, 78-79, 106 (note 26); Saul 1991, 210; Anderson 1961, 34; Thomas 1930, 113; Seymour to Marcy, 2 June, and 19 August 1854, NA M-35/16/4,7; Marcy to Seymour, 15 June 1854, and William Seward to Cassius Clay, 24 April 1861, NA M-77/136/7 (Seymour),2 (Clay); Marcy to Buchanan, 7 August 1854, NA M-77/75/52. Only The Two Sicilies, Hawaii, Nicaragua, Peru and Bolivia concluded such a treaty with the United States.

¹⁹⁴ Buchanan to Marcy, 19 January 1855, NA M-30/62/57.

¹⁹⁵ See HMM 1854, vol.31, 575-579; Saul 1991,198, 202; Dowty 1971, 79-80; Thomas 1930, 111-112; Golder 1926, 463.

¹⁹⁶ E.g. Seymour to Marcy, 1 October 1854, NA M-35/16/9.

though they did not allow vessels that had departed from the United States before the blockade to enter Russia, they were prepared to permit the export of such commodities as the Americans had purchased in Russia in the previous winter. However, Baring Brothers, who were commissioned to investigate the matter, concluded that such property did not exist in Russia.¹⁹⁷

According to STA, the number of cargoes carried through the Sound decreased significantly in 1854-55 and the number of vessels dropped to 16,000, a figure close to that of normal trade at the beginning of the 1840s.¹⁹⁸ However, an exceptional amount of trade with German ports was carried through the Great Belt and the Little Belt during the war, and these cargoes do not appear in the statistics of the Sound. Thirty-one of the fifty-one American vessels that sailed to the Baltic Sea through the Sound in 1854-55 reported sailing to German ports. According to the American Consul in Stettin the number of such vessels at thirty-nine.¹⁹⁹ The blockade did not affect everybody: the Boston–St Petersburg firm Ropes & Co. carried approximately the same amount of goods to the Baltic as in times of peace, but they were carried not to St Petersburg but to Memel and Königsberg.²⁰⁰ It proved difficult to find a suitable return cargo at German ports and consequently about a third of American vessels returned to the North Sea in ballast. According to the foreign trade statistics of the United States, the export values to Sweden, Denmark and Prussia remained almost constant. The same applied to Hamburg and Bremen. The major change that the Crimean War caused to American shipping was a drastic reduction in the transportation of sugar from the West Indies. Only eighteen vessels sailed from Cuba to Russia in 1856-60, whereas there had been forty-six in 1851.²⁰¹

The Crimean War resulted in a great deal of both economic and political activity in Russo-American relations.²⁰² War material was carried to Russia by circuitous routes and this caused the greatest problem for the British. They prohibited the export of arms, ammunition and marine engines to northern and eastern Europe, and they put pressure on, for example, Prussia and Denmark who prohibited the conveyance of war materials in transit. The controls were, however, merely formal since it was politically impossible to put any other but Russian ports under blockade. In other words, the British had very few means to prevent arms and ammunition from being carried, for example, from New York to Memel and from there to Russia by land. In Hunt's Merchants'

¹⁹⁷ Buchanan to Marcy, 19 April, 2 June and 11 July 1854, NA M-30/62/33, 34, 36.

¹⁹⁸ See Appendix, table 22.

¹⁹⁹ CR 1854-55, NA T-201/3; Schillow to Marcy, 6 August 1854, 9 August and 27 October 1855, NA T-59/3. According to Consul Schillow, 25 vessels visited Königsberg, 9 Memel, 4 Stettin and 1 Danzig. The number of British vessels in the Sound dropped from 4665 to 2032 in 1853-54. By contrast, the number of, for example, Swedish vessels increased from 2007 to 2583; Report of the Select Committee (1856), 190.

²⁰⁰ CR 1854-55, NA T-201/3. The firm used at least the ships *Volga* and *Dublin* on the Baltic Sea during the war.

²⁰¹ Commerce and Navigation 1854-56; Appendix, table 25; CR 1854-55, NA T-201/3. Before the blockade of Archangel in the spring of 1854 seven American ships managed to sail this route to Russia; CR 1855, NA M-481/1.

²⁰² See Saul 1991, 202, 226, 235.

Magazine, the Americans were advised to ship cotton and sugar destined for Russia to Memel.²⁰³ Several other routes to Russia also existed. For example, Samuel Colt's arms were carried there via Antwerp and Berlin. A significant quantity of contraband of war also reached Russia via Hamburg: for example, saltpetre which had been bought in England and trans-shipped in the United States was carried by that route. Sugar that the Americans carried from Cuba was also carried to Russia by the same route.²⁰⁴

The American ship *Samuel Appleton* of Boston, which sailed to a Baltic Port in Estonia in April 1855 before the blockade, gave the British particular cause for concern. At the Sound its cargo was marked down as 804 bales cotton, but its real cargo was said to be 50,000 rifles and 100,000 revolvers that were hidden in cotton bales and intended for Russia. Arthur Cunningham was in charge of the venture.²⁰⁵ Another Boston ship that gained publicity for smuggling suspicious materials was the *Robert Patten*. She entered the Baltic Sea in the middle of October and joined the American vessels waiting for the end of the blockade or for a decrease of British cruisers in order to get St Petersburg. The ship was anchored off Stockholm and attracted the attention of the British inspectors, not least because Arthur Cunningham was the supercargo and one of the owners of the vessel. He claimed his vessel was on the way to Pillau and contested the rumours that arms intended for the Russians were hidden in a cargo of cotton once again.²⁰⁶ The Swedish Customs inspected the vessel thoroughly and found that the cargo contained only 113 tons of logwood and 1019 bales cotton. The British were suspicious but did not officially dispute these findings. The assurances of the consul in Stockholm and Baring's in London, which had probably partially financed the cargo, were received in similar manner.²⁰⁷

²⁰³ HMM 1854, vol. 31, 575-578.

²⁰⁴ Anderson 1961, 35-36, 41, 44-45; Saul 1991, 214; cf. Homans 1858, 925. Circuitous trade routes were also used in the opposite direction: two-fifths of the hemp and two-thirds of the flax of a normal year reached the British Isles from Russia in 1854; Saul 1991, 214; see Kirchner 1975, 208-209. Disputes over payment for the wartime consignments of arms and ammunition carried on for several years; William Henry Prescott to John Appleton, 27 July 1860, Lewis Cass to Appleton, 26 November 1860, and William Seward to Cassius Clay, 16 October 1861, NA M-77/136; Appleton to Cass, 11/23 November 1860, NA M-35/18; Clay to Seward, 8 April and 13 April 1862, NA M-35/19; see Saul 1991, 254-256; Greenhill & Giffard 1988, 157-159.

²⁰⁵ Saul 1991, 213; Seymour to Marcy, 26 April 1855, NA M-35/16; Schroeder to Marcy, 25 May 1855, NA M-45/9; CR 1855, NA T-201/3. After the British prevented the ship from sailing to St Petersburg it proceeded to Stockholm where it was commissioned to carry 7400 shippound of iron as freight to Boston.

²⁰⁶ Schroeder to Marcy, 14 November 1855, NA M-45/9. Persistent British suspicion, probably unjustified in this instance, was caused by a tip-off from the English-born U.S. Consul Gothenburg, Alexander Barclay. Barclay later resigned from his office partly because of this incident.

²⁰⁷ The ship *Robert Patten* was so carefully watched that it was impossible for her to get to St Petersburg. The vessel probably ended up in a Prussian port and from there sailed to Revel when the blockade was over. The next spring, on 6 May, the vessel passed through the Sound with a cargo of hemp and iron; CR 1856, NA T-210/3; Cunningham to Schroeder, 13 December 1855, NA M-45/9; Schroeder to Marcy, 11

The Crimean War was expected to have an epoch-making influence on trade between the United States and Russia. Seymour's view was that the Russians were ready to stay as far apart from the British as possible in their foreign trade. Only certain American initiatives and possibly certain reductions in customs duties by Washington were needed to make good use of the situation.²⁰⁸ Secretary of State Marcy also stressed that the involvement of Britain as an intermediary in this trade should be minimized. He assumed that the war offered good opportunities for that since its wounds would not be easily healed. However, he did not have any concrete ideas about how to increase direct trade.²⁰⁹

After the Crimean War the principles of neutrality that the United States had been insisting upon since it became independent were included in international maritime law. A convention on maritime law consisting of four articles was signed together with the Paris Peace Treaty on 16th April 1856. According to this, the flag protected the ship and neutral goods were safe under any flag. Only contraband of war was to be excepted. Moreover neutral vessels had the right to carry the property of a belligerent to ports that were not blockaded. The articles of the convention also defined the circumstances in which blockade was legal and what constituted contraband of war.²¹⁰

The contents of the declaration were such that the United States could be expected to be among the first countries to sign. However, William Marcy refused to do so because the first article of the treaty abolished privateering ("Privateering is and remains abolished"), and in his opinion neutral countries that did not maintain a powerful navy would thus be deprived of a means of defending themselves. The question of privateering had already been discussed several times during the war, with the English being willing to abolish it totally, while the State Department opposed this. Moreover the fourth article on the legality of maritime blockade was, in Marcy's opinion, too vague and gave rise to the possibility of the paper blockade the British had practiced. Marcy wanted to go even further, and he proposed an amendment to the Paris Declaration which would have meant abolition of all seizure of private property (except contraband) at sea.²¹¹

The United States carried on with its distinctive line of policy in the question of maritime rights. It aimed at an international treaty which would protect merchant shipping absolutely in wartime. Their proposals, however, were not exactly taken seriously. Russia supported them in principle, but did not want to open the question for discussion in the post-war situation. The

December, and 15 December 1855, NA M-45/9; Seymour to Marcy, 5/17 January 1856, NA M-35/16/62; see Blackwell 1968, 243.

²⁰⁸ Seymour to Marcy, 23 January/4 February 1856 and 16/28 May 1857, NA M-35/16/65,114.

²⁰⁹ Marcy to Seymour, 1 October 1855, NA M-77/136/20.

²¹⁰ Piggott 1919, vol. IV, 264-266; Dowty 1971, 230.

²¹¹ Buchanan to Marcy, 24 March 1854, NA M-30/61/26; Marcy to Buchanan, 13 April 1854, NA M-77/75/35; see Bemis 1963, vol. IV, 283-284; Dowty 1971, 230-232; Stark 1967,140ff.; Thomas 1930, 118-120.

treaty of the summer of 1854 between the United States and Russia was considered valid, although Russia also signed the Paris Articles.²¹² The United States wanted to keep open the question of naval rights by involving Russia – as in the past. For example in the summer of 1859, U.S. Minister Francis W. Pickens was instructed to negotiate a new treaty with Russia. Privateering was to be allowed by the treaty, but naval blockade should be defined more strictly than in the Paris Declaration, and only arms and ammunition were to be designated contraband of war.²¹³

History repeated itself yet again: Russia did not want a new bilateral treaty, but the Minister of Foreign Office, Alexander Gorchakov, proposed arranging an international congress on the privateering question in Paris. The reaction of the Secretary of State, Lewis Cass, was rather surprising, but also revealing. He instructed Pickens to refrain from further discussions. His view was that the United States had a recognized position as a naval power and thus it was sufficient that these American views had been clearly brought to the knowledge of the European great powers.²¹⁴

Washington's attitude to the question of privateering changed abruptly in the spring of 1861. Secretary of State William Seward instructed the U.S. Minister Cassius Clay to conclude a treaty with Russia forthwith on the basis of the Paris Declaration. The change was caused by the fact that "a provisional government ... have taken the bad resolution to invite privateers to prey upon the peaceful commerce of the United States".²¹⁵ Thus on Washington's interpretation privateering, which had a long tradition in America, became piracy as soon as the Confederation resorted to it.

A draft of a treaty which repeated the Paris articles of neutrality was also sent to seven other countries. In St Petersburg Minister Clay attempted an even more wide-reaching agreement, which would have marked the abolition of all commercial wars. Russia again restated its earlier position: it would not conclude a separate treaty that contradicted the Paris Articles. Thereafter a treaty of neutrality was concluded between Russia and the United States in accordance with the original draft on 12th/24th August 1861 in St Petersburg.²¹⁶ Thus the United States effectively joined the countries that had signed the Paris Neutrality Articles.

²¹² Gorchakov to de Stoeckl, 1 May 1856 and Count Orloff to Gorchakov, 19 April/ 1 May 1856, NA M-39/3; Bemis 1963, vol. VI, 283-284; Saul 1991, 251.

²¹³ Cass to Pickens, 29 June 1859, NA M-77/136; Pickens to Cass, 31 August 1859 (enclosures: Pickens to Alexander Gorchakov, 28 July/9 August 1859, and Pickens to Cass, 31 August 1859, private letter), NA M-35/18/47.

²¹⁴ Pickens to Cass, 31 August 1859, NA M-35/18/47, and Cass to Pickens, 4 October 1859, NA M-77/136/21.

²¹⁵ Seward to Cass, 24 April 1861, NA M-77/136/22; cf. Stark 1967, 43.

²¹⁶ Seward to Clay, 24 April, 3 September, 21 October, 23 October, and 9 November 1861, NA M-77/136; Clay to Seward, 7 June, 21 June, 3 August, 17 August, 24 September, 19 November, 10 December 1861, and 6 February 1862, NA M-35/19; Gorchakov to de Stoeckl, 21 July and 24 October 1861, NA M-39/3.

4.8 The Sound Dues Question

American trade with the Baltic and especially Baltic Russia was as a rule shipped through the Danish channels, the Sound in particular. Thus questions about sailing through the Sound and dues levied directly concerned those trading with St Petersburg. Rights of passage through the sounds and their control could develop into wide-reaching problems in international politics, as for example during the Napoleonic Wars. The first vessels registered as American had sailed to Russia through the Sound already in 1782-83, but the Danish Board of Customs (Da. Generaltoldkammaret) ordered on 30 June 1784 that vessels that passed the Sound "from the newly established state in North America" had to be treated in a "non-privileged" way.²¹⁷

The practice of levying dues and the amounts levied had undergone some changes over the years since the Danes started to collect the dues in the 1420s. Changes in the political balance of power in northern Europe used to be reflected in either gained or lost privileges in Elsinore. The treaty of Christianopel between the Netherlands and Denmark in 1645, amended in Copenhagen 1701, can be considered to have set up the basic arrangements for levying dues, creating a general tariff for cargo and shipping through the Sound and the Belts. Although some adjustments were occasionally made, the arrangements of 1645 were essentially in effect until the abolition of the dues.²¹⁸

Sound dues were collected as specific duties, and when the tariffs were defined, the amount to be paid was calculated as one per cent of the product's value at the port of loading. As the prices of the commodities varied, the dues may in some cases have been below one percent, while in other cases significantly higher. In addition to cargo dues, shipping dues set according to the size of the vessel were also collected.²¹⁹ The dues collected in Elsinore were so insignificant, however, that they did not provoke strong demands for change at the end of the 18th century or the beginning of the 19th century. The vessels of privileged countries paid an ad valorem duty of 1 percent for unspecified goods, while the others paid slightly more - 1¼ percent. The difference was in practice insignificant, but the extra tariffs were one factor contributing to H.R. Saabye, a business associate of Ryberg & Co., being appointed consul in Copenhagen.²²⁰

The fact that non-privileged vessels had to wait for customs clearance was often considered a greater problem than the extra tariffs. On 26th April 1826 the

²¹⁷ Foghtman og Algren-Ussig 1810, vol. IX, 775; Rasch 1965, 58.

²¹⁸ See Rubin 1905; Fogdall 1922; Christensen 1941; Börman 1981, *passim*.

²¹⁹ For example, after the re-arrangements in 1842 the payment levied on a loaded vessel of registered at 40 tons was 4½ silver talers, and for a vessel in ballast 2½ silver talers. The dues varied according to the size of the vessel; see Becker- Christensen 1988, 406. Lists of customs duties were printed in several languages; see e.g. Thaarup & Martensen 1821; Hjort 1831; Hjort 1842.

²²⁰ Rasch 1965, 32; Rasch 1964, 153; Fogdall 1922, 48. Saabye served as a consul up to 1811, after which he was replaced by the special minister sent from London, George W. Erving.

United States and Denmark concluded a treaty of commerce based on reciprocity and the most-favoured nation principle.²²¹ Thereafter American vessels were considered to belong to the privileged countries and thus extra tariffs and delays were over. According to U.S. Minister Henry Wheaton, the only difference between the Americans and the British, who dominated the traffic in the Sound, was that the English were more willingly allowed to pay their dues on credit, in other words, on the return trip from the Baltic Sea – on condition that the vessels returned within three months.²²²

In Elsinore customs clearance was obtained on the basis of the bills of lading and invoices the ship's officers presented. In practice local agents, of whom there were some forty or fifty in the city in the 1850s, carried out the customs formalities. The agents saved time, and without them customs clearance would have taken at least three or four hours.²²³ Quite often the agents received their provisions from the London or St Petersburg houses with which the American merchants traded.²²⁴ The American merchants' agent was most often the firm Balfour, Ellah & Rainals. Most of the U.S. consuls to Elsinore were also appointed from within this house. Other firms that the Americans used as their agents included Fernwick & Co. and Chapman, Norrie & Co.²²⁵

The bills of lading and invoices the American captains or supercargoes presented did not always convince the customs officers as to the contents of the cargo. The invoices of Captain Benjamin Bailey, who sailed for Champlins of Newport, were treated with suspicion in the summer of 1791: "... *they seem scrupulous at the Custom house about the weights of the Goods.*" Bailey assumed that the reason for suspicion was that two other American captains had been caught for similar fraud.²²⁶

Unlike the problems they encountered in times of crisis – privateering and blockades – the American traders with St Petersburg do not seem to have found the Sound dues troublesome. They were something that applied not only to

²²¹ Malloy 1910, vol. I, 373-375.

²²² Wheaton to the Secretary of State, 31 December 1831, NA M-41/3.

²²³ Report from the Select Committee (1856), 24, 55, 65, 89, 99, 143, 158; see Fode 1989, 142.

²²⁴ For example, when Samuel Endicott of Salem made his third Havana – St Petersburg voyage in the brig *Jeremiah* the dues on the vessel and the cost of provisioning in Elsinore were paid by John D. Lewis of St Petersburg. He subtracted the bill for £80 pounds sent from Elsinore from the sale price of the 710 boxes of sugar carried from Havana.

²²⁵ U.S. consuls or consular agents in Elsinore were John Rainals (1817-34) and his two sons, Edmund Lewis Rainals (1834-48) and Harry Thomas Alfred Rainals (1848-58); John Rainals to Clay, 2 May 1827, NA T- 195/3; H.T.A. Rainals to Webster, 14 July 1851, NA T-201/3; Epping to Webster 10 December 1858, NA T- 201/3/19; Epping to Cass, 8 September, and 21 September 1859, NA T-201/4.

²²⁶ Bailey to Christopher Champlin, 16 June and 18 June 1791, CRI, 347-348. Bailey probably meant James Brown and William Wood who sailed for Brown & Ives's account, and whose bills of lading left a lot to be desired; STA 1791 (414,521). American bills of lading were often unclear before the 1820s. Usually the vessels with imprecise documents were directed to Copenhagen for weighing of the goods, and any extra dues were paid on the return trip. Such cases were extremely rare with vessels sailing west from the Sound; see Rasch 1965, 32; Åström 1988, 181.

them but to everybody else as well, except the Danes themselves. What they did grumble about was the compulsory stop when the winds were favorable and the waste of time. When the winds were bad, the roads were sometimes so full that it was dangerous to anchor. On 10th July 1839 Captain Richard Wheatland on his way from Havana to Riga recorded in the log of his ship, the Boston bark *Gulnare*, that he had seen 250 vessels in the Elsinore passage at one time.²²⁷ On the other hand Elsinore was also a welcome port of call after several weeks at sea. Fresh food and drink, mail and instructions from business associates were received there.

The Sound dues were actively re-assessed in the 1830s. There were several reasons for this, among them the dissatisfaction of the merchants of Copenhagen. The dues collected were regarded as a cause of the city's lost position as the entrepôt of Baltic trade. A great deal of trade was lost to Hamburg. The decline in the prices of colonial produce had gradually generated a new situation after 1815: the dues had in many cases risen significantly above the one per cent they had been originally set at.²²⁸ In 1829 the English merchants who were active in St Petersburg sent the British Consul General, Daniel Bayley, a letter in which they claimed that the Sound dues seriously affected the import of several commodities to St Petersburg, as the Russians got them almost ten percent cheaper via Lübeck. Their examples were coffee (dues from six to eight per cent in the Sound), fustic (six per cent), sugar, raw cotton and cotton twist (about three per cent).²²⁹ Apparently the commodities that had a high value in relation to their weight and that were easily re-loaded were directed to the markets of the Baltic via Hamburg and Lübeck. Indigo in particular was reported to be a product transported to Russia in that way.²³⁰

The dues the Americans paid were rather high in relation to the number of vessels. This was due to the above-average size of the vessels, and the untypically high value of their cargoes. According to the calculation of a U.S. consul to Stockholm, David Erskine, the Americans paid 12 percent of the Sound dues in 1824, amounting to 155,000 rixbankdollars. The total sum in the

²²⁷ Log of bark *Gulnare* 1839, EI, Logbooks; STA 1839 (2346). The British consul in Elsinore, Francis McGregor, recorded on 5 July 1832 that as many as 497 vessels had arrived for clearance, because unfavorable winds had for several days prevented the vessels from anchoring off Elsinore, "thus exhibiting a spectacle not within the memory of the oldest inhabitants of the place"; McGregor's report, 5 July 1832, PRO, FO 22/110. – The one-day record for American vessels was probably 27 July 1799, when 13 vessels sailed from east to west; STA 1799.

²²⁸ It was claimed that it was possible to carry sugar to Copenhagen more cheaply via Hamburg and Kiel than through the Sound; Christian Hambro to Forsyth, 1 July 1836, and Ryan to Forsyth, 5 January 1941, NA T-195/4; Jackson to the Secretary of State, 31 April 1842, NA M-41/4; Rubin 1905, 431-432. The demands were strengthened by the facts that Sweden was demanding exemption from dues for its coastal traffic, and the longstanding critic of the Sound dues, Prussia, had become more active than earlier; Rubin 1905, 200-202; Becker-Christensen 1988, 400.

²²⁹ The letter of the merchants to Daniel Bayley, 25 April 1829, PRO, BT 6/236.

²³⁰ H.W.W. Wynn to Aberdeen, 1 June 1830, PRO, BT 6/236. The British Parliamentary Committee investigating the issue heard that in the 1850s several other products were carried from Hamburg to Lübeck or from Altona to Kiel to avoid the Sound dues; Report from the Select Committee (1856), 11.

following year amounted to 101,100 rixbanksdollars, 7.6 percent of the total amount levied. Only the English (33.0 percent) and the Prussians (21.2 percent) paid more.²³¹ According to a calculation “from official sources” by the U.S. Minister to Denmark, William Irwin, about 106,000 rixbanksdollars, or \$110,200, was collected from Americans on average between the years 1828 and 1843. Of this figure \$89,700 was paid on the ships and cargoes on the way into the Baltic Sea, while only \$20,500 was levied from those returning, of which \$19,500 related to vessels and cargoes bound for the United States.²³²

The claims on the increase of the Sound dues applied, at least, to American trade with Russia – and were actually better than the protesting merchants presented. The accounts of the customs house in Elsinore, which were drawn up on the basis of the average prices in the loading ports in the years 1834-39, showed duties of, for example, was nine percent on brazilwood and four per cent on West India sugar, which was essential to the Americans. The duties were much the same for raw cotton, cocoa, fruit and raw rice. By contrast the duties on American tobacco and indigo were calculated to have remained at about one percent. There was no complaint about the duties on commodities carried westward from the Baltic, perhaps because these had not changed significantly. Only in the case of iron had a reduction in price meant an increase in its tariff to a level above one percent, but conversely the duties on many Russian manufactures had decreased.²³³

The Sound dues were reduced in the summer of 1841 when Britain had also taken up the question.²³⁴ The reduction applied to about 100 out of altogether 500 listed articles. The most wide-reaching changes to affect American trade related to logwood, coffee and cocoa, duty on which fell to a quarter of the previous rates. The duty on raw sugar was reduced from nine stivers per 100 lbs to five stivers. The duty on cotton twist, which was important to the English, was reduced to less than half what it had been. It was considered that the tariff changes were made in the interest of the English in other respects too, and the possibility that Denmark would abandon the dues and take a lump sum in compensation was also widely discussed.²³⁵

The U.S. Minister to St Petersburg, Charles Todd, considered the tariff modifications of 1841 unfavourable to the Americans, since he had been

²³¹ Erskine to the Secretary of State, 26 April 1825, NA T-230/1; John Rainals to Clay, 16 January 1826, NA T-195/3; cf. Rainals to Henry Clay, 11 January, 1826, NA T-195/3.

²³² Irwin to Buchanan, 3 June 1847, NA M-41/5. The calculation was later used in the Danish-American negotiations on the abolition of the dues.

²³³ Sammenlignende Register över Varetransporten fra og til Østersøen med Toldens Beløb, 1834-39; DRA, ØTA; Hambro to Forsyth, 24 November 1838, NA T-195/4; cf. Report from the Select Committee (1856), 5.

²³⁴ The consul of Great Britain in Elsinore, Francis McGregor, and the head of the customs house, Nicholas Holten, negotiated most parts of the new tariff. The Anglo-Danish agreement was signed on 13 August 1841. The reductions in the dues applied to all “privileged” countries from the beginning of 1842 on; see Hill 1926, 277.

²³⁵ On different plans for reforming the dues see: Hill 1926, 231, 277; Rubin 1905, 216; Fode 1989, 148; Report from the Select Committee (1856), 3; Isaac Jackson to the Secretary of State, 31 April 1842, NA T-41/4; Henry Wheaton to Charles Todd, 27 November 1842, NA M-35/14; Christopher Hughes to Webster, 19 July 1841, NA M-45/7.

informed that the duty on raw cotton (18 stivers per 100 lbs) was equivalent to six per cent on the American purchase price. The duty on English cotton twist by contrast was only two percent.²³⁶ The fact that the duty on raw cotton, an important commodity on the Russian market, remained unaltered made the Americans impatient, and in 1846, after U.S. Minister William Irwin's approaches on the subject, the duty was reduced to 10 stivers per 100 lbs. The duties on twist and raw cotton were finally at approximately the same level.²³⁷

Unlike Todd, the U.S. Minister in Copenhagen, Isaac Jackson, assessed the amendments as favourable to the Americans and believed that at least the trade in coffee would go over to the Americans from brokers in Bremen and Hamburg.²³⁸ However, this did not happen. According to ST II, average exports of coffee to Russia tripled between 1836-40 and 1841-45, but this did not reflect an increase in the American share, but rather an increase in the amounts of coffee carried from the German North Sea ports to the Baltic through the Sound.

The overall impact of the Sound dues on U.S. trade with Russia is difficult to estimate. Tariffs were in some cases heavy, but still only a fraction of, for example, the Russia import levies. The Boston merchant Benjamin Shreve calculated in 1830 that the Sound duty was 1.3 percent of the selling price of the sugar he carried from Havana to St Petersburg, but the Russian import duties were almost 35 percent.²³⁹ John D. Lewis seems to have taken the Danish duties into account when he estimated the profitability of his operations in Havana,²⁴⁰ but generally speaking the duties were rarely mentioned separately in the information on prices sent from St Petersburg to the United States.²⁴¹

Quarantine regulations were perhaps the most irksome problem for sailors bound for St Petersburg. The Americans confronted them at least as early as 1805, when Denmark wanted to protect itself from yellow fever. Despite intense protests, vessels arriving from the West Indies were directed to Kristiansand to be put in quarantine. The U.S. Consul in St Petersburg, Levett Harris, struggled to get exception from these regulations, but he could not do much, as the Danish did not readily accept bills of health given by any but their own consuls, and they were not necessarily easy to obtain. American captains were not always aware of the regulations, and if they were, they did not take them seriously at first.²⁴²

²³⁶ Todd to Webster, 10/22 February 1843, Todd to Hugh S. Legaré, 6/18 June and 19 June/1 July 1843, NA M- 35/14/26, 31, 32.

²³⁷ Irwin to Buchanon, 1 Juni 1846, NA T-41/5; cf. Report from the Select Committee (1856), 5. It was still claimed in a letter to the Senate in 1854 that dues of three percent were collected on American cotton, but only one percent on cotton twist; HMM 1854, vol. 31, 436.

²³⁸ Jackson to the Secretary of State, 1 December, and 29 December 1841, NA T-41/4.

²³⁹ PM, BSP, vol. 5 (Brig Washington).

²⁴⁰ E.g. John D. Lewis to William D. Lewis, 5 February 1826, HSP, LNP, Letters 1810-1841.

²⁴¹ The firm Hill & Whishaw wrote in the list of f.o.b- prices it sent from St Petersburg: "exclusive of Sound Dues"; NYPL, PDCP, Foreign Letters 1831-35. The Sound dues were often included in the commissions of the St Petersburg firms; e.g. Buist 1974, 194.

²⁴² Harris to Madison, 18/30 August, and 23 August/4 September 1805, NA M-81/1.

Arrangements were agreed between the Danes and the Russians in 1807 whereby bills of health for all vessels sailing to Russian ports would be controlled in the Danish sounds. The practice irritated the Americans, who could be put in quarantine merely because of logwood carried as ballast.²⁴³ The "American" trading houses in St Petersburg were especially critical of the practice. William D. Lewis considered it unreasonable that some American vessels had been ordered into quarantine at Kensö Island for as much as 40 days because of failing to carry certification. According to Lewis, the Danes were always exceptionally mistrustful of the Americans in particular.²⁴⁴ Their mistrust was not always unjustified, as many American captains took a cavalier attitude towards bills of health, amending them if it suited or even getting new ones drawn up. One practice was to visit Philadelphia, Boston or Rhode Island with a cargo of sugar and try to carry the product to its destination as an American re-export. In the summer of 1821 the U.S. Consul in Copenhagen, John Rainals, referred to several cases where Americans had tried to enter the Baltic Sea with forged or inadequate documents.²⁴⁵ One way to avoid quarantine was not to report in the bill of lading such commodities as would have meant the need for a certificate, and to hope that the custom officers would not find time to inspect the vessel itself. However, there was also the risk of getting into trouble with the Russian customs if smuggled commodities were found.

The U.S. Minister to Denmark, Henry Wheaton, wrote about the quarantine problem in the summer of 1828. He described how the Americans ripped off the hide bindings of sugar boxes and threw them into the sea because the hides were assumed to carry a risk of contagion if they were taken into the Baltic. However, the vessels still had to stay under observation for a few weeks. Yet it was also sometimes considered that the long voyage from the West Indies and the cold temperatures of the north removed the threat of yellow fever.²⁴⁶ John Randolph Clay estimated that the delay due to Danish quarantine requirements cost the Americans \$1500 on average. The quarantine regulations also hampered the return journey to the United States of those arriving late in

²⁴³ E.g. J.M. Forbes to Adams, 17 June, and 8 August 1818, NA T-195/3. The bills of health that were required in Elsinore for vessels that sailed to Russia created a common misconception, at least among the Americans, that Russian ports could not be entered without a certificate of dues paid in Elsinore. The Danes did not struggle to dispel this idea, and it is still restated in Charles Lenartzen's guide (1841) for Americans in St Petersburg; Rainals to Clayton, 15 January 1850, NA T-201/2; Rainals to Webster, 3 January 1852, T- 201/3; Hutton to Marcy, 17/29 November 1856, NA M-81/3; Thomas Tupper (Riga) to John Bidwell, 5 July 1827, PRO, FO 65/160; e.g. Marcy to Buchanan, 31 March 1855, NA M-77/75/84; William D. Lewis' circular of March, 1823, EI, JHAP, vol. 1/11.

²⁴⁴ William D. Lewis to John D. Lewis, 8 October 1821, HSP, LNP, Letters 1810-41.

²⁴⁵ For example the captain of the brig *Fawn* from Boston was fined in 1821 for presenting a forged bill of health. The bill stated that the cargo of sugar was loaded on in Boston, but, in fact, it had come straight from Havana, which had been declared a dangerous region; John Rainals to John Q. Adams, 16 August and 22 August 1821, NA T-195/3; William D. Lewis to John D. Lewis, 29 June 1821, HSP, LNP, Letters 1810-41.

²⁴⁶ Wheaton to Clay, 31 August 1828, NA M-41/3/4; Wheaton to Forsyth, 15 October 1834, NA M-41/4; G.M. Hutton to Cass, 29/11 May 1857, NA M-81/5; Benjamin Shreve to his wife, 15 May, and 24 July 1830, PM, BSP, vol. 20.

the summer to Elsinore.²⁴⁷ This “extremely vexatious and injurious” practice, from which the Danes profited and which harmed trade with Russia was at its worst claimed to have led to some Americans calling off planned sailings to St Petersburg.²⁴⁸

The quarantine question came to the fore in the autumn of 1834 when some American vessels were ordered into quarantine at Kyholm because of the threat of yellow fever despite their carrying bills of health. Once released from quarantine and having reached St Petersburg, the captains presented U.S. Minister William Wilkins with an indignant report, full of what they had had to endure. When all the costs caused by the delay, interest, insurance costs and maintenance of the crews, were added together, the captains estimated their losses at \$10,000 per vessel. Wilkins was influenced by the fact that, in addition to Henry Wheaton in Copenhagen, also the Russian Foreign Minister, Count Nesselrode, interfered.²⁴⁹ Significant amendments to quarantine practice were not, however, made.

The questions of quarantine, custom duties and the privateering of the Napoleonic Wars were factors that probably made the United States the sharpest critic of the Sound dues. Though levying Sound dues was hardly relevant to privateering problems, for example, U.S. Minister Adams had already questioned the right of the Danes to make charges of this kind by 1809. This was later the core of the official American criticism: transit dues were against the principles of the freedom of the seas. The United States had no obligation to pay taxes to any country for its right to sail the seas.²⁵⁰ George W. Erving had already in 1812 developed the idea that the Americans would refuse to accept the Sound dues when he came to Copenhagen in order to try to solve the problems caused by privateering.²⁵¹

The Sound dues question was occasionally discussed between the Americans and the Danes at the beginning of the 1820s, but it vanished from

²⁴⁷ John Randolph Clay to Martin Van Buren 29 October/10 November 1830, and 10/22 March 1831, NA M-35/12.

²⁴⁸ Kirchner 1975, 105; John Rainals to John Q. Adams, 13 January 1824, NA T-195/3. Description of customs: HMM 1853, vol. 24, 714.

²⁴⁹ The complaining captains were J. Osborne Baker (ship *Empire* of New York), B. Filliner (ship *Concord* of Boston), Sam Thaxter jr. (bark *Wallace* of Boston), and Robert H. Pearson (ship *Galconda* of Newburyport). The captains described Kyholm as totally incapable of receiving great American vessels, and the compulsory voyage through the wretched passages was equal to crossing the Atlantic in mid-winter. The port was shallow, the equipment for unloading cargo was lacking, and the workers demanded unreasonable wages for their short working days. Worst of all the vessels had to wait in Kyholm for two months. The four vessels had to break their way through the ice to Kronstadt late in the autumn, and they had to stay there over winter. Two vessels that sailed to Riga managed to return to the United States late in the autumn; Wilkins to Forsyth, 15/27 January and 4/16 May 1835, NA M-35/13/4,5 and the related correspondence; Wheaton to the Secretary of State, 15 October 1834, 18 February and 12 March 1835, NA M-41/4/51,54,55; Kirchner 1975, 105; STA 1834 (2618, 2604, 2606, 2605), STA 1835 (988, 1009, 1239, 926). The vessels visited Riga: STA 1834 (2588/2746, 2594/2755).

²⁵⁰ Adams 1874, vol. III, 127, 147; see Tønnessen 1968, 296.

²⁵¹ Erving to Monroe, 14 May 1812, NA M-41/2.

public discussion after the treaty of commerce between the countries of 1826. The United States was credited with the position of a “privileged nation” in the fifth article of the treaty.²⁵² According to a later, often repeated Danish interpretation, this article meant that the United States recognized Denmark’s right to the Sound dues.

American “Sound dues diplomacy”, which finally resulted in abolition of the dues in Elsinore, started in the middle of the 1830s. In 1836, for example, the consul in Copenhagen, Christian Hambro, criticized the “oppressive nature”²⁵³ of the dues, and US Minister Jonathan F. Woodside suggested renouncing the treaty of 1826. He regarded it as America’s responsibility to take the initiative over abolishing the dues, since the European great powers could not under the terms of the Treaty of Vienna of 1815. His characterization of the dues was harsh:²⁵⁴

“– a tribute, at once oppressive in its operation, disgraceful, in its character, and pleading no justice for its imposition, but the power to enforce it from the early era in which it took its origin. – I am of the opinion that, a free people, whose motto is to ‘ask nothing but what is right, and to submit to nothing that is wrong’, ought not to submit a single day longer to the imposition of a tribute, so entirely unjust and totally barbarous. If we wish our commerce to be free, we ought not to only let the Danes, but the world see, which we possess the energy, as well as power to protect it from interruption_ _ _.”

American criticism of the Sound dues was a part of a policy of demanding freedom of the seas, but economic motives were also involved. The importance of Russian trade was apparent especially in the early stages of the diplomatic efforts. In the spring of 1837 Secretary of State John Forsyth instructed the U.S. Minister Dallas to make an unofficial appeal for help from Nesselrode to ease the “virtual restrictions upon the commerce of the United States and Russia”.²⁵⁵ The pressure might well have been stronger if the mainstream of the U.S. trade had consisted of American produce and not West Indian raw sugar. Duty on sugar was considered a problem mainly concerning sellers in Cuba and Russian buyers, and not the Americans themselves. Russian diplomats in the United States at least informed the State Department of quarantine restrictions.²⁵⁶ It is, of course, a different question whether the information reached the merchants.

Secretary of State Daniel Webster, who was known as an advocate of free trade and free shipping, raised the Sound dues question in Congress through President Van Buren. A few years later the new Secretary of State, Abel Upshur,

²⁵² “Neither the vessels of the United States nor their cargoes shall when they pass the Sound or the Belts, pay higher or other duties than those which are or may be paid by the most favored nation”; *Danske Traktater 1874*, vol. I, 39; see Tønnessen 1968, 297.

²⁵³ Hambro to Forsyth, 1 July 1836, NA T-195/4.

²⁵⁴ Woodside to Forsyth, 7 April 1837, NA M-41/4.

²⁵⁵ Forsyth to Dallas, 19 April 1837, NA M-77/136/2.

²⁵⁶ E.g. Baron de Krüdener to Forsyth, 14/26 July 1836; George Krehmer to Forsyth, 9/21 April 1837, and Alexander Bodisco to Forsyth, 24 September 1839, NA M-39/2.

even suggested that American frigates should be sent to ensure navigation free of duty.²⁵⁷

The Sound dues question went through several phases in the 1840s. Secretary of State James Buchanan took up the matter once again in 1848 after becoming acquainted with the Sound dues question while serving as Minister in St Petersburg. He was to solve the problem by offering Denmark a lump sum in compensation for giving up levying dues on American vessels. According to President James Polk's diary, Buchanan introduced the matter to him as merely an economic question and left the principles undiscussed. Denmark was offered a lump sum of \$250,000 in return for permanent freedom from dues for the Americans, and an amendment of the treaty of 1826 abolishing the fifth article. The payment was offered in compensation for reduced customs revenue and was not a payment for the right of navigation, which in Buchanan's opinion could not be bought or sold under the principle of the freedom of seas.²⁵⁸ Denmark rejected the offer and was supported by Russia amongst others. The Americans' hope of support from St Petersburg was thus buried.²⁵⁹ Even later on Russia was found to be the strongest supporter of Denmark in the dispute over the Sound dues.

The final phase of the disagreement began at the end of 1853, when Washington determined upon cancellation of the treaty of 1826. Negotiations in Copenhagen had once more failed, but the rift between Russia and Britain provided an opportune moment, as both countries had supported Denmark over the question in previous years. According to Hunt's Merchants' Magazine: "It was right that the Great Republic should lead the way in attacking this as well as so many other antiquated wrongs."²⁶⁰ The U.S. Minister to Denmark, Henry Bedinger, made the official announcement of the abrogation of the treaty on 14th April 1855, and thus the Americans considered themselves free of the Sound dues as from 14th April 1856, once a year's notice had elapsed.²⁶¹

The decision was considered surprising, and it provoked critical discussion.²⁶² For example, the influential Democrat Senator Thomas H. Benton compared the politics of his country to Quixotic tilting at windmills. The United States had adopted a policy, which should have kept it uninvolved in the

²⁵⁷ Tønnessen 1968, 301; Fogdall 1922, 70; Hill 1926, 275; Benton 1864, vol. I, 364-365; Jackson to the Secretary of State, 24 October, and 1 December 1841, NA M-41/4; William Irwin to the Secretary of State, 2 April, and 22 April 1844, NA M-41/5.

²⁵⁸ Polk 1910, vol. IV, 153; Moore 1906, vol. VI, 220-225; Fogdall 1922, 70; Bemis 1963, vol. VI, 285. The idea about the lump sum compensation may have originated with Robert Flenniken, who served as minister to Denmark; see Flenniken to Buchanan, 8 September 1848, NA M-41/6.

²⁵⁹ Flenniken to Buchanan, 21 May 1849, NA M-41/5; Tønnessen 1968, 299; Hill 1926, 236; Fogdall 1922, 71.

²⁶⁰ HMM 1854, vol. 31, 439.

²⁶¹ Richardson 1896, vol. V, 279; Afløsningen 1859, 455-466; Bedinger to Marcy, 3 December 1853, 26 January, 1 April, 10 October 1854, NA M-41/5.

²⁶² E.g. Feddersen 1856; Der Sundzoll 1854; HMM 1854, vol. 31, 439, and 1855, vol. 33, 403-423. – F. Hassenland's booklet "On Sound Dues and their Relation with General Commerce" (1854), published in several languages, was perhaps the most cited publication critical of the Sound dues.

economic and political arrangements of the old continent.²⁶³ President Franklin Pierce discussed the dues question at length in his message to Congress in 1855. The problem was not considered to be political in nature. Pierce equated Danish policy with the acts of the Barbary states in the Mediterranean: the Sound dues were no more justified than tribute exacted by pirates, since nobody had the right to impose duty on sailing between two open seas.²⁶⁴ Also the American newspapers interested in the Sound dues question especially in the winter of 1855. For example New-York Daily Times published in 1855 over forty articles or news about the topic.²⁶⁵

In 1854 the Americans were given to understand, both in Copenhagen and St Petersburg that Russia supported Denmark to such an extent that entrance to Russian ports might be denied to American vessels that did not pay the Sound dues. All the same, Secretary of State Marcy still tried to gain Russian support for American freedom from duty. However, he gave the U.S. Minister to London, James Buchanan, freedom to decide whether or not to act upon the question.²⁶⁶ The Americans did not gain Russia's support even though the countries had reached a mutual understanding on the question of the neutrality of the seas by that time. Count Nesselrode did not understand the American point of view. Why should the old and internationally accepted practice have to be questioned, and on what ground could it be claimed that Denmark had no right to dues that were centuries old? U.S. Minister Seymour's argument that the dues were not justified "in the present advanced state of international law" met with little response.²⁶⁷ The Russian Foreign Minister was only concerned about the possibility that the present war against France and Britain would bring about a situation in Denmark that would prove unfavourable to Russian trade and foreign policy.²⁶⁸

Denmark faced a difficult situation when the American treaty was cancelled. If the Americans were to pass through the sounds without paying dues, others would follow their example. Sound dues were of no small importance for the Danish economy, since they constituted about ten percent of state revenues.²⁶⁹ After considering several options, the Danes resolved to call an international conference in Copenhagen to decide on the fate of the Sound dues. Denmark itself suggested the payment of a lump sum in compensation. Invitations were sent to almost 30 countries at the beginning of October 1855,

²⁶³ Benton 1864, vol. II, 264-265.

²⁶⁴ Richardson 1896 vol. II, 504, and vol. V, 335.

²⁶⁵ New-York Daily Times 1855. A series of critical articles were late published as a pamphlet *Letters on the Sound- Dues-Question*, I-VII; see Fogdall 1922, 77.

²⁶⁶ Marcy to Seymour, 1 October, and 5 November 1855, 27 March 1856, NA M-77/136; Marcy to Buchanan, 5 November 1855, NA M-77/75, vol. 16; Fogdall 1922, 72, 76.

²⁶⁷ Seymour to Marcy, 8/20 December, 14/26 December 1855, NA M-35/16/57, 8; Nesselrode to de Stoeckl, December 1855, NA M-39/3. Seymour himself recommended sending an American warship to the Danish sounds to guarantee free passage; Seymour to Marcy, 26 February/10 March 1856, NA M-35/16/68.

²⁶⁸ Nesselrode to de Stoeckl in December 1855, M-39/3.

²⁶⁹ Andrew Buchanan to Earl of Clarendon, 31 March 1855, PRO, FO, 22/244A; Fode 1989, 148; see Fogdall 1922, 72; Halicz 1977, 154.

and they did not conceal the fact that Denmark was forced into this course by the policy of the United States.²⁷⁰

The Copenhagen Conference started its work in January 1856. The current diplomatic representatives of different countries took part in the negotiations, with Russia alone sending a special delegate to the conference. The United States refrained from participating, as Denmark refused to discuss the question of the right to collect the Sound dues. According to the Secretary of State, William Marcy, the Americans had no reason to be involved in a meeting that discussed European arrangements. Nor was he willing to pay any compensation "for the right that naturally belongs to us". Later he assented to discussions on keeping the Baltic Sea channels navigable, and compensation to Denmark for the cost of this.²⁷¹

The Sound dues question was discussed in Copenhagen for over a year. The conclusions were delayed by anticipation of the terms of the Peace of Paris and the line the British would take. The British were mainly concerned about how the American declaration of freedom from duties would affect their own trade with Russia.²⁷² Denmark agreed to abolish the dues on condition that it would be paid in compensation a lump sum of 35 million rixdollars, which was about half the originally stipulated amount and was equivalent to customs receipts for fifteen years. In return Denmark would abolish the Sound dues from 1st April 1857 on, and it undertook to keep the Sound and the Belt passages safe for navigation.²⁷³ The resolution on compensation for the cargo dues determined that the payment should be equally divided between the sending and receiving countries. The solution was favourable to the United States, as the payments on its cargoes of raw sugar were divided between Spain and Russia. The American proportion was calculated at 0.7 percent of ship dues and 2.2 percent of cargo dues. This amounted to 718,000 rixdollars or \$393,000 altogether, and this was explicitly paid not for the abolition of the Sound dues, but for the maintenance of the channels for navigation.²⁷⁴

²⁷⁰ Afløsningen 1859, 458-465.

²⁷¹ Richardson 1874, vol. V, 335; Hill 1926, 284-285; Fogdall 1922, 78.

²⁷² The British Parliament appointed a committee of 14 members to tackle the question. The committee gathered 11 times and heard 22 experts. The conclusion of the almost 200-page report was the recommendation of a lump sum in compensation; Report from the Select Committee (1856), I-VI; cf. Hill 1926, 253.

²⁷³ Afløsningen 1859, 556-558; Rubin 1905, 276-291; Danske Traktater 1874, vol. I, 278-279. The only country that refused payment was Brazil. It considered such compensation unreasonable, since no Brazilian ship had ever entered the Baltic Sea.

²⁷⁴ Danske Traktater 1874, vol. 1, 188; Rubin 1905, 239, 242-244; Tønnessen 1968, 306-307. Britain and Russia paid about a third of the total sum each. Finland's share of Russia's contribution of seven million silver roubles was 400,000 silver roubles; see Heikkinen 1994, 214; Harmaja 1920, 770-773.

5 MERCHANTS AND TRADING HOUSES

5.1 “No people are more keen or clever than the Russians”¹

Central to the history of trade relations between American and Russia in this period is the contrast between what might be characterized as American activity on the one hand and Russian passivity on the other. Trade was conducted by American merchants and carried almost entirely by American vessels. However, the Americans were not exceptional in this, since Russian foreign trade had traditionally been strongly dominated by foreigners. In Russia foreign entrepreneurship was above all commercial and not industrial at the beginning of nineteenth century. A “traditional caution and fear in manufacturing as well as trade” was characteristic of the Russian merchant class.² Several reasons have been given to account for this commercial backwardness: the slow growth of the Russian middle class, lack of capital, and the fact that the political authorities wanted to maintain strict supervision and control of foreign transactions. The economy of the Russian state, however, was such that the government had a particular interest in promoting exports, and thus two-way transactions were left to foreigners. From the Anglo-Saxon point of view, Russian merchants seemed to focus their interest on the profitability of single transactions, and to be less willing to plan long-term business.³ The picture Hunt’s Merchants’ Magazine draws in 1844 is not flattering about the Russians:⁴

“Not a single Russian is engaged in maritime traffic – they have neither the requisite knowledge and connections, nor the genuine, intuitive spirit of commercial spirit. The

¹ Oddy (1805, 199): “No people are more keen or clever than the Russians when they have interests in view.”

² Owen 1983, 14. According to Owen (p. 2), Russian merchants “relied more on intuition and the aid of loyal friends and relatives than on rational calculation and understanding of trends in the world market”; see Rieber 1982, 23.

³ Kirchner 1975, 170-172; see Owen 1983, 59; Kaser 1978, 456; Kirchner 1966, 231-246; Owen 1991, 5ff. Also the uncertain social status of the merchants has been considered a factor contributing to passivity; see Rieber 1982, XXII-XXIII.

⁴ HMM 1844, vol.10, 210.

Russian, with his narrow-minded notions, cannot divest himself of his false views of money; and, alike all eastern merchants, he is unable to raise himself to an intellectual consideration of the times”.

It was calculated even in the middle of the 19th century that the Russians themselves had only a few percent of their foreign trade in their own control. Prior to the Crimean War joint-stock companies hardly existed in Russian trade. In the north the bulk of both exports and imports was handled by German and English trading houses, while in the south Greeks, Italians and Armenians dominated the trade.⁵ According to the British Consul Daniel Bayley, foreigners clearly dominated the tonnage figures of Russian foreign trade. Of the tonnage arriving in 1823 (176,300 tons) only one percent was Russian, while the bulk of it was English (71 percent), American (6 percent) and Prussian (4 percent).⁶ It was calculated as late as 1847 that foreign merchants controlled 90 percent of Russia's imports and 97 percent of its exports. According to British calculations, there were 22 English firms in St Petersburg in 1843.⁷ At the beginning of the 1840s there were two trading houses that can be considered American, although they were often assumed to be British.

The activities of both foreign and Russian merchants were strictly regulated. The regulations, which dated back to the reign of Catherine II and were amended in 1807, required foreign merchants to register in specific guilds and to pay a tax on their declared capital at the ports. Membership in the guilds depended solely on the amount of capital.⁸ Most Russian merchants dealing with foreign trade belonged to the first guild, but non-Russians could act as either “travelling merchants” or “foreign guests”. The first status gave restricted privileges which were in practice sufficient for purchasing, for example, a cargo for one vessel. By contrast, the rights of foreign guests approximately equalled the powers of the first guild merchants. A foreign merchant was a non-Russian of “incomplete citizenship”, and so many of them took Russian citizenship in order to have inland commercial rights.⁹ In 1830 there were twenty-one foreign guests, and by 1852 sixty-one.¹⁰

⁵ See Owen 1983, 62-63; McKay 1974, 340; Blackwell 1970, 242-243; Kirchner 1966, 243. Rieber (1982, 28) mentions that 41 joint-stock companies were founded in 1799-1836. However, half of them were in no way connected with trade or industry.

⁶ Bayley to Canning, 10/22 March 1824, PRO, FO 65/144. British vessels carried 68 percent and American vessels nine percent of St Petersburg's exports worth 87.7 million roubles. However, Bayley calculated at the same time that in rouble terms foreign merchants controlled 63 percent of exports, but their share was only 40 percent of the city's total trade worth 210 million.

⁷ Edward Bayley's report, 26 January 1844 (Annex B), PRO, FO 65/302; cf. Rieber 1982, 23, 73.

⁸ Hartley 1995, 258; Dowler 1987, 40.

⁹ Owen 1983, 3; Kaser 1978, 449-456; Kirchner 1975, 179; Blackwell 1970, 247; Clark 1841, 22-23; Chapman 1977, 6, 32; Amburger 1957, 348; see Rieber 1982, 12, 31-34; Dowler 1987, 44-48. – An extremely thorough American discussion of the guild system and the status of the foreign merchants: HMM 1842, vol. 6, 37-42, 161-163; Consul Bayley's report, 28 January 1841, PRO, FO 65/274/3938; Clarew Hunt to Palmerston, 30 November/12 December 1833, PRO, FO 65/209.

¹⁰ Kirchner 1975, 179. – On guilds and merchants in St Petersburg, e.g. de Tegoborski 1855, vol. III, 319; MacGregor 1844, vol. II, 319; MacCulloch 1854, 986.

Most Americans who took part in St Petersburg trade in the short term were captains or supercargoes responsible for the export and import arrangements of their ships and who for that reason stayed in Russia over the winter. One of them was Peter Lander Jr., the supercargo of Benjamin Pickman's ship *Eliza Ann* from Salem. His cargo of sugar did not sell for the desired price in the autumn of 1816 because of a "sudden rise in exchange and scarcity in money". Consequently, Lander had to spend the winter in St Petersburg.¹¹

Those American merchants who settled down permanently in St Petersburg usually took on the status of foreign guests. William Ropes, who came to St Petersburg in 1831, was a first guild merchant from 1847 onwards. By contrast, John D. Lewis kept his foreign guest status throughout his almost 30-year-long career.¹² Purchase of Russian products was usually easier and cheaper if a merchant had Russian citizenship. This was claimed to be most easily acquired in Finland. Thus, for example William Hooper Ropes, who followed his father from Boston to St Petersburg, wrote in 1834 of having registered as a merchant in Hamina and subsequently becoming a merchant of the second guild in St Petersburg.¹³

The Americans acknowledged the talents of the Russians, as for example in the quote from J. Jepson Oddy, a member of Russia Company, used in the current chapter heading. However, they did not find it easy to understand Russian trading practices. There were many reasons for this, of which the most serious, according to John D. Lewis, were lack of proficiency in the language and limited knowledge of Russian markets.¹⁴ Moreover, the Americans in St Petersburg, like the British, associated with their compatriots rather than with the Russians.¹⁵ Alexander Hill Everett, who had arrived in St Petersburg in the company of Minister Adams, claimed that the Americans had been "tremendously cheated in their business" before the Philadelphian Miers Fisher, whom the Americans could consult, became a merchant.¹⁶ Adams pursued the matter and reported to his friend William Gray in 1810 that some trading houses had monopolized the American trade and conspired to plunder

¹¹ Lander to Pickman, 24 December 1816/ 5 January 1817; also 8/10 July 1816, and 26 February 1817 O.S., EI, BPP, vol. 1, Letterbook 1801-1820.

¹² Kirchner 1975, 185, 189. – Because the registration of those who arrived in the country was strictly carried out, it is difficult to estimate the number of Americans who arrived in Russia, as the complicated paperwork was avoided by arriving in St Petersburg as, for example, supercargo of a merchant vessel; PM, Fettyplace Journal, PM, (Ship Peterhoff). – Kirchner (1975, 183) estimates an average of twenty American visitors in 1830s. After the Crimean War the number was ten times as many.

¹³ William Hooper Ropes to Hardy Ropes, 23 September/ 5 October 1833, 12/24 June, and 29 September/ 11 October 1834, HUBL, RFP; Cabot 1963, 136; see Amburger 1957, 348.

¹⁴ Lewis to James Ronand, 11 March 1815, HSP, LNP, vol.69.

¹⁵ E.g. Ernestus Plummer's correspondence with her sister Caroline Plummer from St Petersburg 1809-1812, EI, Bowditch Family Papers, vol. 12/1-2; Dallas 1892, 78. – "The English Club" (The Petersburg Factory) was the centre of Anglo-American relations, although the British were sometimes blamed for somewhat arrogant behavior: "they go bear-hunting on the Newa as they do tiger-hunting on the Ganges"; HMM 1844, vol. 10, 209-210; see Karttunen 2005.

¹⁶ Alexander Hill Everett to Oliver Everett, 14/26 July 1810, USR 1980, 681-682.

the Americans by mutual agreement. Adams described several ways this could be done and recommended Gray to send his own agent to St Petersburg.¹⁷ In his report to the State Department, Adams restated the accusations in more restrained terms, and he also remarked that his fellow countrymen were unacquainted with Russian trading practices. One reason for their losses complained of was that the Americans tried to complete their dealings in St Petersburg as quickly as possible.¹⁸

The U.S. consul in London, Samuel Williams, advised Captain Richard Wheatland, who wished to acquire information about Russian merchants, as follows: "*Let them not detain you by fair promises to procure any articles that may not be on the spot.*"¹⁹ McCulloch's Dictionary (1854), which was obviously in extensive use among the American merchants, listed several peculiar Russian customs and habits that could be learnt only in Russia, and that a merchant who temporarily visited St Petersburg would find impossible to manage without trust in his trading partner: "*... it is highly creditable to the Russians, that foreigners do not hesitate to trust them with immense sums*"²⁰

From the American point of view Russian trade possessed many peculiar characteristics. Bureaucracy was one of the most irritating features of the local scene, as customs officers in St Petersburg could become very awkward and slow if presented with incomplete or unclear ship's documents.²¹ John D. Lewis even alarmed his trading partners by stating that "confiscation of ship and cargo is the inevitable result" if anomalies should be discovered in the totals recorded by the bills of lading.²² Apart from the bureaucracy, the Russian customs were also blamed for being over-suspicious: "sealing up everything about a ship, which can be sealed".²³ On the other hand, the English were blamed for tricky business methods, as they possessed centuries-long experience in the Russian market and their expertise was not willingly shared with rivals.²⁴ However, the British also made miscalculations. In the autumn of 1828 John D. Lewis derided the English merchants' "silly old game" of selling the products on contract in London prior to their purchase in Russia, which had resulted in losses of two or three pounds per ton on tallow, and an almost equal

¹⁷ Adams to Gray, 8/20 October 1810, USR 1980, 710-712.

¹⁸ Adams to the Secretary of State, 2 November 1811, NA M-35/3/74.

¹⁹ Williams to Wheatland, 13 July 1798, EI, GFP, vol. 1.

²⁰ McCulloch 1854, 987. Also Lenartzen's printed guide composed for captains and navigating officers stressed the same; Lenartzen 1841.

²¹ Benjamin Shreve of Salem communicated to his nephew, who was about to begin his voyages to St Petersburg, that it was better to carry too many than too few documents. He had himself needed seven copies of each bill of lading and invoice. Benjamin Shreve to Samuel Shreve, 7 March 1833, PM, BSP, vol. 2. – Stieglitz & Co., for its part, emphasized that "an exact Specification of the Weights and measure together with the proper signature is rigidly demanded", Stieglitz & Co. to Henry Lee, 1 August 1819, Porter 1937, vol. II, 1382-1385.

²² In Philadelphia published circular by Lewis, 19 January 1826, HSP, LNP, vol. 70; also: Lewis to John Andrews, 10 November 1825, EI, JHAP, Business Letters, vol. 1; see Harris to Monroe, 31 December 1816, NA M-81/2, and Cobden 1994, 117.

²³ John Randolph Clay to Martin Van Buren, 10/22 March 1831, NA M-35/12/4.

²⁴ See Kirchner 1975, 142-143.

amount on hemp. This was a result of London merchants miscalculations as to how prices would move in Russia.²⁵

Incomplete bills of lading did not necessarily bring disastrous consequences, since in the words of Clay, the Secretary of Legation, "money is the great agent in St Petersburg".²⁶ Bribery of customs officials, whose wages were said to be poor, and vague extra payments were often referred to. Francis Dana was extremely irritated about them, but Consul Harris for one thought they had to be tolerated to get anything done.²⁷ Captain Judah Paddock, who sailed for the New York merchant Isaac Hicks, complained that he had to pay "bribe after bribe" to accelerate the slow process of loading of the cargo.²⁸

Corruption and smuggling walked hand in hand. Illegal imports were known to be common practice, as well as easy and profitable. Captains were, of course, warned against engaging in it,²⁹ but sometimes the temptation grew too big. In the summer of 1843 Captain Henry Johnson of the Salem ship *Eclipse* was found guilty of attempting to smuggle 10,000 cigars hidden in a cargo of Havana sugar and coffee. Johnson did not convince anybody with his claims that the cigars were intended for the cruise's festivities.³⁰ In addition to cigars, probably coffee, rum and refined sugar were the commodities most often involved in attempts at smuggling. In 1804 William Jones & Co. warned Benjamin Pickman against trying to carry rum to St Petersburg, as legal importation was unprofitable due to massive smuggling.³¹ Edward Bayley, British Consul, reported in 1844 that the customs officers were guilty of such "enormous" fraudulent practices that he considered the whole of St Petersburg "inconvenient to the honest merchant".³²

5.2 "American houses" in St Petersburg

The number of American trading houses set up overseas in the first half of the 19th century is remarkably low in relation to the scale of the country's foreign trade and by comparison with the corresponding figure for western European countries. At least until the middle of the century American firms "preferred the 'adventure' kind of enterprise, with the ship's captain fulfilling the main

²⁵ John D. Lewis to William D. Lewis, 3 September 1828, HSP, LNP, Letters 1810-41.

²⁶ Clay to Van Buren, 7 October 1831, NA M-35/12/12.

²⁷ Dana to Adams, 5/16 March 1783, USR 1980, 177-178; USR 1980, 202, note 2; Crosby 1965, 11; Griffiths 1970, 405; Harris to Madison, 18/30 November 1804, NA M-81/1; see also: Alexander Hill Everett Diary 1809, 47, MHS, ENP.

²⁸ Paddock to Hicks, 11 July 1803, NYHS, IHP.

²⁹ E.g. Benjamin Shreve to Samuel Shreve, 7 March 1833, PM, BSP, vol. 2.

³⁰ Todd to Upshur, 21 August/2 September 1843, NA M-35/14/36 with enclosures; STA 1843 (1496/2242).

³¹ Jones & Co. to Pickman, 31 December, 1804, EI, BPP, vol. 1; Letterbook 1801-20 (printed in USR 1980, 419-420).

³² Bayley's report, 26 January 1844, PRO, FO 65/302.

entrepreneurial role".³³ These words of Stanley D. Chapman's characterize U.S. trade with Russia extremely well. Captains and supercargoes handled business in St Petersburg, and only a few merchants had settled down permanently in the city. Probably the first American merchant to engage in overseas trade in his own name in St Petersburg was John Miller Russell (1768-1840), who had not achieved success as a consul. He stayed in St Petersburg only until 1799. He was also a partner of John Math. Bulkeley & Co., whose exports were calculated at 448,000 assignat roubles in 1795. At the same time the exports of the largest export firm, Paris, Warre, Harvey & Co., totalled 3.3 million assignat roubles.³⁴

At the end of 1804 the St Petersburg firm William Jones & Co. announced that Thomas Elmes of New York "have joined our connection". Elmes was a partner of the former New York firm Galbraith & Elmes. Jones reported that the firm had been engaged in trading linen between St Petersburg and the United States for 25 years.³⁵

The exceptional conditions of the Napoleonic Wars brought new American merchants to St Petersburg. Miers Fisher of Philadelphia was one of them.³⁶ He came to Russia in 1809 as a business associate of his father and Josiah Orne of Salem, and he started his own commission business under the protection of the originally German house Meyer & Brückner. Later he set up a joint venture together with John Venning, who had been active in St Petersburg since 1793 and concentrated on trade in linen with England. According to Fisher himself, it was because of Venning's expertise that he managed to sell manufactures to the Americans more cheaply than anyone else. Fisher claimed to have set up the first American trading house in Russia, and the firm did business under the name of Miers Fisher & Co. from the summer of 1810.³⁷

Being versed in languages as well as sociable, Miers Fisher was a popular character among both his fellow countrymen and the Russians. The important merchants Joseph Peabody and Gideon Tucker became his firm's customers. A fabulous career was predicted for Miers Fisher, and the capable analyses of commercial prospects that he sent to Josiah Orne in Salem support these expectations. Fisher himself considered his chances to be good, and fifteen to

³³ Chapman 1977, 6-7.

³⁴ Amburger 1957, 351. The latter was set up in 1780 under the name Ross, Paris & Warre, and it operated until 1862.

³⁵ William Jones & Co. to Benjamin Pickman, 31 December 1804, EI, BPP, vol. I, Letterbook 1801-20 (printed in USR 1980, 419-420).

³⁶ Shreve to Phineas Quincy, 12 Juni 1810, PM, BSP, vol.5; Alexander Hill Everett Diary 1810, 209, MHS, ENP; Alexander Hill Everett to Oliver Everett, 14/26 July 1810, USR 1980, 681-682. Fisher had probably intended to concentrate on the fur trade, but the situation created by the war tempted him to start as a broker of colonial goods.

³⁷ Miers Fisher, Jr. to Miers Fisher, Sr., 9/21 December 1809, USR 1980, 627-668; Miers Fisher, Jr. to Josiah Orne, 28 May/ 9 June 1810, USR 1980, 667-668; Miers Fisher & Co. to Orne, 1/13 July 1810 and Peter von Essen to Orne, 10/22 October 1810, EI, OFF, vol. 20, folder 2; Miers Fisher, Jr. to Orne, 23 January/ 4 February 1811, OFF, vol. 27, folder 1 (printed in USR 1980, 733-734); Alexander Hill Everett Diary, 20 March 1810, 209, MHS, ENP. Meyer & Brückner served as a Russian branch of the English Thomson, Bonar & Co. when necessary. Fisher's and Venning's joint venture was for some time in Abraham and Peter von Essen's name.

twenty American vessels had become his customers by mid-August 1811. Fisher could not handle more as he did not have enough cash for the payments in advance the importers required. Even so, he estimated his profits at \$20,000 in 1811. Fisher's rivals were unhappy about the firm's methods, especially with the rates of commission, which were lower than average. Fisher himself claimed that Consul Harris in particular was hostile to him. The short history of the firm came to an abrupt end with Fisher's sudden death in June 1813.³⁸

TABLE 2 American vessels handled by some St Petersburg firms, 1808-1819.

Firm	1808	1809	1810	1811	1812	1816	1819
John D. Lewis	-	-	-	-	-	15	17
Miers Fisher	-	-	-	15	6	-	-
Brothers Cramer	8	20	27	29	13	11	3
Meyer & Brückner	-	11	24	38	13	6	3
Anthony Naht	-	4	7	5	2	2	-
Stieglitz & Co.	3	3	12	15	8	4	7
M. Gluchkov & Son	-	2	9	4	1	-	-
Thomas Wright	-	1	3	5	5	7	4
John Venning	-	-	-	-	-	11	7
Others	-	6	22	19	16	6	1
No information	5	3	2	1	2	-	-
Total	16	50	106	131	66	62	32

Sources: Lewis Letters 1810-41, HSP, LNP; NA M-35/6.

The major American trading house in the post-Napoleonic period was that of John Delaware Lewis, a merchant from Philadelphia who had begun his career as a supercargo during Jefferson's Embargo and then gone on to set up the firm of Lewis & Willing (Richard Willing) in St Petersburg in 1812. In May 1814 his younger brother William David Lewis came to assist him, and probably in the same year the whole firm was taken over by the elder Lewis.³⁹ It was calculated that in 1815 there were 130 firms in St Petersburg handling foreign trade.⁴⁰ Lewis ranked twenty-first among them in turnover, but the firm grew at an astonishing rate thereafter.

³⁸ Alexander Hill Everett Diary, 26 July 1810, 242, MHS, ENP; Miers Fisher, Jr. to Thomas Gilpin, 17/29 August 1811, USR 1980, 786-789; John Quincy Adams to Alexander Hill Everett, 29 May / 10 June 1813, USR 1980, 969-970.

³⁹ PM, Fettyplace Journal (Ship Peterhoff); Saul 1974, 46; USR 1980, 1135.

⁴⁰ In 1816 Meyer & Brückner was by far the largest (16.7 million assignat roubles). The corresponding figure for John D. Lewis's firm, which was often listed English, was 3.7 million assignat roubles. The firm ranked 10th in imports and 16th in exports; Amburger 1957, 352-353.

TABLE 3 American business transacted in St Petersburg, 1820-21 (1000 roubles).

Firm	Ships	Imports	Exports	Total
John D. Lewis	29	6 621	4 626	11 247
Stieglitz & Co.	13	2 728	2 385	5 113
John Venning	10	2 468	1 103	3 571
Thomas Wright & Co.	9	1 949	1 480	3 429
Brothers Cramer	8	1 408	1 723	3 131
Hornby, Bayley & Co.	2	944	415	1 359
Thomson, Bonar & Co.	2	230	395	625
Meyer, Br�uxner & Co.	1	154	204	358
Others	1	585	295	880
Total	75	17 087	12 626	29 713

Note: Figures given are averages for years 1820-21.
Sources: EI, JHAP, vol. 1/1; HSP, LNP, vol. 69.

In 1820 Lewis's turnover (12.8 million roubles) was the fourth largest in St Petersburg, and as an import firm it came second after Clementz & Berg which traded mainly with the Germans. The turnover of the nearest rival, Brothers Cramer, was only 2.4 million roubles.⁴¹

The factors contributing to the rise and fall of Lewis's firm remain partly a matter of conjecture. His generous advances and quick remittances were certainly among them. The Americans liked his practice of paying for the goods he took for sale as quickly as possible. At least from time to time Lewis used to do business on commission taking a lower commission than the average. Competitors were also irked by his practice of paying a substantial reward to captains who entrusted him with the business of the ships under their command.⁴² William David Lewis explained the success of his elder brother by claiming that the quality of the goods that left Russia for the United States was most carefully watched.⁴³ Lewis was also interested from the very beginning in Russian inland trade, which was also true of another American merchant, William Ropes, who was successful in business in St Petersburg later on.

John D. Lewis concentrated above all on the sugar trade. According to his rival Charles Cramer, he had the damaging practice of selling his cargoes of sugar prior to their arrival in St Petersburg, and thus, depressing the market. Cramer also accused Lewis of speculating on several occasions. He claimed that Lewis had, for example, bought up 100,000 poods of bar iron late in 1826 with

⁴¹ The total figures of St Petersburg were: import 166.4 million roubles, export 104.6 million roubles; HSP, LNP, Letters 1810-41; cf. Kirchner 1975, 184. – On the Reval – Wiborg firm Clementz & Berg see Amburger 1957, 352-353.

⁴² E.g. John D. Lewis to John H. Andrews, 5 October 1817, EI, JHAP, vol.1/6; William D. Lewis to John D. Lewis, 21 April, and 30 April 1821, HSP, LNP, Letters 1810-41.

⁴³ William D. Lewis, *Autobiography*, HSP, LNP. – William D. Lewis was already assisting his brother John in St Petersburg by the winter of 1814. Their co-operation was not always without frictions: the younger Lewis did not always follow his elder brother's instructions, and he drifted into disagreements that John D. Lewis considered damaging to the firm's reputation. Younger Lewis returned to Philadelphia in 1818 and served temporarily as his brother's agent; Kirchner 1975, 190-191; William D. Lewis to John H. Andrews, 9 February 1822, EI, JHAP, vol. 1/10; William D. Lewis to John D. Lewis, 13 July 1821, HSP, LNP, Letters 1810-41.

the aim of monopolizing shipments of iron to the United States in the following summer.⁴⁴ In the middle of the 1820s Lewis found that a much more formidable competitor had emerged on the scene: Stieglitz & Co., which operated with much greater capital and had excellent relations with London.⁴⁵

Lewis's business was at its most flourishing at the beginning of the 1820s. According to William D. Lewis, the firm had "extraordinary good fortune" in the winter of 1821, as it did not "lose a kopek" in the wave of bankruptcies that destroyed several firms in St Petersburg.⁴⁶ In 1821 altogether twenty-six laden American vessels arrived for Lewis (nine from the U.S., fifteen from Havana and two from Brazil), as well as another eight either in ballast or short-loaded. Lewis himself calculated that the value of the cargoes that arrived for him was \$940,000 and of the export cargoes that he handled \$900,000. His share of U.S. trade via St Petersburg was greater than that of his five leading rivals put together.⁴⁷

John D. Lewis had an abundance of American business contacts, most of them from New England: Gideon Tucker, Curtis & Bayley (Curtis & Baylies), Samuel G. Gray, G.G. & J. Howland (G.G. & S.S. Howland), John P. Cushing, Nathan Russell, John L. Gardner, John & Thomas H. Forrester, Henry Lee, and Cunningham & Loring.⁴⁸ Lewis did not make much of the fact that he was American,⁴⁹ although it could have been to his advantage. He was known as a sharp-tongued, risk-taking original businessman who avoided at least Anglo-American social life. He was claimed to have rather good relations with Russian merchants. Lewis differed from the trading partners of several other Americans in St Petersburg in that he kept his customers extremely well informed of the import and export opportunities that came to his knowledge. With regard to his

⁴⁴ Cramer to John D. Bates, 1 April 1827, and 27 March 1835, PM, JDB, vol. 1, 17.

⁴⁵ Brothers Cramer claimed in the summer of 1827 that Stieglitz, which sought a monopoly of the trade to America, had managed to put down Lewis with financial help from Philadelphian Stephen Girard's and from Boston firms; Brothers Cramer to John D. Bates, 15/27 July 1827, JDB, vol.1; see John D. Lewis to William D. Lewis, 12 March 1826, 27 July, and 3 September 1828, HSP, LNP, Letters 1810-41.

⁴⁶ William D. Lewis to John D. Andrews, 9 February 1822, EI, JHAP, no.1/10.

⁴⁷ The trading turnover of Stieglitz & Co., Thomas Wright, Brothers Cramer, John Venning and Thomson, Bonar & Co. in American business was altogether about \$1.5 million; HSP, LNP, vol. 69. – According to Nile's Weekly Register, there were three firms of approximately the same size participating in American trade in 1824: John D. Lewis, Thomson, Bonar & Co., and Stieglitz & Co. The total value of imports and exports was about 12-14 million roubles. The figure for the four companies ranked in order (Brothers Cramer, William Moxton, John Penny and Thomas Wright) was about 10 million roubles; NWR, vol. 28, 132 (30 April, 1825). – 51 vessels arrived in the Sound from St Petersburg in 1826 according to STA, and 19 of them had been customers of Lewis, 10 of Stieglitz, 9 of Thomson, Bonar & Co. and 8 of Brother Cramer; EI, JHAP, vol. 2; STA 1826.

⁴⁸ E.g. William D. Lewis to John D. Lewis, 6 July 1821, HSP, LNP, Letters 1810-41. John W. Langdon of Salem was at least for some time Lewis's main agent. Also the Boltons of New York and the Lynchs of Philadelphia were among Lewis's most significant trading partners.

⁴⁹ For example Minister James Buchanan announced in the summer of 1832 that "there is not a single resident American merchant or factor in this Capital", Buchanan to Livingston, 29 June 1832 (enclosure: Buchanan to Nesselrode, 14/26 Juni 1832), NA M-35/12/4.

methods of doing business, his advice was surprisingly cautious, usually thoroughly pessimistic as to prospects for the future, and if his recommendations were disregarded he commented on it impetuously and irritatedly.⁵⁰

John D. Lewis aimed to operate as independently as possible, but in need he also resorted to English credits. Although some of his dealings were financed by Brown & Co. of Liverpool, as a rule, like most other Americans, he used Samuel Williams of London. Williams's bankruptcy in the autumn of 1825 led to difficulties and losses for Lewis as well. At the end of the shipping season he had claims on about twenty American firms for almost \$200,000. Lewis ended up without sufficient working capital and demanded immediate payments from his debtors, regardless of rates of exchange. Later most of Lewis's banking business went over, as seems most likely, to Bates & Baring and Timothy Wiggins.⁵¹

Both Lewis's success and the problems he encountered in connection with the failure of Williams were due to the way that, unlike other American firms in St Petersburg, he had rather generously afforded the advances that American trading partners demanded. Lewis announced his intention to reduce them ("I am quite sick of the system"), as the practice would have required available funds of 10 million roubles.⁵² It seems that Lewis's rationalised his operations after 1826, and he directed more of his attention to the British market. Lewis himself gave up the running of the firm, probably in the autumn of 1837, and his responsibilities were taken over by his secretary Abraham van Sassen and his associate since 1813. However, the firm operated still in Lewis's name until his death in 1841, whereupon the name was changed to Van Sassen & Co. The firm continued, mainly as a broker of Havana sugar, until the 1860s.⁵³

Unlike John D. Lewis, the Salem merchant William Ropes (1784-1869), resident in St Petersburg from 1832, did not become one of the leading merchants, but his firm became in a certain way a symbol of American-Russian commercial relations. Ropes had acquired twenty years' experience as a merchant and supercargo, buying and selling colonial produce, before he ended

⁵⁰ E.g. John D. Lewis to John H. Andrews, 10 May 1826, EI, JHAP, vol. 2/6. William D. Lewis to John D. Lewis, 1 March, and 5 March 1821, HSP, LNP, Letters 1810-1841. – In 1826 Lewis described one of his most significant trading partners, Thomas B. Curtis, as follows: "He is sharp as a needle in promoting his own interest, but methodically slack, loose and forgetful in giving Credits, when they operate against him", John D. Lewis to William D. Lewis, 9 March 1826, HSP, LNP, Letters 1810-41.

⁵¹ John D. Lewis to Thomas B. Curtis 1 December 1825, John D. Lewis to William D. Lewis, 6 November 1825, 5 February, 16 February, and 23 February 1826, HSP, LNP, vol. 70.

⁵² John D. Lewis to William D. Lewis, 19 March 1826, HSP, LNP, Letters 1810-41.

⁵³ PM, Fettyplace Journal (Ship Peterhoff); Thomas Pritchard to John Cushing, 21 April 1853, PM, Thomas Pritchard Letterbook; Gibson to Forsyth 25 September/7 October 1837, NA M-81/3; CR 1841-60, NA M-81/3-6. – According to Fettyplace, Lewis started in St Petersburg with an initial capital of 3000 roubles, which he increased to £200 000 by 1837, that is, on his removal to London. According to Amburger (1957, 353), Lewis's imports totalled 6.9 million assignat roubles still in 1838, but his exports were modest. The successor to Lewis' firm, Abraham van Sassen & Co., which presented itself a German firm in 1861, was the 29th biggest import firm (1.1 million silver roubles). In those days, the largest import firm in St Petersburg was German Ludwig Knoop (8.7 million silver roubles); Amburger 1957, 354-355.

up in Russia.⁵⁴ He started his activities in St Petersburg providing Havana sugar for Stieglitz & Co. on instructions from Baring's. Initially, Ropes was mainly engaged in commission trade and avoided such risks as, for example, John D. Lewis took with his sugar orders. According to Stieglitz, Ropes considered the raw sugar business "generally overdone". He was immensely worried in one instance about a 300,000 lbs lot of rice purchased speculatively, which at first did not sell but finally made a "handsome profit".⁵⁵ Ropes also clearly benefited from a cheap purchase of leather goods, hides, sheet iron and feathers in the winter. At first he was an export merchant, and in the autumn of 1836 he still considered concentration on the import trade as being "uncertain and the mere work of capitalists".⁵⁶

Initially Ropes worked under the protection of Baron Stieglitz. Operating in the name of an established house reduced the high fixed costs, but it also reduced commission income, since the "parent firm" was paid a commission of a few percent.⁵⁷ The establishment of the independent firm of William Ropes was announced in a printed circular of March 1833. Baring Brothers & Co. of London, Goodhue & Co. of New York and Thomas W. Ward of Boston were named as its backers.⁵⁸ Ropes & Co. remained a small steady customer of Stieglitz and of Baring's banking firm, carefully building up his credit in St Petersburg and London.⁵⁹ A practice used in handling the cargo of, for example, the Plymouth ship *Waban* in 1836 seems to have been fairly standard. The vessel carried a cargo from St Petersburg consigned to Peabody, Riggs & Co. and valued at approximately \$100,000. Peabody had purchased two thirds of the cargo, and Ropes the rest. Samuel Riggs managed the sales in the United States. George Peabody arranged funding for the operation with Baring Brothers & Co., and Ropes himself chartered the vessel and obtained the Russian goods.⁶⁰ Most of Ropes's major trading partners were in New York (Goodhue & Co., Homer &

⁵⁴ The indebted Ropes, who had a large family, dealt in West Indian and South American produce carried via Salem and Boston in partnership with his brother Hardy (1788-1875). He co-operated with Benjamin Pickman until 1816, and after that he served in the firm Ward & Ropes, which went bankrupt in 1819. Ropes himself had served as a supercargo from 1806 onward, for example in the Mediterranean, Calcutta and Canton. He visited St Petersburg for the first time in the summer of 1830 on a sugar vessel that had departed from Havana; William Ropes to Hardy Ropes, 26 October 1831, William Ropes to Samuel Ropes, 16 Juni 1830, and William Ropes to Goodhue & Co., 24 July 1830, HUBL, RFP; William Ropes to Hardy Ropes, 31 October and 16 November 1832, HUBL, RFP, Hardy Ropes Journal. – On Ropes's earlier contacts to St Petersburg, see Hardy Ropes diary 1819-1875, HUBL, RFP; CR 1830, NA T-195/3 (brig Hardy).

⁵⁵ William Ropes to Hardy Ropes, 4/16 October, and 17 October 1832; HUBL, RFP.

⁵⁶ William Ropes to Hardy Ropes, 22 October/ 3 November 1836, HUBL, RFP.

⁵⁷ See Reber 1978, 25-26.

⁵⁸ William Ropes to Hardy Ropes, 4/16 October 1832, Circulars 17/29 March 1833, 6/18 May 1833, and 23 October/ 4 November 1833, HUBL, RFP. Goodhue & Co. and Ward were Barings' main agents in the United States.

⁵⁹ For example, in September 1839 Ropes received £10 000 from Baring for end-of-year shipments: "I tell them all my business & they have entire confidence"; William Ropes to Hardy Ropes, 17 September 1839, HUBL, RFP.

⁶⁰ Hidy 1978, 107; STA 1836 (594/1188).

Homer), Boston (Thomas W. Ward, John Brown & Co., Gossler & Knorre, R.D. Tucker) and Baltimore (Peabody, Riggs & Co.). In 1838 Ropes' was the fifteenth biggest export firm in St Petersburg (2.4 million assignat roubles). The merchant himself described his firm as possessing a good reputation "*not for a great wealth of course but for integrity & honourable & Christian dealing and supported by Barings*".⁶¹ A year earlier, when the firm had clearly established its position, Ropes declared with evident self-satisfaction, and ignoring, for example, his fellow countryman, Lewis, "*there has never been an instance of anyone's forming so respectable an establishment in so short time in so difficult a place as St Petersburg*".⁶²

William Ropes's correspondence from St Petersburg to his brother Hardy draws a picture of a cautious and peaceful merchant, pursuing not only prosperity and the maximization of business only, but above all aiming to guarantee, in his own words, a proper livelihood for the big family. His business arrangements and financial support show his concern for his close relatives and co-religionists around Boston and Salem.⁶³ Walter Kirchner's comment that several New England merchants trading in Russia were not encouraged by economic interest alone but also by "some kind of missionary spirit", may well apply to Ropes. These merchants believed that economic contact would also help to disseminate understanding of republican institutions and the humanitarian ideals they embodied.⁶⁴

William Ropes's alertness to the growing demand for American cotton wool in Russia is probably one reason for his success. He was later recognized as the first merchant to organize the direct export of cotton from the United States to St Petersburg.⁶⁵ Already in the summer of 1832 Ropes sold 1320 bales of cotton to the Alexandrovsk Factory, and 1820 bales the year after. He regarded this trade as "a perfectly safe and good business". It was precisely because of cotton wool that Ropes decided to register as an independent first guild merchant.⁶⁶

⁶¹ William Ropes to Hardy Ropes, 6 January 1838. Ropes was strongly committed to temperance, and involved in the missionary activities of the Protestant religious community. Active members of the Dorcas Society, Ropes and his family carried related literature to Russia. In 1833 Ropes reported having delivered almost half a million tracts: 323,000 in Russian, 30,000 in English, 39,000 in German, 8000 in French, 6000 in Estonian and 5000 in Finnish; William Ropes to Hardy Ropes, 22 March 1831, HUBL, RFP; Kirchner 1975, 197 and note 69; Saul 1991, 114-115.

⁶² William Ropes to Hardy Ropes, 1 January 1837, HUBL, RFP.

⁶³ E.g. William Ropes to Hardy Ropes, 29 January 1830, 30 September/12 October 1833, and 23 October/4 November 1833, HUBL, RFP.

⁶⁴ Kirchner 1975, 215. On the same phenomenon in the Mediterranean region, see Field 1969, 92-102.

⁶⁵ See Hill 1884, 6.

⁶⁶ William Ropes to Hardy Ropes, 11 August, 14/26 October, 17 October 1832, in April 1833, 23 October/4 November 1833, and 7/19 July 1834, HUBL, RFP. – Ropes's interest in cotton was also influenced by the fact that since 1822 his son-in-law William C. Gellibrand, who was from St Petersburg had co-operated with and was later a stockholder of the English firm Hubbard & Co.'s cotton enterprises. Gellibrand owned, for example, a fifth of a spinning mill with 25,000 spindles, the building of which started immediately in the summer of 1842 when the export ban affecting British spinners was over; William Ropes to Hardy Ropes, 12 April 1831, and 10/22 February; Mrs Gellibrand to Samuel Ropes, 4/16 July 1834, and Gellibrand to William

In 1836-37 William Ropes planned to expand his business and sought a new trading partner in London in order to reduce his dependence on Barings and Stieglitz. He considered the lack of his own capital to be a reason for his failing to get profitable sugar consignments: the firm was not prosperous enough for advances. Failure to expand may have been fortunate, since to his surprise Ropes managed the “commercial earthquake” of 1837 without losses. Ropes moved permanently to London that year and left his firm in St Petersburg in the hands of his son-in-law William C. Gellibrand, his son William Hooper Ropes and his nephew George Prince. The name of the company was changed to William Ropes & Co. Ropes kept his St Petersburg–Boston firm, managed from London in the years 1837-41, involved in the commission trade financed by Barings. However, the firm’s dealings seem to have been quite extensive, and in June 1838 for example, the total value of the goods it bought and sold on commission came to about \$500,000.⁶⁷

In addition to those already mentioned, Hardy Ropes, who had been responsible for operations in Boston, and Joseph Samuel Ropes, another son of William Ropes who had been resident in St Petersburg for a few years, became partners of Ropes & Co. in 1845-46.⁶⁸ William Ropes & Co. in St Petersburg until about 1900.⁶⁹ The firm was not one of the biggest trading houses in St Petersburg. In 1856 its imports were calculated at 343,000 silver roubles, and its exports at 857,000 silver roubles. The corresponding figures for John D. Lewis’ successor, Abraham van Sassen’s firm, were 810,000 and 326,000 silver roubles respectively. These figures are low compared with, for example, Stieglitz & Co.’s imports of more than ten million roubles.⁷⁰

Unlike John D. Lewis or Miers Fisher, William Ropes participated in the trade between the United States and Russia using his own and chartered vessels. In 1841 Ropes bought two-thirds of the bark *Ceylon* (422 tons), and somewhat later became a shareholder in such vessels as the *Chicora* (467 tons) and the brig *Czarina* (218 tons), which permanently sailed the route to St

Ropes, 21 August/ 2 September 1842, HUBL, RFP. – Amburger (1957, 354) mentions Egerton Hubbard founding a weaving mill in St Petersburg in 1851 and working as a lumber entrepreneur in the Lake Ladoga region.

⁶⁷ William Ropes to Robert C. Hooper, 18/30 October 1835, William Ropes to Hardy Ropes, 19 January, 29 January and 27 February 1836, 9/21 February, 19 August 1837, 31 March, 5 May and 18 Juni 1838, and 22 March 1839, HUBL, RFP; Saul 1991, 123, 129 (and note 75). For the sake of the extra capital, Ropes took the English merchant Archibald Muriel(e) as his business associate. He does not seem to have been actively involved in the real work of the firm.

⁶⁸ Agreements 26 May 1845, and 6 August 1846, HUBL, RFP; Kirchner 1975, 189, 195-196. – Joseph Samuel Ropes (1818-1903) served as a priest and a merchant in Russia and returned to Boston at the end of the 1840s. After the death of his father and son, he managed the Ropes’s Boston–St Petersburg firm, was somewhat active in politics, and wrote articles on finance and banking in, for example, *Hunt’s Merchants’ Magazine*.

⁶⁹ Morison 1921, 295-296. Morison mentions that the trading firm organized sales of lamp-oil from the United States to St Petersburg on such a scale that the product was known in Russia as “Ropski kerosin”.

⁷⁰ Hutton to Marcy, 1 March 1857, NA M-81/5.

Petersburg.⁷¹ In 1834 Ropes (at that time with Brown & Co.) started the practice of having vessels visit St Petersburg twice a year, and the *Czarina* became known for at least fifteen years for regular voyages of this sort.⁷² After transferring to London, William Ropes seems to have made a practice of looking for vessels that had arrived at French or Dutch ports and lacked a return cargo. They could sometimes be used very cheaply for carrying goods from St Petersburg.⁷³

American entrepreneurship in Russia was not confined to the activities of the trading houses in St Petersburg. Norman Saul mentions that the American Harry Evans served in St Petersburg as a superintendent of the government cordage works that produced most of the Russian navy's rope. The export of American shipbuilding and railway technology played a central role. The contribution of American entrepreneurs to the first Russian railway, completed in 1851 between St Petersburg and Moscow, is probably best known. The activities of George W. Whistler, appointed consulting engineer (i.e. leader of the project) in February 1842, have been discussed in several different contexts.⁷⁴ However, what really was an American commercial enterprise was the Philadelphian partnership of Harrison, Eastwick & Winans' agreement with Russia in 1843 of a twelve-year undertaking to manufacture the rolling stock for the Russian railway. The firm was given the use of the state-owned foundry at Alexandrovsk, and the necessary machines and equipment were brought from England and Philadelphia. The firm built 162 locomotives and 5300 cars during its first five years of operation.⁷⁵

⁷¹ Cabot 1963, 139; William Ropes to Hardy Ropes, 13/25 May 1833, HUBL, RFP. After the Crimean War, at least five vessels were owned by Ropes & Co. of St Petersburg, and at least three of them sailed annually on the North Atlantic: the *Volga* (574 tons), the bark *Sarah Bryant* (357 tons), the bark *Telegraph* (504 tons) and the *Dublin* (596 tons). In 1856-60 the vessels made altogether about thirty voyages from St Petersburg to North America. In 1862, also the *Ladoga* (868 tons) appears in consular reports as one of the firm's vessels; CR 1856-62, NA M-81/5-6.

⁷² Usually the brig *Czarina* left Boston in February-March and sailed to Havana, for example, via Charleston. The cargoes carried from Russia in the previous autumn and those taken on in Charleston were sold there and the proceeds used towards the cost of the sugar. The vessel was usually among the first in St Petersburg, where a cargo was waiting to be carried to Boston. In Boston a certain amount of sugar and coffee was in store ready for shipment on the second voyage. They were carried directly to St Petersburg and the vessel then returned to Boston late in the autumn with a cargo of hemp and iron, e. g. STA 1841 (613/1198, 3423/3911); CR 1841, NA T-201/2, M-81/4.

⁷³ For example, in 1839 he chartered the Boston ship *Francis Ann* (446 tons) and the New York ship *Moslem* (450 tons), which had carried cotton from New Orleans and Mobile to Le Havre. Such vessels were resorted to above all when the demand for Russian goods in North America seemed to exceed estimates; William Ropes to Hardy Ropes, 17 May 1839, HUBL, RFP; STA 1839 (818/1677, 847/1638); CR 1839, NA T-201/2, and M-81/4.

⁷⁴ E.g. Saul 1991, 134-142; Blackwell 1970, 279-323; Kirchner 1975, 204-207; McKay, 1974, 342-343; Kaser 1978, 463. On the agreement between Whistler and Minister Alexander Bodisco: Todd to Webster, 6/18 June 1842, NA M-35/14/17. Whistler died of cholera in April, and Major Thomson Brown, superintendent of the New York and Erie Railroad, was appointed his successor.

⁷⁵ Saul 1991, 139-141; Kirchner 1975, 205. In 1850 some re-arrangements were made in the company: Andrew Eastwick was bought out and Ross Winans's two sons,

The company of Eastwick and Harrison won fame in the United States too. For example in 1846 Hunt's Merchants' Magazine presented the firm without sparing superlatives as an enterprise of 3500 workers: " ... *perhaps the most extraordinary, as well as gigantic, commercial establishments which can be found in the history of the world, ancient and modern*".⁷⁶ Railway business seems to have brought the Americans enormous profits, but the firm stood alone and did not become an economic bridgehead for the Americans in Russia as expected.⁷⁷

The Crimean War created an anti-English and pro-American ambience, which raised great expectations of American opportunities in Russia. Plans were made for setting up Russian-American trading houses. In Consul Hutton's opinion, Boston and New York merchants could settle down in Riga and St Petersburg just like the British and the Germans. There was also "an earnest desire" for the establishment of a firm in St Petersburg specializing in the cotton trade presented in Hunt's Merchants' Magazine.⁷⁸ However, the Moscow consul, Francis S. Claxton, remarked in 1857 that the status of Liverpool's brokers and banks was once again as before, and could not be upset as long as American financiers were not interested in Russian trade. The great plans for American-Russian trading houses tailed off: only the Bostonian firm G. H. Grey & Danforth started in St Petersburg in 1859 as a hardware commission merchant, but it operated for only a short period.⁷⁹ The Constantinople consul, J. P. Brown, reported, however, on signs of a new sort of activity in 1860: "several" flat-bottomed vessels meant for American inland waters had arrived for service in the Black Sea trade: "It tells volumes for Yankee enterprise".⁸⁰

5.3 Consul merchants

Consuls, vice-consuls and consular agents in the ports of the Baltic constitute a group of their own among the American merchants in Russia. Most of them possessed a dual role which proved problematic: they were official representatives of the United States, but also often private merchants. In the system the Continental Congress had created and that had been confirmed in April 1792, the consuls' duties remained rather obscure, but generally speaking

William L. Winans and Thomas DeKay Winans, formed a new company with Joseph Harrison. The new company also concluded a 12-year agreement with the government.

⁷⁶ HMM 1846, vol. 15, 107. About the railway business, see HMM 1849, vol. 21, 132-133.

⁷⁷ See Saul 1991, 183-185; Kirchner 1975, 206-207.

⁷⁸ Hutton to Marcy, 17/29 November 1856, NA M-81/5; see Kirchner 1975, 37-38; Saul 1991, 169-170, 203, 240-248; HMM 1854, vol. 31, 579, and HMM 1856, vol. 34, 427. John E. Gowen's operation to hoist Russian warships that had sunk at Sebastopol and to clear the port for use was maybe the most ambitious venture. For example Samuel F. B. Morse and Samuel Colt came to St Petersburg after the war to assess their opportunities.

⁷⁹ Kirchner 1975, 39, 203.

⁸⁰ HMM 1860, vol. 42, 171.

protection of American property and commercial interests was considered their major responsibility. However, it became clear in the ensuing decades that the American consular system did not develop at the same rate as the country's foreign trade, and consequently the consuls did not have as much economic importance as had originally been expected.⁸¹

The consuls' dual role caused several conflicts, beginning with the fact that, as they were rivals of the other merchants in the region, they were not always given the information they were required by the regulations to send on to the State Department.⁸² However, the dual role seems to have suited some consuls excellently. For example David Erskine, who served as consul in Stockholm from 1813-36, handled his responsibilities as a commercial representative in an exemplary way and in accordance with the regulations, while simultaneously he was one of the major exporters of iron to the United States.⁸³ Levett Harris, on the other hand, who served as consul in St Petersburg from 1803 to 1816, was perhaps the one who least managed to keep his different roles apart.

Levett Harris's first intention was to found his own trading house, but he found it worked more successfully to operate in conjunction with other firms. His most long-term business associate was Alexander James Smith, one of the major partners of the firm of Cramers, Smith & Co., set up in 1799. Harris attempted to build up trade relations with the most significant merchants of his home town of Philadelphia, for example Stephen Girard and Tench Coxe.⁸⁴ By his own account he became a partner in the firm of Meyer & Brückner at the end of 1809, but it later emerged that his co-operation with Cramers had continued.⁸⁵ It is impossible to assess Harris's role in the success of Cramer, Smith & Co. or Meyer & Brückner, but at any rate both firms were during the war period among those used most often by Americans in St Petersburg.

Harris's position among the U.S. ministers and consuls in St Petersburg was exceptional. In spite of his minor official status, he got on exceptionally well in diplomatic circles and for many years he served as an informal *chargé d'affaires*.⁸⁶ Several Americans who visited St Petersburg praised Harris's range

⁸¹ See Johnson et al. 1915, vol. II, 271-274; Kirchner 1975, 22-25; Homans 1858, 407; HMM 1855, vol.32, 746-747.

⁸² See e.g. HMM 1842, vol. 6, 297-305; Homans 1857, 543.

⁸³ One of the two major shareholders of another significant iron export firm Tottie & Arfwedson, Carl D. Arfwedson, was nominated Erskine's successor in 1837; Arfwedson to Forsyth, 24 January 1837, NA T-230/1; Adamson 1969, 77.

⁸⁴ Harris to Girard, 8/20 August 1804, and Cramer, Smith & Co. to Girard, 29 August 1804, APS, GP, mf - series 2, reel 31, no. 413, 425; Harris to Coxe, 10/22 August 1806, USR 1980, 460-461; EI, JOP (Ship Commerce); Christopher Champlin to Edward James Smith & Co., 19 May, 1797, USR 1980, 310-311; Brown, Benson & Ives to George W. Page, 22 January 1795 (1796), BUJCBL, BIP, V-H27 (brig Harriot); USR 1980, 1138.

⁸⁵ Brothers Cramer to Brown & Ives, 18 August 1809, BUJCBL, BIP, P-C68; Levett Harris to Brown & Ives, 10/22 September 1809; USR 1980, 593-594, note 1; John Quincy Adams to the Secretary of State, 10 April and 4 October 1810, NA M-35/2/14, 26; Kirchner 1975, 191.

⁸⁶ E.g. Harris to Madison, 12/24 June 1804 (printed in USR 1980, 410-414), and 10 August 1806, NA M-81/1.

of contacts, his active social life and talent for organization.⁸⁷ John Quincy Adams too recognized Harris's position and influence; Adams was appointed minister to St Petersburg in 1809, although the Russians had frankly, both officially and unofficially, wished the post had gone to Harris.⁸⁸

"The Illustrious Levitt Harris"⁸⁹ was accused of abuse of his consular post by directing Americans to the firm of Cramers' and by demanding additional payments from captains to speed up the treatment of ships' documents. He was claimed to have made out false documents for English captains attesting to the American origin of vessels and their cargoes during the Continental System. Moreover his allegedly glamorous lifestyle and popularity at court made more people envy him.⁹⁰ When Harris sought consular appointment after the war in 1817, John D. Lewis interfered. He contacted the Secretary of State, John Quincy Adams, and strongly opposed the appointment. He considered Harris corrupt and thus totally unsuitable for ministerial office. This destroyed Harris's dreams of a diplomatic career. The affair had a long epilogue: William D. Lewis (brother of John D. Lewis) and John Levett Harris (nephew of Levett Harris) fell out with each other, and pursued their disagreements first in St Petersburg and then for about ten years in the American courts. Claims about Consul Harris's abuses came up for discussion again in this process, but no evidence was found for most of the accusations.⁹¹

⁸⁷ John Spear Smith to Senator Samuel Smith, 28 May/ 9 June 1810, USR 1980, 666; Saul 1991, 61-62. - One of Harris's "admirers" was, for example, Alexander Hill Everett who was in John Q. Adams retinue.

⁸⁸ Nikolai Rumiantsev to Maksim Alopaeus, 6/18 October 1807, and William Pinkney to James Madison, 2/14 December 1807, USR 1980, 495-497; Adams to the Secretary of State, 11 March 1811, NA M-35/3/41; Saul 1991, 49; Crosby 1965, 153; Bolkhovitinov 1975, 196, 207.

⁸⁹ A name used by, for example, merchant-adventurer Edward Dwyer for Harris; Saul 1991, 58-59.

⁹⁰ Harris was also accused of demanding money from men he nominated consular agents. Minister Adams cannot have avoided being aware of Harris's shady activities, although he, initially, recommended his trade firm to his friend William Gray. Later relations between the consul and the Minister broke down, but Adams did not officially intervene in Harris's activities. However, they may have had an influence on Adams's suggestion of changing the post so as to be held for a specified period, and amending consuls' rights so that the President's approval would be required for appointment of vice-consuls and consular agents by a consul; Adams to the Secretary of State, 1/13 November 1810, NA M- 35/2/31; Adams to the Secretary of State, 12 January 1812, and 25 January 1812, NA M-35/3/77,78; About Harris's activities, see Crosby 1965, 175, 239-241, 276-279; Rhoads 1962, 299-300; Kirchner 1975, 190-191; Buist 1974, 220.

⁹¹ John Levett Harris held the post of consul either alone or jointly with his uncle in 1816-1819. The "official" reason for his and the younger Lewis's disagreement was a consular fee imposed on the American captain Isaiah Bowditch, but the background was Levett Harris's failed attempt to become Minister and, on the other hand, William D. Lewis's failed attempt to gain a consular post. A fistfight between the younger Lewis and the younger Harris in the St Petersburg Exchange threatened to create a difficult diplomatic situation, since Harris, as a consul, took the issue to Alexander I through the Foreign Minister Count Nesselrode. The issue came back to Minister Pinkney, who refused to handle this "ridiculous and disgusting business" any longer. William D. Lewis, who had returned to Philadelphia, had a leaflet printed on "Consular Corruption", which presented testimonies about Consul Harris's abuses during the war. For example, Christian Rodde, who had served as a consul in Riga,

The consular network that had been created in Russia and the Baltic region during the Napoleonic Wars remained almost unchanged for half a century. Abraham P. Gibson from New York held the office of consul in St Petersburg, the most important position in the Baltic trade, from 1819 until 1850. He won praise for his work as consul, perhaps because he did not have his own business interests. He was satisfied with his annual pay of \$2500, which the other commercial representatives considered absolutely insufficient, since in his own words he was "a gentleman of economical habits". Gibson spent long periods in London, during which John D. Lewis's business associate Abraham van Sassen served as his substitute.⁹²

Consular arrangements in St Petersburg and Kronstadt went through a rather chaotic phase after William H. Ropes, consul from 1850 to 1854, who possessed a thorough knowledge of Russian trade, was appointed Gibson's successor, and after him William L. Winans took over as acting consul (1854-56).⁹³ Both of them had strong trading interests and contacts in St Petersburg and round about. However, Congress amended the American consular system at this very time. From July 1855 onwards consuls were not allowed to do business as merchants at the same time as having official duties, and they had moreover to be citizens of the United States. U.S. Minister Seymour severely criticized the extension of the amendment to Russia. Where could those Americans be found who spoke English and Russian, were familiar with the legislation and commercial practices of both the United States and Russia, and who were willing

claimed to have paid altogether 320,000 roubles to Harris by 1817. Consequently, Levett Harris sued William Lewis for libel, and the result of the colourful trial was that the younger Lewis was sentenced to a symbolic fine of \$100 for malicious accusation. Lewis considered it a victory, being a "mere nominal verdict"; Levett Harris to Monroe, 12/24 August 1815, and 24 July/5 August 1816, NA M-35/5/7,19; Pinkney to Adams, 20 July/1 August 1817, 3/15 August 1817,17/29 August 1817, William D. Lewis to Pinkney, 20 July 1817 and John Levett Harris to the Secretary of State, 28 July, and 2/14 August 1817, NA M-35/6; John Levett Harris to the Secretary of State, 28 July 1817, NA M-81/2; William D. Lewis to John D. Lewis, 30 April, and 9 May 1821, HSP, WDLP, Letters 1810-41; William D. Lewis, *Autobiography*, 53-56; HSP, WDLP; Rhoads 1962, 301-311; Saul 1991,84-85. Charles Cramer, who visited the United States while the court case was in progress, and who was in a way involved, considered William D. Lewis a "false, scandalous and malicious libeller"; Cramer to John D. Bates, 1 April 1827, PM, JDB, vol.1. Levett Harris was later resident in Paris, but he returned to St Petersburg and died there on 10/22 September 1839. He left a "considerable property", Gibson to Forsyth, 23 September/5 October 1839, NA M-81/4.

⁹² Hutton to Marcy 12/29 November 1856, NA M-81/5. Gibson's discharge was probably due to Minister Arthur Bagby's claim that he had not attended his posting for three years; Bagby to the Secretary of State, 2 May 1849, NA M-35/15/4; Gibson to Webster, 3 March 1851, NA M-81/6; Saul 1991, 171.

⁹³ Saul 1991, 171; Ropes to Webster, 4/16 December 1850, Ropes to Marcy 20 July 1853, NA M-81/5; Neill Brown to Daniel Webster, 15 November 1850, NA M-35/15/4; Daniel Webster to Neil Brown, 25 September 1850, and W.S. Derrick to Brown 9 October 1850, NA M-77/136. Winans' and Harrison's railway company had obviously had dealings that were against the British blockade regulations during the Crimean War, which exploited William L. Winans's diplomatic status as acting consul; Saul 1991, 225.

to move to Russian ports for a paltry recompense?⁹⁴ The problems of the coming years showed that such men were by no means abundant.

William H. Ropes did not have the slightest intention of giving up business because of his consular post, and neither did Winans, who renounced his office in the spring of 1856, and recommended Gaun H. Hutton as consul. As acting consul, Hutton put in a report to the State Department consisting of sixty pages about the Russian economy and American trade as his "apprentices' examination" in the autumn of 1856.⁹⁵ The report was wider ranging and more thorough than any other overview sent from St Petersburg before. But neither it nor a sheaf of recommendations that Hutton collected could persuade the State Department to deviate from the Consular Acts approved in 1856. Caleb Crosswell was appointed Consul in 1857.⁹⁶

Usually consuls in St Petersburg, but also in some cases ministers, made proposals to Washington for the appointment of commercial representatives, or else appointed consular agents and vice-consuls on their own authority. For example Gibson as consul appointed Charles R. Lenartzen a consular agent in Kronstadt in 1825. He took this decision upon advice from John D. Lewis, the "only established American merchant".⁹⁷ Lenartzen served as Kronstadt's consular agent until his death in 1852. His expertise and assistance seems to have been vital to Americans who were unaware of Russian regulations. It was precisely because of those practical services that the post was almost as important as that of the consul in St Petersburg.⁹⁸

After Lenartzen's twenty-seven-year tenure, affairs in Kronstadt were entrusted at first to Elisha (Elijah) Rowe, and then from 1855 on to his former

⁹⁴ Seymour to Marcy, 28 May/9 Juni, 12/24 July, 6/18 December 1856, NA M-35/17/78, 81, 96. The consuls in St Petersburg were among consuls at about 90 ports who were paid a regular salary. For the consul in St Petersburg this was \$2000 per year. The consul in Elsinore (\$1500 per year) belonged to the same group. Approximately the same number of ports belonged to the lower category (e.g. Gothenburg). The consuls at those ports were paid significantly less but they were permitted to carry on business.

⁹⁵ Hutton to Marcy, 17/29 November 1856, and 29 November/31 December 1856, NA M-81/5; Saul 1991, 260.

⁹⁶ Seymour to Marcy, 3/15 August 1856, and 8/20 November 1856, NA M-35/17/83,91; Seymour to Cass, 8/20 May 1857, NA M-35/17/113; Crosswell to Cass, 5 June 1857, NA M-81/5; Hutton to Marcy, 29 December 1859, M-81/5; Saul 1991, 260; Kirchner 1975, 23-25.

⁹⁷ Gibson to Clay, 1/13 June 1825, NA M-81/2. - Lenartzen's brother John A. Lenartzen served earlier as agent in Kronstadt, and his predecessor was John Sparrow. The latter was found guilty of smuggling together with Reval's Vice- consul Dietrich Rodde; Campbell to Adams, 19/31 October 1818 and 21 April/3 May 1819, NA M-35/6/2, 6.

⁹⁸ In 1846 altogether 15 "commercial gentleman engaged in the American trade" proposed the promotion of Lenartzen to the rank of vice-consul. The first signatories of the proposal were Stieglitz, William Ropes and Abraham van Sassen; Charles S. Todd to Upshur, 22 January/3 February 1846, NA M-34/14/65 (enclosed the merchants' letter to Todd 10/22 January 1846, and Todd's reply 14/26 January 1846); see also Hutton to Marcy 31 December 1856, NA M-81/5, and Bayard Taylor to William Seward, 10 October 1862, NA M-35/19; Saul 1991, 112, note 54.

business associate and Lenartzen's son-in-law, Alexander Wilkins.⁹⁹ At least Wilkins and probably also his predecessors served as some kind of intermediaries between American captains and trading houses in St Petersburg. Wilkins' activities provoked adverse comment. For example, the consul in Elsinore, V.P.M. Epping, sent some bitter letters to the State Department and claiming that Wilkins did not even collect the official fees he was entitled to from the Americans in order to attract customers. Consequently, captains did not want to pay anything in Elsinore either. Moreover, by Epping's account, Wilkins favoured the captains if he had to settle a dispute between crew and officers.¹⁰⁰

The American merchants at least officially sought very little help from U.S. consuls or ministers, except with routine paper work. John Jacob Astor did, however, seek through President Madison the services of the U.S. legation in extending the grip of his American Fur Trade Company, set up in 1808, on the fur trade of the Northwest Coast. An agreement was concluded with the Russian-American Company in 1812, but the St Petersburg legation did not play a crucial role in it.¹⁰¹ Ministers certainly had connections with merchants as private persons. In the 1820s the jovial Henry Middleton had prolonged negotiations mostly through unofficial channels on the compensation the Americans demanded for their losses caused by the Napoleonic Wars. This brought promising results, and he got efficient practical help from his consul, Abraham Gibson.¹⁰² The merchant who traded on the largest scale with St Petersburg was probably William Gray, a friend and political ally of John Quincy Adams. He tried to gather information for example about Russian companies from Adams: "... as you are upon the spot, you must know the most solid house..."¹⁰³ Gray supplied funds for Adams's use, and these were supplemented by several captains who visited St Petersburg.¹⁰⁴ However, Adams was probably of little help in practice to Gray.

5.4 "Russian houses" in the American trade

Before Harris, Fisher and Lewis settled down in St Petersburg, the American merchants mostly had dealings with William Archibald Cramp, Noah Gazalet, Blandow Brothers, John Venning and Brothers Cramer. The 1795 list of such merchants can be further extended to include the firms of Paris, Warre, Harvey

⁹⁹ Seymour to Marcy, 25 March/6 April 1856, NA M-35/17/72; Hutton to Marcy, 31 December 1856, NA M-81/5; Kirchner 1975, 24.

¹⁰⁰ Epping to Cass, 8 September 1859, and 21 September 1859, NA T-201/4; Hutton to Marcy, 31 December 1856, NA M-81/5/10.

¹⁰¹ Porter 1937, vol. I, 194-197; Saul 1991, 64-68; USR 1980, 1129.

¹⁰² Bergquist 1977, 27-41.

¹⁰³ Gray to Adams, 13 July 1810, Gray 1914, 55-56. Adams arrived in St Petersburg with his retinue on Gray's ship *Horace*, and Gray's son William Calley Gray served as Adams's secretary; Adams to Robert Smith, 7 July, and 4 August 1809, NA M-35/2; Saul 1991, 51.

¹⁰⁴ Gray to Adams, 25 April 1810 and 6 April 1811, Gray 1914, 52, 68-69.

& Co., Thomson, Peters, Bonar & Co. (from 1781-1801 under the name of Thomson, Peters & Co.), Cattleys, Prescott & Co., Thorntons, Smalley, Bailey & Co. and E. J. Smith. It is noteworthy that all of them, except Blandows were English, and almost all of them were among the largest firms in St Petersburg.¹⁰⁵ Smith's trading history included the Edward James Smith Company, involving Anthony Thiringk, who handled American trade for it up until 1787, Cramers, Smith & Co., from 1799 onwards, and then from 1808 Brothers Cramer. The change of name was due to the war. Brothers Cramer was probably the largest firm dealing with American trade in St Petersburg before the rise of Lewis and Stieglitz.¹⁰⁶

TABLE 4 Imports and exports of some leading St Petersburg firms in 1809 and 1815 (1000 roubles).

Firm	Imports		Exports	
	1809	1815	1809	1815
John D. Lewis	-	1 071	-	1 829
Meyer & Br�uxner	386	4 512	2 025	9 222
Brothers Cramer	426	486	1 458	1 559
Stieglitz & Co.	276	2 889	1 701	5 548
Thomson, Bonar & Co.	-	1 086	-	4 608
Thornton, Cayley & Co.	-	97	-	7 688
John Venning	-	1 238	-	1 015
Others	4 012	54 577	14 789	76 029
Total	5 100	65 956	20 000	107 498

Sources: HSP, LNP, Letters 1810-41; PM, BSP.

Cramers were heavily involved in the raw sugar business from the beginning of the 1820s onwards. During his visit to the United States in the summer of, 1827

¹⁰⁵ See e.g. EI, DFP, vol. 3, 11; EI, GFP, vol. 2; PM, JDB, vol. 16. Cramp had trade contacts with, for example, Stephen Girard, and Gazalet bought Russian goods for Bates's of Boston still in the 1830s. Blandow Brothers (in 1800-1807 under the name Blandow & Co.), which had a German background, traded with, for example, Derby, Brown, Benson & Ives and Ebenezer and Gorham Parsons. The English-born John Venning (1776-1858) concentrated on American commission business after 1805. Venning was deeply interested in Russia's prison reforms and missionary activities, and similarly-minded British merchants seem to have become his customers. One of William Ropes's reasons for transferring to St Petersburg may have been that Venning closed his business in 1830; Saul 1991, 114-115; William Ropes to Hardy Ropes, 22 March 1831, HUBL, RFP; Henderson 1862, 23ff.; Amburger 1957, 351-352.

¹⁰⁶ The firm of Edward James Smith & Co., which was set up by Smith's father in 1759, can be considered a predecessor of the company. William Gray, Champlins and Brown, and Benson & Ives were among those who did a great deal of business with it. The trading firm was under the joint ownership of Alexander James Smith and the German-born Benedikt and Sebastian Cramer. Smith visited the United States and England probably in 1807-08, and was in charge of the American connections of the firm from 1809 to the end of the 1820s, Cramers, Smith & Co. to Brown & Ives, May 7 1807, Alexander J. Smith's circular, March 1, 1808, Brown & Ives to Brothers Cramer, 13 March 1810, BUJCBL, BIP, P-C68; Smith to Nathan Bridge, 16/28 August 1827, and 29 September 1827; Smith to John D. Bates, 16/28 August 1827, PM, JDB, vol. 1; Harris to Madison, 10 August 1806, NA M-81/1; Harris to Tench Coxe, 10/22 August 1806, USR 1980, 460-461; Saul 1991, 61; Amburger 1957, 351-352; USR 1980, 1138; see Buist 1974, 220.

Charles Cramer attempted to set up a regular network of agents so that Russian goods could be exchanged for Cuban sugar. Cramer's got his edge over the competition by giving his American trading partners exceptionally generous advances in St Petersburg, of two-thirds of the value of the cargo, and this attracted consignments for the firm. When the Cramers concluded agreements, they also often undertook to arrange a return cargo, which might not be easily available.¹⁰⁷

Cramers operated as invisibly as possible. Although a considerable proportion of the funds spent on sugar in Cuba were in one way or another arranged by Cramers, they preferred to keep these dealings in the name of American merchants as far as possible.¹⁰⁸ For some reason the firm ceased to be successful during the 1830s and at the beginning of 1839, Cramers reported in confidence to their main American business associate, John D. Bates, that they had ceased trading because they had experienced "unpleasant interferences, speculations, bad concerns... [and] failures in different directions".¹⁰⁹

The American contacts of Meyer & Br uxner, a firm which dealt mostly with trade with Germany and Britain, were at their strongest at the beginning of the 19th century. Miers Fisher stated that it had "always been" the Russian part of the Russian-English firm Thomson, Bonar & Co.¹¹⁰ After the wars both firms used their own names. In the early part of the 19th century the latter was known as both a trading house and a significant banking firm with connections in both St Petersburg and the United States. Meyer & Br uxner co-operated a great deal with Thomas Wilson & Co., at least as far as their American trade was concerned.¹¹¹

Several American merchants transacted business in St Petersburg with English trading houses that had strong links with London because of their financing arrangements. One of these firms was Thomas Wright & Co., whose main operations were in England but with a branch in St Petersburg. The branch was noted for not using underhand methods to compete for the favour of American captains and therefore several merchants addressed their consignments to it.¹¹² Another firm somewhat similar to Wrights, it handled iron for Liverpool and from there to the United States, was Hill(s) & Whishaw

¹⁰⁷ Charles Cramer to John D. Bates, 1 April 1827, PM, JDB, vol. 1. William D. Lewis claimed that Cramers attracted captains from Rhode Island in particular by questionable means, but the "bribes" were probably hardly any bigger than the half percent "commission" he and his brother demanded from the captains; William D. Lewis to John D. Lewis, 9 May, and 7 June 1821, HSP, LNP, Letters 1810-41. On "bribing" captains in the Swedish iron trade, see Adamson 1969, 89.

¹⁰⁸ E.g. Alexander J. Smith to John D. Bates, 16/28 August 1827, PM, JDB, vol. 1.

¹⁰⁹ Brothers Cramer to Bates, 14 February 1839, PM, JDB, vol. 17.

¹¹⁰ Miers Fisher, Jr. to Miers Fisher, Sr., 9/21 December 1809, USR 1980, 627-628. – Thomson, Bonar & Co. ran the business until about 1798 under the name of Thomson, Peters, Bonar & Co., USR 1980, 1139.

¹¹¹ E.g. Henry & Alexander Ladd to Reuben S. Randall, 10 March 1818, HUBL, WFP, vol. 5. Thomas Wilson & Co. was an important financier of the Swedish iron trade in the 1820s; Adamson 1969, 92 (note 70).

¹¹² William D. Lewis to John D. Lewis, 13 April 1821, HSP, LNP, Letters 1810-41.

although this firm concentrated mainly on shipping British cotton and flax.¹¹³ Hornby, Bayley & Co., closely linked with William Hornby & Co. in Liverpool, also transacted business with the Americans to some extent.¹¹⁴

Stieglitz & Co., which operated until 1859, was by far the most significant firm involved in American-Russian trade. The firm was set up in 1803 by German-born Ludwig Stieglitz (1779-1843), who had started as an exchange broker and linen dealer, and it became one of Russia's major foreign trade enterprises within a very few years. Later it also expanded to become a major finance and banking firm.¹¹⁵ It was crucial for American trade that Stieglitz was interested in the production and trading of iron and raw sugar. The firm owned sugar and tallow factories, and from 1835 on a cotton spinning factory. Walther Kircher considers the firm's banking activity of extreme importance: foreign banks' operations were strictly limited in Russia, and Stieglitz "managed to gain a virtual monopoly in the export and import trade".¹¹⁶

In foreign trade Stieglitz was "the thermometer whose movements are closely watched by all"¹¹⁷: even mere speculation about his intentions had an influence on many operations in the American trade. For example the planning of sugar shipments in the summer of 1827 was overshadowed by a rumour that Stieglitz was going to conquer the Russian market by the simple method of undercutting his competitors. He could cut prices and still make a profit because of the considerably greater scale on which he worked.¹¹⁸ In 1831-32 Stieglitz together with Barings bought 1.6 million poods of Russian iron, his obvious intention being to monopolize the export of the product to America.¹¹⁹ U.S. Minister Wilkins suspected Stieglitz of being in charge of a "selfish and dishonest" scheme to get crushed lump sugar into St Petersburg in the summer of 1835. It would have meant considerable losses to Americans who had invested in Havana raw sugar.¹²⁰

¹¹³ Hill Brothers, active in Riga, and Hill & Moberly in Archangel managed American trade through Hills & Whishaw; see NYPL, PDCP, vol. 1.

¹¹⁴ From 1842 on the St Petersburg firm appeared as Hornby & Co. It provided some credit for American sugar dealings and was Joseph Peabody's main agent in Russia before William Ropes. When Brothers Cramers closed down, the firm became a partner of John D. Bates; Hidy 1978, 20-21; see e.g. PM, BSP, vol. 20 (Brig Washington).

¹¹⁵ Stieglitz (the name also appears as Shriglits, Steiglitz, and Steglitz), who was ennobled in 1826, was known in business circles only as "the Baron", sometimes even "the Russian Rothschild" or "the Eastern Rothschild". The U.S. Minister, Buchanan, compared him more modestly to the Philadelphia merchant-banker Stephen Girard; Charles Cramer to John D. Bates, 10 April 1835, PM, JBP, vol. 17; Buchanan to Livingston, 20 December 1832, NA M-35/12/9; Blackwell 1970, 255-256; see Buist 1974, 604-605.

¹¹⁶ Kirchner 1975, 186-187; see Kaser 1978, 458.

¹¹⁷ HMM 1844, vol. 10, 211; Kirchner 1975, 186.

¹¹⁸ Benjamin F.B. Mitchell to J. Douglas Bates, 2 October 1826, and John D. Bates to Nathan Bridge, 16 April 1830, PM, JDB, vol. 1. Stieglitz tried rather unsuccessfully to establish direct connections between St Petersburg and Havana, which would have made the American angle of the "sugar triangle" unnecessary.

¹¹⁹ See Kirchner 1975, 187-188; Blackwell 1970, 255-256.

¹²⁰ Wilkins to Forsyth, 28 August, and 1 September 1835, NA M-35/13/9, 10.

TABLE 5 Imports and exports of Stieglitz & Co., John D. Lewis, and William Ropes & Co., 1824-60 (million roubles).

Period	Stieglitz		Lewis		Ropes	
	Import	Export	Import	Export	Import	Export
1824-30	10.8	8.8	5.5	3.9	-	-
1831-40	7.9	12.7	6.7	2.4	0.6	1.6
1841-50	5.3	2.4	1.2	0.2	0.3	0.5
1851-60	3.6	1.1	-	-	0.3	0.4

Notes: Figures are in silver roubles from 1841 on. Those of 1840 have been converted into silver roubles (1:3.5). Lewis's data from 1825-42 and Ropes's from 1834-60.

Source: Kirchner 1975, 195.

Already in the 1820s, the background of Stieglitz's special position was his excellent relations with the Court and his status as a semi-official court banker. His standing was moreover based on close collaboration with the banking firms of Hope in Amsterdam and Barings in London. Stieglitz, Hope and Barings jointly managed Russian state debts and finance, for example, for building railways.¹²¹ Stieglitz was by far the most important Russian source of credit for the American merchants, but not as significant as the great banking and exchange houses in London, Amsterdam, and Hamburg. William Davis, John and Robert Hooper, Charles and Thomas Parsons, John D. Bates and Nathan Bridge were among Stieglitz's most important American trade contacts. Goodhue & Co. served as the common agent of Stieglitz and Baring Brothers & Co. in New York. However, Stieglitz & Co. was probably not a very popular trading partner, as he was claimed to be slow with his payments, which was "the most impardonable of all offences" for the Americans who acted on credit.¹²²

In addition to these merchants and companies the Americans dealt with, for example, Thornton & Cayley, who dealt mainly in hemp and tallow for Britain. Other examples that can be included in the same group are William Brandt & Co., Amburger & Co., Anderson & Moberly, Martin & Jacob Krause, George Edward Müller, Lenartzen & Co., Anthony E. Naht and the Dutch vice-consul F. Winberg.¹²³

¹²¹ Platt 1984, 39-65; McKay 1974, 340; Kirchner 1975, 187; Blackwell 1970, 256. Stieglitz actively promoted the American-Russian commercial treaty in 1832 using his relations with the Foreign Minister, Count Nesselrode and the Minister of Finance, Count Kankrin. This may have been a reason why Buchanan recommended Stieglitz for the post of official banker of the United States, because it could strengthen his attitude "still more strongly in favor of the merchants of our Country". The appointment had no practical importance, particularly when the legation's monetary transactions were managed by Rothschild's and then Baring's banking firms until 1843; Buchanan to Livingston, 20 December 1832, and 22 February 1833, NA M-35/12/9, 15; Daniel Brent to John Randolph Clay, 6 April 1833 and circular by Daniel Webster, 22 April 1843, NA M-77/136; Kirchner 1975, 189; Bolkhovitinov 1981, 90, note 166.

¹²² William D. Lewis to John D. Lewis, 2 April 1821, HSP, LNP, Letters 1810-1841; see Kirchner 1975, 189.

¹²³ See Kirchner 1975, 201. From the superficial notes in the consular reports, it seems that Matthew Anderson & Co., Müller & Hauff, L. Gazelet, R. Clementz & Co. (Clementz, Tunder & Co.) and Cattley & Co. actively did business with the Americans in the 1850s, CR 1851-60, NA M-81/5-6; see Amburger 1957, 353-355.

Only a few trading houses of Russian origin were directly involved in American trade. Russian entrepreneurs are often reported as producers or sellers of iron, hemp or manufactures, but these goods were shipped by non-Russian firms. The merchant Dimitry Brusgin was one involved in American trade. He sold for example great quantities of sailcloth which reached the market in the United States or Cuba through Brothers Cramer and John D. Bates, and the proceeds were invested in raw sugar. However, the bills of lading and the invoices for the sugar purchased were made out in the name of his trading partners.¹²⁴

5.5 Merchants dealing with Russian trade in the United States

5.5.1 Commercial houses in New England

It is more difficult to form a picture of those American merchants dealing with Russian trade than is the case with St Petersburg firms active in American trade. Even in New England there were only a few merchants or firms that specialized in sailing just to St Petersburg. Dealings with Russia were marginal for most merchants trading there: they complemented operations their firms had in Western Europe or the West Indies. Moreover, many merchants traded on a small scale and they tried out the Russian markets only occasionally. In the early years of the period, there were entrepreneurs interested in trading with India, the East Indies or Canton who sought to purchase goods in St Petersburg that could be traded in the east. Conversely, they also tried to sell produce in St Petersburg shipped from the east via North America.¹²⁵ This came to an end in the 1820s.

It was the sugar trade that was probably the most distinctly specialized. Participants in the sugar triangle – both merchants and carriers – formed a group of their own, and the centre of their activity was in Cuba. Everything else was subordinated to the success of sugar operations. For some St Petersburg was a regular export destination; for others an alternative to North Sea ports. The entrepreneurs were old-style merchant venturers, who were very flexible in their activities, dealing in different commodities in different parts of the world according to the situation on the market.¹²⁶

Most of those dealing with Russia at the beginning of the period can be regarded as so-called “sedentary merchants”. The expression was used for a resident wholesaler who dealt with imports and exports and used both his own and chartered vessels for transport. When the same merchant also allowed his customers credit, arranged insurance and personally directed all these functions,

¹²⁴ E.g. Brothers Cramer to Nathan Bridge & Co., 7/19 September 1826, and Josiah Bradlee & Co. to John D. Bates, 6 February 1827, PM, JDB, vol. 1.

¹²⁵ For example, the Bostonian Lee’s family traded in Calcutta, Canton, the West Indies, the Mediterranean, the North Sea and the Baltic Sea; see Porter 1937, vol. II, 1339, 1398-1401.

¹²⁶ Cf. Steele 1998, 1-2.

he begins to fit into Alfred J. Chandler's model of the "all-purpose businessman" of colonial times. Increasing economic activity started to change the institutional structure of the American economy after 1790, and the characteristic figure of the colonial merchant began to fade out from around 1840. Trade and transport became specialized on the main Atlantic trade routes, but all purpose merchants continued to trade with Asia, Africa and Latin America,¹²⁷ and undoubtedly also the Baltic. According to Samuel Eliot Morison, a central characteristic of New England's foreign trade is the continuity of trading practices and regions. The pace of specialization differed in Boston from what it was in New York.¹²⁸ Old Bostonian ways carried on for a long time in trade with the Baltic, as for example the vitality of the captain-merchant combination indicates. At the beginning of the 1830s or even later consuls often recorded the captain as being the principal owner of a vessel that passed the Sound.¹²⁹

Trading and shipping were interconnected in history of the firms that traded with St Petersburg at least until the 1840s: vessels carried cargoes that in one way or another belonged to their owners. The success or failure of these maritime merchants depended upon both navigation and trade. Before the age of professional shipowning each vessel and its voyages constituted a separate business. Information about both domestic and foreign markets and making adequate forecasts at least half a year in advance were required for even moderate success. Thus it was essential that captain, supercargo and trading partner in St Petersburg should be reliable. Indeed many smaller scale merchants – as most merchants in New England were – considered it necessary to travel personally to St Petersburg. Usually vessels carried cargoes consisting of several different commodities in order to reduce risks. The same purpose was served by maintaining the old types of partnership both in trade and shipping, and they remained the standard organizational model. Consular returns show that in trade with St Petersburg a vessel and its cargo tended to belong to a group of about five owners. A partnership was sometimes formed among small groups of people, often within the family. For example, E.H. Derby did not accept anyone but close family members as his partners. Usually merchants in New England knew each other, and many of them were also connected by family ties. Only at the end of 1830s did the growth of trade and increasing specialization and competition gradually begin to break up the old system based on close personal ties.¹³⁰

¹²⁷ Chandler 1978, 74, 77, 82; see Porter 1937, vol. II, 5; Baxter 1945, XX; Killick 1974a, 1-14.

¹²⁸ Morison 1921, 253.

¹²⁹ For example Benjamin Shreve of Salem was a merchant-captain who sailed his own vessel. He left Salem for St Petersburg (via Alexandria, St Thomas and Havana) in January 1830 as captain of the brig *Washington* (336 tons) to improve his business, which had been unsuccessful in the preceding years. He got financial backing in Liverpool and Hamburg. The purpose of the voyage was to secure Shreve's old age using the proceeds from carrying the cargo of sugar freight (593,000 lbs) and his own investment: "Poverty in age, I pray to be preserved from"; Shreve to his wife, 24 July 1830, PM, BSP; STA 1830 (1955/2685); cf. Keene 1978, 694.

¹³⁰ See Killick 1974b, 502-503; McKey 1961, 424.

TABLE 6 Owners of American vessels sailing through the Sound, 1792-1807.

Firm or merchant	Number of ships		
	1792-93	1801-03	1804-07
Boston:			
Parsons	4	9	9
Wheeler & Co.	-	3	4
John Holland & Co.	-	4	5
Davis	1	3	2
Salem			
William Gray	9	22	21
Samuel Gray	-	7	3
Simon Forrester	2	-	4
Josiah and William Orne	-	5	4
Peabody & Co.	-	4	4
Crowninshields	-	2	3
Newburyport			
William Bartlett	1	4	4
Moses Brown	1	5	4
Providence			
A. and S. Welcome	3	4	1
Brown & Ives	5	5	4
Buttler & Co.	-	8	10
Newport			
Gibbs & Channing	3	6	4
Chr. & G. Champlin	4	-	-
New York			
Carter	-	1	7
Isaac Hicks	-	1	3
Minturn & Champlin	-	5	-
Duxbury: Ezra Weston	-	1	4
Gloucester: Pearce	2	7	5
Marblehead: Hooper	-	3	5
Portland: Asa Clapp	-	1	6
Philadelphia: Stephen Girard	-	2	4
Others	14	100	162
Total	49	212	282

Notes: Information for the years 1792-93 and 1801-03 only from 1 July onwards. The figures are calculated from vessels that sailed east from Elsinore.

Source: CR 1792-1807, NA T-201/1.

Boston dominated the merchant shipping of New England, but Salem, Marblehead, New Bedford, Newburyport, Duxbury and Portland were strongly involved in trade with the Baltic at least until the 1820s, as were Providence and Newport. The commercial rise of almost all the above-mentioned ports had started in the days of the War of Independence and privateering, and it reached its peak during the European wars. Somewhat imperfect lists of American vessels visiting the Baltic Sea in 1792-93 and in 1801-07 and their owners, composed by the consul in Elsinore, include numerous merchants and trading houses from New England. The lists indicate that only a few merchants or captains visited the Baltic Sea annually. Most of the vessels carried their cargo to Copenhagen and occasionally brought a return cargo from St Petersburg.¹³¹

William Gray of Salem (1750-1825) is in a class of his own among individual merchants who sailed to the Baltic and St Petersburg. At least six of

¹³¹ CR 1792-93, 1801-07, NA T-201/1.

his vessels were on the Baltic Sea already in 1793, and the names of captains appearing in STA indicate that at the end of the 1790s there were about ten a year. There were eleven in 1803 and eight in 1804.¹³² Gray was the most prominent shipowner-merchant of Massachusetts in the 1790s and in the next decade. In those days, he employed 300 sailors on average. Israël Thorndake of Beverly and Ebenezer & William Parsons employed 200 each.¹³³ After William Gray's transfer to Boston in 1809, his voyages to St Petersburg decreased in number, but still continued into the 1820s. At that time Gray's and his sons' operations in St Petersburg were often in connection with voyages to the Mediterranean or the East Indies. In the 1790s Gray had carried duck, for example, from Russia to the Cape of Good Hope, where it was exchanged for wine, brandy and fruit that were taken to the east.¹³⁴

John Hancock Andrews (1776-1832) was among the Salem merchants actively trading with Russia. He seems to have visited St Petersburg several times during the Napoleonic Wars, and he maintained these connections until the end of the 1820s.¹³⁵ Several representatives of the Endicott and Page families, Andrew's partners in many business activities, were involved in voyages to Russia. They were owners, supercargoes and captains of vessels that sailed on their own or another's account. For example Samuel Endicott, who was known as a merchant, started his career trading with St Petersburg at the beginning of the 19th century and carried on into the 1820s together with his

¹³² Some of his vessels sailed directly from the United States to the Baltic, some in ballast from the Netherlands, and some using the route via Lisbon. As well as Salem and Boston, Gray was active also in New York, and possibly for that reason his captains often reported in Elsinore that they were on the way to "North America" or "America". Before 1815 Gray was reckoned to own at least 113 vessels. In 1801-04 for example the ship *Rising States* (299 tons), in 1802-03 the ship *Aurora* (222 tons) and in 1803-04 and 1806-07 the ship *Wells* (205 tons) visited the Baltic; CR 1801-07, NA T-201/1; e.g. STA 1803 (1035/1988; 1951/2216, 1888/2543); see Gray 1914; Morison 1921, 194; HMM 1857, vol. 36, 165; Fairburn 1945, vol. I, 549-553.

¹³³ Other significant "employers" trading in the Baltic were Joseph Peabody of Salem (150 sailors), William Orne of Salem (60), and Nathan Hooper of Marblehead (50). In 1807 Gray was reckoned to own a quarter of Salem's tonnage; HMM 1857, vol. 36, 165.

¹³⁴ For example, in 1821 the ship *Albion* was sent to Batavia loaded with Russian raven duck and Swedish iron. The captain had instructions to buy coffee or, if coffee was unavailable, Sumatran pepper, with the proceeds of the sale of the cargo and additional resources of \$110,800. The coffee was to be carried to Amsterdam, and iron and hemp were to be brought back from St Petersburg with the money raised; Henry Gray to Charles Hazen, 14 April 1821, and ship *Albion's* invoice, 10 April 1821, HUBL, HGP, vol. 16.

¹³⁵ The brig *Jeremiah* owned by Andrews, Samuel Endicott and Samuel Page visited the Baltic Sea in the early years of the 19th century. According to STA the captain of the brig, William Duncan, visited St Petersburg eleven times in 1816-27 (perhaps on the same vessel). Duncan departed for those sailings from Havana, Pernambuco, Charleston or, late in the summer, Salem. Andrews had several links too with the Mediterranean, Sumatra and Calcutta; e.g. Orders to Captain William Duncan, 25 March 1823, PM, EP, vol.1; STA 1816-27; Hitchins, *Digest of Duties*. The name Andrews appears in connection with Russian trade at least in the firms Endicott & Andrews (dissolved in 1821), Andrews & Shepherd and Andrews & Page; EI, JHAP, vol.1/2, and vol. 2/ 8-9; EI, CFP, vol. 3/3.

son William P. Endicott.¹³⁶ Other comparable figures were, for example, William Orne (1752-1815) and Josiah Orne (1768-1825). The former transacted business in St Petersburg with Cayley & Co., and the latter with Miers Fisher. Like several other Salem merchants, they were customers of Ryberg & Co. in Copenhagen. They often used their own ships to carry Charleston rice and Havana sugar, but they also liked to charter their vessels for freight traffic.¹³⁷ Derby's son-in-law Benjamin Pickman (1740-1819), Crowninshields, Allen & Co. and Simon Forrester also belong to the same group of shipowner-merchants or captain-merchants from Salem who were engaged in trade with Russia at the beginning of the 19th century.¹³⁸

TABLE 7 Owners of American vessels sailing through the Sound, 1829-32.

Firm or merchant	Number of ships		
	1829	1831	1832
Boston:			
John Brown & Co.	1	4	5
Sam Train & Co.	1	2	4
Curtis & Baylies	3	2	2
Samuel C. Gray	3	1	2
William Parsons	1	1	2
Alfred Richardson	1	1	1
A. & C. Cunningham	-	2	4
Sam Austin	2	2	-
R.G. Shaw	1	-	3
Salem:			
Joseph Peabody	2	-	2
N. Rogers & Co.	3	-	-
New York:			
Samuel Hicks	2	-	-
Howland	2	-	3
Others	67	63	68
Total	89	78	96

Note: Information in the year 1829 only from 1 July onwards.

Sources: CR 1829-32, NA T-195/3, T-201/1.

¹³⁶ For example Moses, Jacob, Nathan, Aaron, John and Lewis Endicott appear as owners of vessels; PM, EP, no. 1-2; EI, FP, Samuel A. Fabens Letterbook, 1842-53; CR 1792-93, 1801-1807, NA T-201/1.

¹³⁷ EI, OFP; William Orne to Benjamin Lander, 20 June 1799, USR 1978, 339-340. For example, in 1795 the brig *Essex* and in 1801 the brig *Washington* (178 tons) and the ship *Hazen* (240 tons) were vessels of William Orne's in the Baltic; STA 1795 (66/554), STA 1801 (1031/2084, 765/2083), CR 1801, NA T-201/1; Osgood & Batchelder 1879, 188.

¹³⁸ The name Pickman appears in connection with Baltic trade at least in the firms Pickman & Sargent, Benjamin & William Pickman, Ropes & Pickman, Pickman & Rogers (Boston) and Pickman & Lander; EI, BPP, vol. 1-2; EI, JHAP, vol.1/1; PM, EP, vols.1-2; PM, BSP, vol. 5. For example, Derby's son-in-law Nathan West's ship *Augusta* (127 tons), Nichols & Co.'s ship *Union* (250 tons), Nathan Robinson's ship *Bonetta* (230 tons) John L. Gardner's brig *Three Friends* (140 tons) and William Ward's brig *Henry* (160 tons) were vessels owned by Salem firms that passed through the Sound in 1806; STA 1806 (325/1375, 679/1796, 257/2067, 197/342, 277/424); CR 1806, NA T-201/1.

Only a few vessels sailed from St Petersburg to Salem after the War of 1812-14, mainly for Joseph Peabody (Peabody & Co.) who had several vessels in the Baltic from the beginning of the 19th century onwards.¹³⁹ Even in 1827 at least three ships, the *Augustus* (246 tons), the *Glide* and the *Amazon* were involved in the Havana – St Petersburg sugar business.¹⁴⁰ After 1815, the role of Salem merchants in sailing to St Petersburg changed and they became freight carriers; the vessels brought a cargo from the southern ports or the West Indies, visited Russia and returned either to Boston or New York. At least Brothers Cramer was concerned at Salem's decline in importance. In the autumn of 1826 the firm ordered its agent John D. Bates to "make some impression in our favour in Salem", as "the merchants there are the most enterprising and we wish to be again connected with them".¹⁴¹ The *Eclipse*, which sailed in 1843, was probably the last vessel to sail from Russia to Salem.¹⁴²

The pattern of New England's trade with Russia, as did that of the United States as a whole, changed from the end of the 18th century to the 1830s in that such major merchants as Derby and William Gray apparently did not maintain contacts with St Petersburg. It can be concluded from the consular returns of Elsinore and Copenhagen that around 1830 only a few houses kept their vessels permanently in the Baltic, and the ownership of the vessels was clearly more widely distributed than earlier.

At the end of the 18th century Boston was the leading port in the United States, but except perhaps for Ebenezer and Gorman Parson, there were no merchants trading with Russia on the scale of the merchants of Salem.¹⁴³ Apart

¹³⁹ For example the ship *Sally* (269 tons), STA 1803 (81/1410), and the ship *Mount Vernon* (254 tons) STA 1803 (1532/2244), STA 1804 (372/1125), and STA 1805 (968/1937); CR 1803-04, NA T-201/T1.

¹⁴⁰ The ship *Augustus* sailed to St Petersburg about ten times in the 1820s and 1830s, and she almost always carried a cargo of about 500,000 lbs sugar from Cuba. The ship always arrived in Elsinore among the last Americans in July-August, and was back in Salem only at the end of the year, sometimes even at the beginning of the next year. She was reported to have paid more customs duties in Salem in 1830 than any other vessel before: \$21,441. According to STA, her cargo consisted of an exceptionally large quantity of Russian manufactures: 1690 pieces raveduck, 2282 pieces flems, 1410 pieces sailcloth and 5222 pieces dreil. The vessel visited the Baltic Sea for the last time in 1837, after an interval of four years: from Stockholm she brought iron, which was directed immediately from Salem to Boston; STA 1830 (1740/2786); STA 1832 (2406/3012); STA 1837 (1283/2019); Brothers Cramer to John D. Bates, 15/22 July 1827, PM, JDB, vol. 1; Kirchner 1975, 129-130; Hitchins, Digest of Duties.

¹⁴¹ Brothers Cramer to Nathan Bridge, 20 November / 2 December 1826, PM, JDB, vol. 1.

¹⁴² Phillips 1941, 689; STA 1843 (1496/2242). The vessel returned to H.L. Williams in Salem almost completely in ballast, having carried 983,000 lbs sugar from Havana to St Petersburg. Salem's trade with northern Europe thus came to an end: the last vessel from Copenhagen arrived in 1816, from Archangel in 1820, from Hamburg 1828 and from Gothenburg in 1837; Osgood & Batchelder 1879, 187-191. However, as late as 1852 the Salem ship *Monterey* (422 tons) sailed the route New Orleans-Stockholm-New York; CR 1852, NA T-201/3.

¹⁴³ Parsons' vessels that visited the Baltic Sea in 1801 were at least the brig *Peregrine* (93 tons), the brig *Violet* (102 tons), the ship *Reliance* (212 tons), the ship *Financier* (224 tons), and the brig *Grayhound* (151 tons); STA 1801 (728/983, 789/1496, 1477/2143, 1710/2364, 1053/2080); CR 1801, NA T-201/1; Adamson 1969, 64. – In table 6, "Parsons" include Ebenezer, Gorham and William Parsons and Parsons & Co. Other Boston and Salem merchants dealing with trade to St Petersburg were, for example,

from those listed in Table 7, the most significant examples were obviously Daniel Sergeant and Thomas Russell (1740-1796). Russell, who sent his first vessel to Russia in 1786, in 1793 sent at least two, the *Francis & Sarah* (233 tons) and the brig *Elisabeth* (135 tons) for what were at the time still unusual direct voyages between Boston and St Petersburg.¹⁴⁴

During the Napoleonic Wars re-export of colonial produce was essential to the trade of Massachusetts and of the rest of New England. More than 60 percent of Massachusetts's exports in the years 1803-10 were re-exports and the state's share of the whole country's re-exports was more than a quarter.¹⁴⁵ After 1815 Charles and Thomas Parsons of Boston were two who continued this kind of activity.¹⁴⁶ There were several re-exporters, but their significance started to decline from the 1820s on. The change can be followed in the rather extensive notes and letters of William D. Lewis, who travelled along the East Coast as his brother's agent. At the beginning of the 1820s, Boston's trade with Russia also started to become concentrated on the Havana sugar business. At the turn of the 1820s Samuel Sanford (1777-1856), who had his counting house on Boston's India Wharf, gives a similar picture of the way things were changing.¹⁴⁷

The activities of Nathan Bridge & Co. and John Douglas Bates give a representative picture of the organization, finance and competition between the

Nathaniel West, Nathaniel Silsbee, Gideon Barstow, Stephen Goodhue, Thomas Perkins, Stephen Phillips, Stephen White, Pickering Dodge, Simon Forrester, William Silsbee, Joseph White, John Crowninshield, Dudley L. Pickman, James Devereux, John Osgood, Thomas B. Osgood; Osgood & Batchelder 1879, 188; cf. John Prince, Jr. to Pavel Svinin, 3 July 1812, USR, 1980, 864-869.

¹⁴⁴ STA 1793 (186/706,184/717); CR 1793, NA T-195/1; see HMM 1839, vol.1, 131; East 1938, 253. - Boston firms that had annually one or two vessels on the Baltic Sea were, for example, John Holland & Co., J.& P. Davis and Lyman & Co. (Lyman & Rea); e.g. Holland's ship *Pocahontas* (280 tons), STA 1804 (1837/2230); Davis' brig *Edward* (190 tons) and ship *Sally* (205 tons), STA 1804 (663/1316 and 662/1315); Lyman's brig *Aurora* (175 tons), STA 1804 (442/959), CR 1804, NA T-201/1. - In table 6, the name John Holland also includes Holland & Co. and Holland & Goddards. - Also Davis of Boston includes several "Davis", for example John Davis, J.& P. Davis and J. & J. Davis. Carter of New York appears most often as H. & J.G. Carter. - Pearce of Gloucester refers mainly to William Pearce. - Hooper of Marblehead includes the merchants Robert, William and A.N. Hooper. - Brown & Ives of Providence under the name Brown Benson & Ives until the year 1796. - For example the brig *Mary* (135 tons) is one of the Bostonian Wheeler & Co.'s (Wheeler & Cunningham) vessels that regularly sailed the route Lisbon-St Petersburg-Boston under the command of Captain Obediah Rich; e.g. STA 1802 (915/1803), STA 1805 (694/1450); CR 1802,1805, NA T-201/1.

¹⁴⁵ ASPCN 1812.

¹⁴⁶ Of Parsons' vessels, the bark *Garland* (233 tons) sailed for about ten years the basic route between Boston and St Petersburg and, after that, at least until 1838, the "rice route" from Charleston to Copenhagen. For example in 1836 the vessel sailed twice the route Boston-Charleston-St Petersburg-Boston under the command of Captain Nathan Whitmore; PM, CTPP; e.g. STA 1815 (390/1182), STA 1836 (55/93 and 2535/2629), and STA 1838 (91/243); CR 1828-38, NA T-201/1, T-195/2-4, M-81/2-5; see Kirchner 1975, 97.

¹⁴⁷ HSP, LNP, Letters 1810-41; HUBL, Samuel Sandford Letterbook, 1818-1825. Sanford had been involved in Havana trade from 1808 on, and he had carried sugar from there to Boston and Amsterdam. Little by little and cautiously - leaning on Samuel Williams in London and Stieglitz in St Petersburg - he started to carry sugar directly to St Petersburg at the beginning of the 1820s.

Boston houses trading in the sugar triangle. Bates was a shareholder of Bridge & Co., and agent of the firm until the death of Nathan Bridge in 1830. After that Bates and his brother Edward carried on trading under the name of Bates & Co. They both travelled to St Petersburg via Cuba several times, John in the 1820s and Edward in the 1830s. Both Nathan Bridge and Bates were customers of Joshua Bates, who was the “American partner” of Barings of London from 1828 to 1864. Both firms collaborated in their sugar operations with Henry and Horace Gray, who owned vessels but did not always have the necessary capital to buy sugar in Cuba. Bridge and Bates could apparently obtain credit in London and St Petersburg. They were very close business associates of Brothers Cramer until the St Petersburg firm closed for business. After that the number of Bates & Co.’s sugar shipments fell significantly and the firm concentrated its operations on the Dutch markets.¹⁴⁸

Henry and Horace Gray’s journals and ledgers from the 1830s and part of the 1840s, mentioned above, give a good picture of the financing arrangements of sugar purchases, and of the way a large part of the Russian produce the firm had purchased was marketed in different parts of New England. Horace Gray & Co. itself used hemp for the production of cordage by its own Mill Dam Company. Amongst others the Boston Manufacturing Company, Boston Iron Company, Plymouth Cordage Company and local shipbuilders bought raw hemp. Grays’ also had several regular customers in New York, Baltimore, Savannah and Charleston. Russian manufactures were also taken to Cuba in significant quantities in payment for sugar and coffee. The Gray brothers traded with several houses in St Petersburg, most often with Brothers Cramer and Thomson, Bonar & Co.¹⁴⁹

William Gray’s nephews Samuel C. Gray and Francis A. Gray were other merchants sailing the sugar triangle and active in the Boston–St Petersburg axis. For example in 1832 the *Florence* and the brig *Henriette* (234 tons), registered in the name of Samuel C. Gray, sailed the route Boston-Havana-St Petersburg-Boston.¹⁵⁰ In the pages of his letter book Samuel A. Fabens, who sailed the sugar triangle as the Gray brothers’ agent and captain, the Grays are described as a firm that in the 1840s sent two or three vessels every year to trade in sugar. The Grays were Stieglitz’s customers as steadily as the Bates were Brothers Cramer’. However, they were both equally dependent on instructions emanating from

¹⁴⁸ PM, JDB, vols. 1, 17; HUBL, HGP, vol. 17; Kirchner 1975, 195.

¹⁴⁹ HUBL, HGP, vol. 1-7, 11-13, 16-17. – In New Orleans, the partner of the Gray brothers, as well as many other Bostonians, was Thomas Hewes, who sold Russian duck, flems and cotton bagging both at retail and wholesale. The Gray brothers traded with Martin, Knight and Drake, Mitchell & Co. in Havana and with James Sargent, Jr., in Matanzas.

¹⁵⁰ In 1834 the ship *Florence* made two voyages to St Petersburg, one from Charleston via Copenhagen, and the other directly from Boston. In 1836 the brig *Charlotte* (224 tons) repeated the voyages; STA 1832 (1617/2570, 1628/2510); STA 1834 (125/805, 2152/2560); STA 1836 (160/697, 2534); CR 1832-36, NA T-195/3, and M-81/3. The latter vessel was wrecked on Gotland coast on her way back from St Petersburg in the autumn of 1836; Rainals to Forsyth, 31 December 1836, NA T-201/1.

Thomas Ward, Barings' representative in the United States. These instructions were based on information Stieglitz sent from St Petersburg to London.¹⁵¹

Walter Kirchner considers R. D. Tucker, who was active in Boston and Salem, perhaps the best-known merchant in New England engaged in trade with Russia.¹⁵² Tucker was a ship-owner, but his name also often appears as the owner of cargoes ordered from St Petersburg and Copenhagen. Tucker frequently used Lewis's firm in St Petersburg in the 1820s, but in the 1830s William Ropes's firm more often. Like Tucker, Curtis & Baylies (Thomas B. Curtis and Edward Baylies) also traded regularly with Russia, and they were interested in trade with Pillau and Königsberg as well. The above-mentioned brig *Czarina* (280 tons), owned by the latter firm and William Ropes, was among the few vessels that sailed twice a year from Boston to St Petersburg via Copenhagen almost regularly.¹⁵³

According to the shipping lists of the consuls at the Baltic ports, at least the following Bostonian firms maintained rather regular connections to Russia from the beginning of the 1830s on: Nathan Appleton, Sam Austin, Josiah Bradley & Co., John Brown & Co., Bryant & Sturgis, A. & C. Pratt, Putnam & Co., William Rice, J. Richardson (Alfred Richardson), Enoch Train, Sam Train & Co. and Nathan West.¹⁵⁴ Many of these firms had connections with other ports in Northern Europe besides St Petersburg. For example, Richardsons often carried iron from Stockholm,¹⁵⁵ and as well as St Petersburg, Cunninghams' vessels visited Archangel and German ports on the Baltic Sea.¹⁵⁶

Boston kept its leading position in trade with the Levant and the Baltic, although New York, which had increased its imports enormously, and New Orleans, owing its development to cotton, became the most important

¹⁵¹ Samuel C. Gray (according to William D. Lewis "fine little fellow") was a shareholder of Roy & Gray firm, which operated until 1821, and Stieglitz's business associate at this point.

¹⁵² Kirchner 1975, 216. – In William Ropes's letters Tucker appear as Tucker & Son from 1832 on.

¹⁵³ See Howes 1894, 10. – Also Curtis & Stevenson appears later as the owner of the brig *Czarina*; e.g. Edward Bates to John Bates, 3 March 1840, PM, JDB, vol. 13. – Another regular sailor – which, however, visited the Baltic Sea only once a year – was the bark *Gulnare* owned by John B. Cushing; e.g. STA 1836 (603/1434); STA 1840 (2170/3415); NA T-201/2, and M-81/4.

¹⁵⁴ Firms appearing more rarely were, for example, Bernard, Adams & Co., J. Baker & Son, Baker & Hodges, Thomas Coffin, Curtis & Stevenson, Caleb Davis & Ingersoll (John Davis & Son, James Ingersoll), John Dike, John Dwyer, Stephen Higginson, Hathaway & Co., Geo. A. Hodges, John Holland, Peter Lander, Caleb Loring, D.D. Parker, Pratt & Son, Rice & Thaxter, B. Rich & Sons, Robert B. Storer, Sargent & Brooks and Thomas Thaxter; see Kirchner 1975, 216-217.

¹⁵⁵ E.g. Simon Burbank & Co. to T. & J. Richardson, 29 December 1819, HUBL, JRP, vol. 2.

¹⁵⁶ In 1830 Cunningham's brig *Eliza Ann* (137 tons) visited the Baltic Sea twice under the command of captain John Barnicoat; on the first voyage, she sailed via Copenhagen and Gothenburg, and on the second she visited Pillau. Two years later the firm had as many as four vessels on the Baltic Sea; three of them sailed to Pillau or Königsberg via Copenhagen, and only one, the brig *Stag* (214 tons), to St Petersburg via Havana. The Cunninghams carried mainly hemp, bristles, wood and flax from German ports; STA 1830 (59/220, 2095/2709); STA 1832 (169/1009, 712/1496, 1603/1279, 1927/2493); CR 1830-50, NA T- 195/3-4 and M-81/2-5; Kirchner 1975, 116-117.

centres of U.S. foreign trade at the beginning of the 19th century. Boston increasingly dominated New England's trade with Russia towards the middle of the 19th century. In addition to the concentration of foreign trade in Boston, another change occurred along the eastern seaboard after 1815. This was a generation change of the merchants dealing with Russian trade: quite a few of the firms that had taken part in sailing to the Baltic during the Revolutionary Wars directed their activity to other regions. It was common for capital to move from shipping to textiles. Perhaps the best-known "retreaters" were Brown & Ives of Providence, Stephen Girard of Philadelphia and Nathan Appleton of Boston. There were, however, no entrepreneurs specializing in trade with Russia and simultaneously investing significant sums in industry or, for example, railways.¹⁵⁷

The concentration of Russian trade in Boston was also due to the fact that several small towns in Massachusetts shared Salem's destiny and never totally recovered from the shock caused by the year of the Embargo and the War of 1812.¹⁵⁸ Among the merchants of Marblehead probably those longest active in trade with St Petersburg carrying sugar from Havana were John and Robert Hooper. They made vigorous attempts to exchange Russian manufactures for raw sugar in Cuba but the results were often poor. Hoopers moved part of their business to Boston and in the 1830s transacted business in St Petersburg with Ropes and Lewis. They also served as agents of the Lewis's successor, van Sassen.¹⁵⁹

Probably the best-known merchant in Newburyport to benefit from the economic conditions of the war years was Moses Brown (1742-1827). He withdrew from foreign trade after 1812, and changed over to industry. David and Samuel Coffin acted in a similar way, but on a much smaller scale, giving up the coastal trade and profitable Atlantic routes in 1793 and investing the capital they acquired from trade in banking, insurance and woollen manufacturing.¹⁶⁰

¹⁵⁷ See Tooker 1955, 157; Kirchner 1975, 4. – James & Thomas H. Perkins' firm, which had been interested in the Baltic trade, re-oriented so clearly to trade with Canton, that William D. Lewis claimed in 1821 that it had totally abandoned operations in Russia; William D. Lewis to John D. Lewis, 15 February 1821, HSP, LNP, Letters 1810-41; see North 1966, 169; Morison 1921, 66; Cary 1856, 44-45.

¹⁵⁸ See Morison 1921, 191, 216; Winslow 1988, 243.

¹⁵⁹ Hoopers transacted business with Martin, Knight & Co. in Havana and with Samuel Williams in London. Timothy Wiggins, and later Bates & Baring arranged the financing in London; PM, JRHP, Letterbook; Robert Hooper to Fabens, 14 April 1845, EI, FP, Samuel A. Fabens Letterbook, 1842-53; Mary T. Ropes to Hardy Ropes, 11/23 August 1833, William Ropes to Robert C. Hooper, and 18/30 October 1835, HUBL, RFP; Kirchner 1975, 215.

¹⁶⁰ Larrabee 1962, 209. The ship *William* (227 tons) and the ship *Mary* (204 tons) were the vessels of Brown's that visited the Baltic Sea most often; e.g. STA 1802 (1740/2601, 1745/2832); CR 1802, NA T-201/1. In 1806 Coffins had three vessels in St Petersburg: the schooner *George* (105 tons), the brig *John* (167 tons) and the brig *Three Brothers* (176 tons); STA 1806 (279/422, 186/348, 221/408); CR 1806, NA T-201/1. It is very often stated in the histories of American trading firms that the gains from foreign trade were transferred to domestic targets; e.g. Hedges 1968, vol. I, I-XIV; Tooker 1955, 157; Gregory 1975, passim. Starkey (1994, 72, 76) claims that, after 1814, a large part of the

Other Newburyport merchants involved in trade with Russia at the beginning of the 19th century were William Bartlett, John Pettingell and Abner Wood.¹⁶¹ The city's position remained strong, if the home ports of the vessels visiting Russia are taken as the criterion. For example in 1834 altogether eleven ships from Newburyport visited the Baltic, but according to STA and the consuls' records, none of them returned to their home port. As a rule the vessels sailed for the account of Boston and New York merchants, as did Salem vessels.¹⁶² For example in the summer of 1851 Henry Johnson's *Massachusetts* (300 tons) carried a cargo of 1.2 million lbs of sugar from Matanzas for delivery to Stieglitz & Co. In St Petersburg the vessel was chartered to carry a cargo of 500 tons of iron from Stockholm to Boorman & Johnston in New York. Having to wait for the cargo in Havana and a change of port in the Baltic for the return cargo delayed the vessel and she had to cross the Atlantic in the winter, which caused unwelcome hardship. The ship sailed finally to New York in January 1852.¹⁶³

David and William Pearce of Gloucester were among the major Massachusetts merchants trading with Russia during period of the Continental System.¹⁶⁴ Ezra Weston of Duxbury also maintained connections which were equally regular but not equally strong.¹⁶⁵ Israël Thorndike (1755-1832) is another who made his fortune in trading as a neutral. Thorndikes still kept up their links with St Petersburg in the 1820s and 1830s, transacting business with, for example, Lewis and Ropes.¹⁶⁶ In some years vessels from New Bedford, generally known as a centre of fishing and whaling, were quite numerous on

capital and tonnage that had been created during the European wars was directed to trading, smuggling and piracy in the Caribbean and South America.

¹⁶¹ In the early years of the 19th century Bartlett's vessels, the ship *Essex* (238 tons), the brig *Respect* (184 tons) and the ship *James* (240 tons), sailed almost without exception from Amsterdam to St Petersburg in ballast and returned to Newburyport. Pettingell's ship *Hannah* (194 tons) visited St Petersburg at least in 1806 and 1807, and the ship *Rolla* (174 tons) in 1807 and 1810, when she was sent to St Petersburg with an extremely valuable cargo from Sumatra; on Bartlett's vessels, e.g. STA 1802 (1490/2580, 2159/2816); on Pettingell's vessels, e.g. STA 1806 (151/281), on Wood's vessels e.g. STA 1806 (318/480, 412/558); CR 1802-10, NA T-201/1; Erving to the Secretary of State, 23 December 1811, NA M-41/2/12; Larrabee 1962, 171, 216.

¹⁶² In the 1830s among them were, for example, the brig *Pocahontas* (282 tons) owned by Cushing & Sons, and the bark *Sagamore* (285 tons) owned by Henry Johnson; STA 1834 (453/1166, 1082/1867); CR 1834, NA T-195/3, and M-81/3.

¹⁶³ Thomas Pritchard to Henry Johnson, 13 June, 3 September, 15 September 1851, 10 January, and 19 January 1852, PM, Thomas Pritchard, Letterbook 1850-53; CR 1851, NA M-81/5, and T-201/2.

¹⁶⁴ For example the brig *Susan & Eliza* (206 tons), which visited the Baltic in 1802-06, and the *Edward & Henry* (125 tons), that sailed there in 1805 and 1807, were vessels of Pearce's, STA 1805 (383/1155, 1040/2030), STA 1806 (224/371); CR 1802-06, NA T-201/1; Erving's report, 23 December 1811, NA M-41/2/12.

¹⁶⁵ Weston's brig *Admittance* (170 tons) sailed annually in 1803-1807 from São Miguel to St Petersburg and back to Duxbury with fruit; e.g. STA 1806 (153/273); CR 1806, NA T-201/1.

¹⁶⁶ Douglass 1971, 36; e.g. William Lewis to John D. Lewis, 15 January 1826, HSP, LNP, vol.70; William Ropes to Hardy Ropes, 17 August 1831, HUBL, RFP. Of Thorndike's vessels, for example, the ship *Hope* (240 tons) visited St Petersburg in 1806 and the brig *Ann* (174 tons) in 1807, STA 1806 (519/651). In 1809 his schooner *Betsey* (82 tons) and ship *Northern Liberties* (355 tons) sailed to the Baltic; CR 1809, NA T-201/1; Erving to the Secretary of State, 23 December 1811, NA M-41/2/12.

the Baltic. They were most often vessels owned by their captains which carried whale oil to Stettin.¹⁶⁷ Plymouth, like ports in Maine that later became famous for shipbuilding, such as Kennebunk and Portland, and Portsmouth, NH, sent several vessels to the Baltic Sea from time to time. However, their role in sailing to Russia relates more to navigation than trade itself.¹⁶⁸

Various trading companies of Providence and Newport in Rhode Island, for example Brown & Ives (until 1796 Brown, Benson & Ives), Champlins and Gibbs & Channing played a central role in opening up trade with Russia at the end of the 18th century. All of them had several vessels on the Baltic at the beginning of the 1790s and in the first decade of the 19th century. Brown & Ives, which sent about forty vessels to the Baltic in the period 1788-1812, may be considered the most important firm both in Providence and the whole state. Trading losses with rice and flour in Copenhagen in 1795-96 dampened enthusiasm for a few years, but in 1802 Brown & Ives found new interest in the opportunities of the Baltic, this time mainly in St Petersburg.¹⁶⁹ In 1803 the firm already had three ships on the Baltic: the *Isis* (360 tons), the *General Washington* (350 tons) and the *Ann & Hope* (550 tons). By 1810 they already had five vessels.¹⁷⁰

In the period 1800-07 Brown & Ives made about ten voyages to Canton and Batavia, and some of the sailings to St Petersburg served the firm's interests in the Far East. The Americans generally found it a problem to find suitable export goods for the East Indies, and Brown & Ives tried to get around this by having recourse to Russian produce, but the results were markedly poor.

¹⁶⁷ On the other hand, three of the six vessels from New Bedford that sailed through the Sound in 1832 were owned by the same firm, J.A. Parker & Co. The vessels were the brig *Dragon* (189 tons), the brig *George* (273 tons), and the brig *Juno* (165 tons). They all sailed in ballast from Bremen to Stockholm to take on iron for New Bedford; STA 1832 (435/914, 1007/1639, 2228/2878); CR 1832, NA T-195/3. During the Revolutionary Wars the vessels of, for example, Quaker merchant William Rotch, A. Hathaway and Hopkins & Co. from New Bedford sailed to the Baltic Sea. For example in 1806 Rotch's ship *William & Eliza* (321 tons), Hathaway's brig *William* (109 tons) and Hopkin's ship *Harmony* (220 tons) sailed to St Petersburg in the autumn of 1805 and returned the next summer; STA 1805 (2761), STA 1806 (250/405, 184/333, 238); CR 1805-06, NA T-201/1.

¹⁶⁸ At the beginning of the 19th century, for example, the Plymouth merchants Barnabas and Isaac Hedge and later Nathan Russell & Co. who was John D. Lewis's customer, traded in the Baltic. Thomas and William Lord were Kennebunk merchants who still in the 1830s and 1840s occasionally did business in St Petersburg. Asa Clapp and Weeks & Co. of Portland had a few vessels a year on the Baltic in wartime, and so did Thomas Schaffe and Thomas Brown of Portsmouth, and later also Charles Rice (Rice & Shaw) and Christian Cushing; John D. Lewis to William Lewis, 6 November 1825, HSP, LNP, vol. 70; CR 1801-07, 1828-50, NA T-201/1-2, M-81/3-5, and T-195/2-4.

¹⁶⁹ For example, in 1802 the brig *Eliza* (135 tons) and the ship *Fame* (220 tons) visited St Petersburg; STA 1802 (2184/2803, 835/1758); CR 1802, NA T-201/1.

¹⁷⁰ Also the firm's "flagship" in trade with St Petersburg, the ship *General Hamilton* (247 tons), joined the group in 1805. She was the firm's only vessel to visit St Petersburg in 1805-07; STA 1803 (732/1657, 1601/2280, 710/1636); STA 1805 (1319/2172); STA 1806 (309/481); CR 1803-1810, NA T-201/1; Erving to the Secretary of State, 23 December 1811, NA M-41/2/12.

During the Embargo and also after 1815 the company concentrated on South America and the East Indies, and later the American cotton industry.¹⁷¹

In the 1790s for example Stephen Dexter and Welcome Arnold were prominent merchants in Providence handling Russian trade, and in the first years of the 19th century Samuel Arnold and Jarvis Bullock joined them.¹⁷² Calculated on the basis of the number of ships, Buttler & Co. of Providence became the second most important firm trading with the Baltic at the beginning of the 19th century. In 1802-07 it had an average of three vessels on the Baltic Sea per navigation season.¹⁷³ After the war Providence's importance as a port generally declined, but Joseph J. Rhodes and Edward Carrington & Co. amongst others continued trading with the Baltic using a few vessels.¹⁷⁴ The Newport firm of Christopher and George Champlin, which mainly derived its income from whaling, was one of the companies that opened trade with Russia in the 18th century, and its traditions were carried on by Gibbs & Channing.¹⁷⁵ At least until the 1830s James and John D'Wolf also sent vessels from Bristol, Rhode Island, to St Petersburg via Cuba, often to Brothers Cramer.¹⁷⁶

5.5.2 Merchants of the Middle States and the South

At the beginning of the 19th century New York was a rapidly growing Middle States port, growing in importance at the expense of Philadelphia and Baltimore. Unlike the firms in New England dealing with Russian trade, those in New York were not as a rule ship-owner-merchants, but often import and export wholesale

¹⁷¹ Hedges 1968, vol. II, 56, 135, 184-185. Brown & Ives started to invest in Taunton industrial enterprises (e.g. Taunton Locomotive Manufacturing Company). In 1820 the firm owned eight ships and three brigs, but sold its last vessel in 1838. As late as 1832 Brown & Ives's brig *George Washington* sailed in ballast from Amsterdam to St Petersburg to bring a cargo of iron and hemp to Providence; STA 1832 (2230/2897); CR 1832, NA T-195/3.

¹⁷² E.g. Welcome Arnold's brig *Samuel* (101 tons), STA 1793 (586/798); ship *General Grant* (285 tons), STA 1793 (314/879). Sam Arnold's ship *Minerva* (220 tons), STA 1802 (2045/2821); schooner *Cornelia* (116 tons), STA 1802 (2370, 2601/3092). Bullock's brig *Swift* (157 tons), STA 1805 (1323/2023) and ship *John* (259 tons), STA 1806 (430/596); CR 1793, 1802-06, NA T-201/1; about Arnold see e.g. East 1939, 77.

¹⁷³ For example in 1803 there were four Buttler & Co. and Buttler & Wheeler vessels on the Baltic Sea: the brig *Arethusa* (107 tons), the brig *Zervah* (110 tons), the ship *Neptunus* (190 tons) and the brig *George William* (153 tons); STA 1803 (511/2063, 1001/1743, 1072/2067, 1889/2667); CR 1803, NA T-201/1.

¹⁷⁴ Kirchner 1975, 127. For example, in 1838 Carrington's ship *Hanover* (330 tons) visited St Petersburg, and in 1843 the bark *Zenopia* (279 tons); STA 1838 (1747/2689); STA 1843 (1465/2235); CR 1838, 1843, NA T-201/1-2, T-195/4, and M-81/3-4.

¹⁷⁵ For example, in 1804 the Champlins had the brig *Brandywine* (112 tons) and the ship *Eagle* (205 tons) on the Baltic Sea; STA 1804 (1321/1635, 385/881); CR 1804, NA T-201/1. The Champlins' firm was wound up in 1806, after Christopher Champlin had died in the previous year. However, in 1807 the firm, which was in George Champlin's (d. 1809) and R. Robertson's name, sent the brig *Fame* (185 tons) to St Petersburg via Charleston and Copenhagen; CR 1807, NA T-201/1; USR 1980, 1130, 1133.

¹⁷⁶ William D. Lewis to John D. Lewis, 9 May 1821, HSP, LNP, Letters 1810-41. For example, in 1832 the firm's brig *Remittance* (217 tons) visited St Petersburg; STA 1832 (2228/2898); CR 1832, NA T-195/3; see USR 1980, 421-422, 424-426.

firms, whose trade with St Petersburg relied upon New England vessels.¹⁷⁷ Ship ownership was relatively uncommon in New York throughout the period discussed here.¹⁷⁸ The difference in the situation there is shown up by the fact that while several vessels sailed the same route between New England and St Petersburg year in year out, those sailing from the major port of New York to St Petersburg changed constantly. The city's central position was based on commerce and the money market, and also indirectly on the fact that the coastal trade of the United States was only open to the country's own vessels. Thus the city became an entrepôt and export centre for produce from the South. Moreover, as well as being the financial centre of the United States, New York was, together with Baltimore the most industrialized region on the East Coast before the Civil War. At the end of the 1850s the value of New York's foreign trade was six times that of the whole of New England. However, according to Robert G. Albion, "the New Englanders captured the port of New York around 1820 and dominated its business until after the Civil War."¹⁷⁹

In New York there were no great firms specializing in trade with Russia such as existed in Massachusetts and Rhode Island. Walter Kirchner states that when New York became the country's leading port for foreign trade, successors for enterprises started in Boston and Salem were lacking.¹⁸⁰ Firms that sent vessels to the Baltic in the first years of the 19th century were, for example, Henry and J.G. Coster, Minturn & Champlin (Minturn & Co.), Isaac Wright, Jacob and Abraham Parker, and Ruben Smith, who often sailed for either London or Portuguese merchants.¹⁸¹

Isaac Hicks (1767-1820) was one of the merchants who took up trade with Russia, and started to send his vessels to St Petersburg at the end of the 1790s.¹⁸²

¹⁷⁷ New York were carried for its own merchants' account. The corresponding rate for Boston was 80 percent.

¹⁷⁸ For example in 1835 the ship *Plato* (239 tons) was the only New York vessel that sailed to St Petersburg. It was only followed the next year by the brig *Virginia* (284 tons); STA 1835 (865/1590); STA 1836 (1579/2464, 2817/3109); CR 1835-36, NA T-201/1, and M-81/3.

¹⁷⁹ Albion 1961, 241, 284; see North 1966, 127, 168; Appendix, table 6.

¹⁸⁰ Kirchner 1975, 130.

¹⁸¹ For example in 1802 Smith's brig *James* (120 tons) visited the Baltic Sea, in 1802-03 Minturn & Co.'s ship *Projector* (233 tons) and Wright's ship *Charleston* (230 tons), in 1804 Smith's schooner *William* (109 tons), in 1805-06 Coster's ship *Orion* (322 tons) and in 1806 Parker's ship *Sterling* (274 tons); STA 1802 (666/1856, 1088/1869, 2240/3091); STA 1803 (259/1271, 700/1556); STA 1804 (579/1076); STA 1805 (289/1092); STA 1806 (390/553, 227/361); CR 1802-06, NA T-201/1. The firm that operated under the different names of Minturns' and Grinells' was one of the major American merchant-shipowners around 1800. It traded first in New Bedford, but the War of 1812 closed its operation there. In 1815-29 the firm operated in New York; Albion 1961, 247-248; Rabuzzi 1998, 175.

¹⁸² The company of Alsop & Hicks, set up in 1791, traded dry goods, and was cautiously developed a commission house for foreign trade. After 1796 Hicks ran the firm alone; Davison 1964, 30-34, 57, 109; USR 1980, 1133. Davison mentions Captain Judah Paddock's voyage to Russia in 1799 as the first journey made for Hicks's account. This may be true, but already in 1797 a vessel under the command of Judah Paddock sailed in ballast from Liverpool to St Petersburg and carried a cargo of hemp and iron to New York; STA 1797(418/975); STA 1799 (515/1243).

Many of his operations were managed in London, where his agent – as well as the agent of many other American merchants – was to begin with Bird, Savage & Bird, and later John Gore & Co. In St Petersburg, Hicks was a customer of Cramers, Smith & Co. The correspondence relating to the voyages of the firm's vessels, and the meticulously kept accounts clearly indicate that Isaac Hicks and his partners exchanged Savannah rice, cotton and tobacco for Russian iron and manufactures. Hicks aimed at utilizing opportunities offered by the French ports of Rouen, Nantes, Dieppe and Paimbeauf in wartime possibly more often than other merchants trading with Russia. After 1806 Isaac Hicks changed to real estate speculation.¹⁸³ In the 1820s Isaac Hicks & Son financed the shipments of sugar to St Petersburg of, for example, Nathan Bridges & Co. of Boston and Brothers Cramer. In 1835 Charles Cramer described the firm as their “only efficient correspondent” in New York.¹⁸⁴

The most prominent firm outside New England that traded with Russia was probably Goodhue & Co. of New York. The founder of the firm, Jonathan Goodhue, transferred from Salem to New York in 1807 and started as an agent of the Salem merchants William Gray and John Norris. When Palatial Perit became Goodhue's partner, Goodhue established the firm of Goodhue & Co., which operated until 1862. For decades the firm was known as a cautious and respectable commission trade enterprise, which “never speculated” and which operated “as firmly as the rock of Gibraltar”.¹⁸⁵ Several merchants involved in Russian trade were directly or indirectly customers of the triangular set-up between Stieglitz in St Petersburg, Barings in London, and Goodhue & Co. in New York. In fact William Ropes initially acted mainly as Goodhue's agent in St Petersburg. Later too perhaps the greater part of the goods Ropes sent anywhere apart from Boston were directed to Goodhue & Co.¹⁸⁶

The firm Boorman & Johnston, set up early in the 19th century, was one of the major tobacco exporters in New York, and one of the biggest iron importers in the country. In the Baltic region the firm was interested primarily in Swedish and Russian iron. Evidently the firm rarely used its own vessels for their

¹⁸³ For example, the ship *Thames* (399 tons), the ship *West Point* (319 tons) and the ship *Robert Bolton* (341 tons) were Hicks's vessels. He shared their ownership with Captain Paddock and Robert & John Bolton of Savannah; NYHS, IHP; see Davison 1964, 112-131.

¹⁸⁴ Cramer to John D. Bates, 10 February 1835, PM, JDB, vol.17; see Brothers Cramer to Nathan Bridge & Co, 11 Juni 1829, PM, JDB, vol.1; John D. Bates to George Knight, 9 February 1831, PM, JDB, vol. 17. According to consular returns, Samuel Hicks & Co. also supplied a great deal of Russian produce to New York: the cargo of almost every vessel that sailed from the Sound to New York included goods belonging to that firm. For example, in 1830 the ship *Leo Clinton* (428 tons) carried goods for it and in the same year the brig *Ann Gadsden* (237 tons) and the ship *Shepard* (350 tons) carried a cargo of sugar financed by Hicks and various London merchants to St Petersburg, and returned carrying cargo for Samuel Hicks and Goodhue & Co.; STA 1830 (937/2221, 3011/3572 and 1942/2710); CR 1830, NA T-195/3.

¹⁸⁵ Scoville 1863, 24; see Kirchner 1975, 221; Albion 1961, 245.

¹⁸⁶ Baring financed Goodhue & Co. with considerable sums when the firm bought Black Ball Line in 1834; Albion 1961, 247.

purchase.¹⁸⁷ Phelps & Peck, set up in 1818 and after 1834 under the name of Phelps, Dodge & Co., also concentrated on metal imports. Russian iron was provided for the firm either by its affiliated company Phelps, James & Co. in Liverpool, or by the St Petersburg firm of Hills & Whishaw. The firm shipped Savannah cotton mainly to Liverpool to finance the purchase of Russian iron.¹⁸⁸ – G.G. & S.S. Howland's firm, which operated under different names in different fields and regions, had connections all over the world early in the 19th century, and was even claimed to be the leading firm in the country in trade with Latin America. Around 1830 two or three ships registered in Howlands' name visited the Baltic every year.¹⁸⁹

Until about 1800 Philadelphia was the biggest city in the United States and also of central importance in its trade. However, it became relatively less important after 1815, and on the eve of the Civil War the value of its foreign trade was less than during the Napoleonic Wars. Perhaps the most prominent merchant trading with St Petersburg was Stephen Girard (1750-1831), who was originally French and became resident in the city in 1776. He started his career in trade with the West Indies, and acquired his remarkable wealth at the beginning of the 19th century by "successfully manipulating the risky strategies of foreign trade".¹⁹⁰ Girard's major operations took place in China, India and Malaya, but also on the Baltic in some of the war years. Girard's ship *Voltaire*, according to her owner "one of the finest ships ever floated on the seas"¹⁹¹, visited St Petersburg in

¹⁸⁷ The Scots James Boorman and John Johnston established the firm. In 1828 the firm's name was changed to Boorman, Johnston & Co. Its successor was first Wood, Johnston & Burrit, and then Francis Burrit & Co.; Scoville 1863, 152. In 1832 the brig *Monument* (211 tons), registered in the firm's name, carried colonial produce to Stockholm and from there took 1800 shippounds iron; STA 1832 (2231/2866); CR 1832, NA T-195/3.

¹⁸⁸ E.g. Daniel James to William E. Dodge, 7 July 1835, Hill & Whishaw to Phelps, Dodge & Co., 19 July and 13 August 1835, NYPL, PDCP, Letters 1831-1835; see Kirchner 1975, 222; Lowitt 1954, 22.

¹⁸⁹ Hodas 1976, 4-5. The firm set up by the brothers Gardiner Greene and Samuel Shaw Howland, in 1816, used the name Howland & Aspinwall at least from 1837 on. The founder brothers retired from business in 1834. The name of the firm appears in consular returns in several different variations, probably not always even referring to the firm; see Scoville 1863, 302-309; Albion 1961, 246. Howland's vessels in the Baltic Sea in 1832 included the brig *Roanoke* (157 tons), the brig *Elbe* (323 tons) and the brig *Pantheon* (271 tons); STA 1832 (2068/2583, 1926/2507, 2290/3163); CR 1832, NA T-195/3. Other New York firms and merchants involved in Russian trade were, for example, John Jacob Astor, Aymar & Co., Bates & Co., Leroy, Bayard & Co., Davis Brooks, Day & Ogden, H. & W. Delafield, Hoffman, Bend & Co., L. & G. Griswold, Horner & Horner, E.H. Macy, J. B. Murray & Sons, Newbold & Cruft, N.H. Peck & Son, Shephard & Franklin, Sam Tisdale, Tucker & Carter, Wales & Co., and Nathan Willis; Kirchner 1975, 221-222; CR 1801-06, 1828-60, NA T-201/1-3, M-81/2-6, and T-195/2-4.

¹⁹⁰ Douglass 1971, 37; see Adams 1978, 7; Marzagalli 1998; Taylor 1951, 197; Nettels 1962, 228.

¹⁹¹ Girard to Bulkeley, Russell & Co., 10 November 1796, APS, GP, mf -series 2, reel 13 (printed in USR 1980, 308-309). Girard's trading partners in Hamburg were, for example, Barenberg, Gossler & Co. and Mahlen Hutchinson, and in Lisbon John Bulkeley & Co. In St Petersburg Girard transacted business with Bulkeley, Russell & Co., W.A. Cramp and Anthony Naht. The ship *Voltaire* visited St Petersburg under the command of Captain Ezra Powen at least in 1797-99 and 1804; Girard to Bulkeley,

1797, and after that at least one of his ships sailed to St Petersburg every year. He seems also to have planned to form a trading connection between the East and West Indies and Europe via American ports. London, though sometimes Hamburg or Lisbon, was usually the centre of operations of this kind. Girard was somewhat unlucky in his Baltic ventures after the Embargo, but in spite of this he had three ships in St Petersburg in 1810: the *Rousseau*, the *Montesquieu* and the *Helvetius*.¹⁹² The results were probably not unprofitable. In 1812 Girard began a vigorous expansion of his banking activities, partly using the resources gained from trade during the war years, and as Barings' partner he became an "enormously wealthy private banker".¹⁹³

After 1815 there were no other merchants in Philadelphia involved in trade with St Petersburg comparable to Girard. However, the firm of William Trotter, established in 1809, and its successor after 1817, Nathan Trotter & Co., purchased and traded considerable amounts of Russian iron and sheetings from time to time. John D. Lewis and Thomas Wright are known to have provided these commodities for the firm. Like Richardson of Boston and Phelps, Dodge & Co. of New York, Trotters also purchased a great part of their Russian iron in Liverpool and London.¹⁹⁴ Direct links between Baltimore and Russia hardly existed. In addition to British dry goods, Peabody, Riggs & Co. also purchased and traded in Russian commodities from time to time. In St Petersburg the firm had contact mostly with William Ropes and Hornby, Bayley & Co. In 1839 Ropes mentioned having done "joint business for three or four years"¹⁹⁵ with Peabody, but their connections were not put to very much use.

In the 1840s the Southern ports of Charleston, Savannah, New Orleans and Mobile became important export centres trading their cotton with Russia. Although considerable amounts of rice had also been carried from Charleston to the Baltic earlier on, it mainly ended up in Copenhagen and the German markets. Merchants and trading firms in the southern ports did not usually own the vessels that sailed to St Petersburg. STA shows altogether twenty-eight

Russell & Co., 10 November 1796, APS, GP, mf -series 2, reel 13 (printed in USR 1980, 308-309). The ship *Liberty* also made four voyages to St Petersburg at about the same time; STA 1801 (1380); STA 1803 (228/1046); STA 1805 (159/1050); STA 1806 (50/274); CR 1801-07, NA T-201/1.

¹⁹² Erving to the Secretary of State, 23 November 1811, NA M-41/2/12; HSP, LNP, Letters 1810-41; cf. McMaster 1918, 87-107,127; see Lingelbach 1914, 280-281.

¹⁹³ Livesay & Porter 1971, 68; see Adams 1978, 91; Douglass 1971,38. After the war Girard directed his trade more often to South America and less to St Petersburg; Kirchner 1975, 220-221; Brothers Cramer to John D. Bates, 15/22 July 1827, PM, JDB, vol. 1.

¹⁹⁴ E.g. HUBL, NTC, vol. T-3, T-4, TA-7, TA-8; Tooker 1955, passim. Other Philadelphia merchants dealing with Russian trade were, for example, William and Daniel Adgate, John A. Brown, Tench Coxe, Gillingham, Mitchell & Co., A. Pratt, Savage & Dugan, T.G. & R.S. Smith, Thomas & Haven, Whiting, Tibbits & Hoyt and Willing & Francis.

¹⁹⁵ William Ropes to Hardy Ropes, 31 May 1839, HUBL, RFP; see Hidy 1978, 20-21. Hidy referred to George Peabody (born 1795) originally from Essex, who traded in Baltimore 1815-37 and after that left to become a rival of Barings' in London banking circles; see Morison 1921, 218-219. Also the following merchants in Baltimore had contacts with Russia: Adams & Swift, John Donnell, Katz & Leupold, May & Brandt, William E. Mayhew & Co., G.H. & A. Newman, Robert Oliver, William Spears, Joseph Taylor & Son, and William Wilson & Sons.

vessels that had departed from Charleston sailing east from the Sound in 1821-25. Apparently all of them were from Massachusetts. None of the vessels sailed from St Petersburg to Charleston.¹⁹⁶ The situation did not change significantly during the following thirty years. In the year before the Crimean War (1853) and the year after it (1856) altogether thirty-three cotton vessels sailed to St Petersburg from the four above-mentioned ports. Only four of the vessels originated from the Southern ports, three from New York and the rest from Massachusetts or Maine. None of them reported in St Petersburg or Elsinore that they were returning to ports south of New York, but nineteen even went to British ports and six to Boston.¹⁹⁷ The shipping of cotton probably accelerated the separation between the functions of transportation and trading also in trade with Russia. It led to competition for cargoes between shipowners. The single-ship enterprises and other firms that operated only with tramp ships became the norm in trade with St Petersburg.

5.6 Competition and co-operation

Trading firms in St Petersburg, like most of those in America, operated as commission agents, and therefore the reliability of the trading partner was essential. Goods had to be consigned to the agent without it being known what they would sell for. Commission business was less risky than operating on one's own account, and it could be carried on with relatively little capital. It did not guarantee a fast route to riches, and a firm often got off to a slow start because it took time to build a reputation for reliability before many assignments came its way.¹⁹⁸

At least from the 1780s on, firms in St Petersburg competed for American customers. For example, Edward James Smith & Co. had strong competition for Champlins' business with Anthony Fr. Thiringk, who had taken care of American business at Smith & Co., but then broken away in 1787, although he announced that he wanted to maintain his earlier contacts.¹⁹⁹ William Cramp, Brothers Blandow and Bulkeley, Russell & Co. competed for Elias Hasket Derby's favour. When Bulkeley, Russell & Co. lost the competition to handle the cargo of the *Henry* to Brothers Blandow, the firm accused their rivals of bribing the vessel's captain.²⁰⁰ Accusations of this sort were commonplace, as the choice of trading partner in an unknown market was in practice left to a

¹⁹⁶ STA 1821-25. 20 of the vessels that sailed from Charleston to the Baltic Sea were from Boston, five from Salem and the others from Marblehead, Plymouth and Newburyport.

¹⁹⁷ CR 1853, 1856, NA M-81/5, and T-201/3.

¹⁹⁸ See e.g. Perkins 1975, 5; Baxter 1945, 301-302.

¹⁹⁹ Ryberg & Co. to Christopher Champlin, 25 March 1788, Edward James Smith to Christopher and George Champlin, 27 June 1788, Edward James Smith & Co. to Christopher and George Champlin, 11 July 1788, and Anthony Fr. Thiringk to Christopher and George Champlin, 28 July 1788, CRI 1915, 361-362, 373-374, 379-382.

²⁰⁰ Bulkeley, Russell & Co. to E. H. Derby, 20 June 1796, EI, DFP, vol. 11.

vessel's captain or supercargo. The cargo was often consigned to the captain to guarantee his freedom of action. In 1794 E.H. Derby instructed Joseph Moseley, the captain of the *Grand Turk*, only to "go to the firm that will make the greatest despatch".²⁰¹ The loose instructions and the letter of credit given for the captain's use left him complete freedom to choose a trading partner.

It was an open secret that the unofficial arrangements between the commander of the vessel and the St Petersburg firm were crucial for the choice of the trading partner, though the practice was not necessarily the ideal one for the owner of the cargo. In 1788 Gorham Parsons of Boston considered the practice understandable, but warned the captain of the *Reliance* Ignatius Webber that he would not pay him if he should take "any gift or benefit from the merchants whose hands you place your cargo in".²⁰²

It was more usual to use a supercargo in American trade with Russia than, for example, Anglo-American trade. The phenomenon can be partly explained by the triangular trade: many purchases and sales were involved, and the handling agents unfamiliar. On the other hand, the different commercial priorities also had an influence on the issue, since the captain of a vessel chartered for freight generally looked after the interests of the vessel's owner, while the supercargo served the interests of whoever chartered the vessel. At least in the early part of the period discussed, New England merchants often had a business associate or relative (often the same thing) as supercargo. Thus, for example, the Salem merchant John H. Andrews's son John P. Andrews sailed with his father's vessels in Cuba, the Baltic and the Mediterranean.²⁰³ It was normal for relatives to serve as commercial agents, which goes to show how the Massachusetts mercantile community became "pretty much of a closed corporation".²⁰⁴

Usually captains and supercargoes were trading firms' agents, but "special agents" were also sent to Russia. One of those was Josiah Birch, who was sent from New York to St Petersburg by Phelps, Dodge & Co. in 1845. He was responsible for buying iron both for New York and for Phelps, James & Co. in Liverpool.²⁰⁵ Sugar purchases in Cuba were risky, and so agents of this kind were often needed. For example Horace Gray sent Joshua Orne to Cuba in the autumn of 1825. His responsibility was to observe Martin, Knight & Co., the major partner of the Gray brothers in Havana, which was rumoured to be in financial difficulties.²⁰⁶

As firms in St Petersburg were in obvious competition for American customers, the Americans took advantage of the situation and provoked competitive bidding between them. Samuel Sanford of Boston, who started to

²⁰¹ Derby to Moseley, 18 January, and 6 June 1794, EI, DFP, vol. 3.

²⁰² Parsons to Webber, 9 June 1798, HUBL, EGPP.

²⁰³ EI, JHAP, vol.1/6 and vol. 2/7.

²⁰⁴ Porter 1937, vol. I, 97.

²⁰⁵ NYPL, PDCP, vol.11; Kirchner 1975, 223. The name "agent" was very loosely used: it could refer to representatives who looked after their employer's interests, partners, correspondents or captains and supercargoes; see Perkins 1975, 13.

²⁰⁶ Horace Gray to Josiah Orne, 27 September 1825, HUBL, HGP, vol.17, Shipbook (Horace Gray).

trade with Russia at the beginning of the 1820s, chose the most suitable partner by sending consignments to more than one company. He first transacted business with Stieglitz, and then had dealings with John D. Lewis and Thomson, Bonar & Co. Sanford sent sugar consignments to all three, and asked them to ship sheeting in payment. However, his tactics did not work, since irrespective of the sender the price of sheeting rose consignment after consignment. After a few years Sanford chose Stieglitz, and gave him freedom to decide on the return cargoes.²⁰⁷

Henry Gray was another who liked to change his trading partner in St Petersburg. In 1820 he transacted business with John Venning, but the next year with Thomas Wright & Co. In 1822 he returned to Venning, but Wright's turn came again in 1825.²⁰⁸ Samuel G. Gray and Francis A. Gray stopped sending their sugar consignments to Stieglitz & Co. in 1844, and changed over to Müller & Hauff, which inquiries had suggested was a reliable firm. The change was not successful. At least sales in St Petersburg did not go as Captain Samuel Fabens had wished, and he found the partners to be "*stupid as all Germans are when it suits their interests*".²⁰⁹ The next partner, John Thomas & Co., was dropped for selling sugar too cheaply. Grays later started to transact business with Coleman, Hutton & Co., "*though they like others undoubtedly require watching*".²¹⁰

Most American firms proceeded as Samuel and Horace Gray did: they received consignments from St Petersburg, but at the same time also imported Russian goods on their own account to be exchanged for Cuban sugar. On the other hand, some merchants, such as Nathan Trotter from Philadelphia, avoided commission trade. The best way to compete for consignments was to manage as liberal financing arrangements as possible in favour of the correspondent. The practice could be used in all cases, but it was particularly evident in the competition for shipments of Cuban sugar. British money often played a decisive role in this competition. Barings' credits to Boston merchants guaranteed that Stieglitz got the lion's share of Havana and Matanzas raw sugar.

One way to get the cargo of a vessel bound for St Petersburg into one's own hands was to invest in a big enough share in the cargo. William D. Lewis used this method when early in 1821 he travelled as his brother's agent to the trading centres of the East Coast. A rival was Alexander J. Smith, who visited the United States for the same reason, and tried to win customers for Brothers Cramer. In one case the younger Lewis gained the custom of the merchant Charles Blanchard, when he sent such a large consignment of Santo Domingo

²⁰⁷ HUBL, Samuel Sanford, Letterbook, 1818-25, especially Sanford to Lewis, 5 February and 25 July 1825, and Sanford to Thomson, Bonar & Co., 24 June 1825.

²⁰⁸ E.g. Gray to Martens Mosselman & Co., 12 September 1820, Gray to Captain Thomas Blackler, 2 April 1821, Gray to Captain Elliott Woodberry, in January 1822, and Gray to Joshua Bates, 14 September 1825, HUBL, HGP, vols. 16-17 Joseph Peabody did much the same, sending consignments of sugar to both Brothers Cramer and W. Wilson in the summer of 1827; Brothers Cramer to John D. Bates, 15/27 July 1827, PM, JDB, vol. 1.

²⁰⁹ Fabens to Samuel C. Gray and Francis A. Gray, 16 July 1845, EI, FP, Samuel A. Fabens, Letterbook 1842-53.

²¹⁰ EI, FP, Samuel A. Fabens, Letterbook 1842-53.

coffee to his brother on a vessel chartered by Blanchard that the main cargo was also put into his hands. Blanchard, who was regarded as a competent merchant, was expected to change from Wright's firm to Lewis' permanently. William Lewis also secured for his brother the custom of the brig *Hesper* through his own financing contribution. The vessel was actually bound for Copenhagen with a cargo of rum, but the owner wanted to invest the proceeds in as profitable a return cargo as possible, and William Lewis persuaded him that it could be found through John D. Lewis in St Petersburg. Several Bostonian supercargoes apparently agreed to take their cargo to Lewis on condition that he arranged a return cargo for the vessels leaving St Petersburg.²¹¹ Several other firms in St Petersburg used the same ploy.

The Americans seem often to have chosen their trading partners in St Petersburg following British merchants' recommendations. For example, the owner of the *Vonolancet*, Ruben Shapley, instructed the captain of the vessel, Ruben Randall, to carry naval stores from Portsmouth to London in the spring of 1800. The consignee of the cargo, Thomas Wilson & Co., was asked to name the best firm in St Petersburg for providing Russian manufactures. Wilson & Co. considered a firm in his family, Porter, Brown, Wilson & Co., the best, and London firm extended Shapley's credit to ensure that he would reach the same conclusion.²¹²

The better understanding of Russia the Europeans and above all the British possessed affected the Americans' chances in the competition for trade with St Petersburg. Moreover, the differences in economic structure between industrializing England and deeply agrarian Russia created more "natural" conditions for trade than the comparability that existed between the United States and Russia. All the same, a variety of American produce (tobacco, rice and cotton) was in demand in Russia, but they were, however, carried by the British. The question of how the Americans would achieve the status their commodities "entitled" them to in Russia was a central problem from the end of the 18th century until the Civil War. How could the role of the British in supplying American goods be cut out? From the North American point of view one problem was that trade with the Baltic and St Petersburg in particular was seasonal. It was possible to ship American cotton to Liverpool irrespective of the season, but it could only be shipped to St Petersburg during the summer. Except at times of crisis and over one or two customs disputes, British merchants and diplomatic representatives did not pay much attention to their American competitors. Merchant shipping between New England and St Petersburg was not experienced as a threat.

²¹¹ William D. Lewis to John D. Lewis, 13 March, 21 March, 4 April, 5 April, and 8 April 1821, HSP, LNP, Letters 1810-41.

²¹² Although Shapley also kept up his contact with Wilson & Co., he later, for example in 1809, directed the sugar carried by one of his vessels to Brothers Cramer, which had become popular among the Americans; Shapley to Randall, 17 March, 7 July 1800, and 1 June 1809, HUBL, WFP, vol. 4.

5.7 The need for information

St Petersburg was far removed from Boston not only in terms of communication but also commercial practice. The Russian language, Russian culture and the bureaucracy caused problems for foreigners, who thus required a more extensive information service than was usual elsewhere. Around 1840 five or six German newspapers concerning themselves with economic affairs were published in St Petersburg and Kronstadt, and there were also about five French periodicals and four English newspapers that provided commercial information. *Sanktpeterburgische Handelszeitung*, a leading economic newspaper of the metropolis and an official publication of the Department of Foreign Trade, was favoured by the diplomatic corps. The *Journal de St. Pétersbourg* was almost equally carefully followed. There were articles on the economics of the United States of America, but written on a rather general level and mainly based on German and British sources.²¹³ Several foreign firms had their own information leaflets published, which were sent to trading partners either as printed or with additional comments. The Americans often used leaflets published by Charles R. Lenartzen, but also those of Friedrich Winberg & Co., which the Germans favoured. They contained foreign trade statistics, shipping regulations, information about customs practices and duties, exchange rates and prices of import and export commodities. These information leaflets were considered so reliable that at least American and British consuls made direct use of them in their reports.

The Americans often lost their patience over difficulties in obtaining information in St Petersburg, and it was common even for ministers' despatches to be based on articles published in the city's German or English newspapers.²¹⁴ The Americans found it of the utmost difficulty to get precise information about commercial matters. According to the Secretary of Legation, John Randolph Clay, nobody seemed to possess it. On the other hand, he also remarked that "with a little tack and more bribery" it was easy to get from the city what one wanted.²¹⁵ Consul Hutton, for his part, had noticed that high-ranking titles and handsome uniforms were also of some help.²¹⁶ The language was also a constant problem, as few American merchants knew Russian. William Ropes, who travelled from Hamburg to St Petersburg by land in the winter of 1831, was surprised by how poorly English was understood in the Baltic ports, and how as a rule merchants spoke and wrote French everywhere.²¹⁷

²¹³ Kirchner 1975, 37,180; see Rabuzzi 1998, 180-182.

²¹⁴ E.g. Neil S. Brown to Marcy, 20 June 1853, NA M-35/15/33.

²¹⁵ Clay to Martin Van Buren, 7 October 1831, NA M-35/12; see also Clay to McLane, 16/28 February 1834, NA M-35/12.

²¹⁶ Hutton to Marcy, 17/29 November 1856, NA M-81/5.

²¹⁷ William Ropes to Hardy Ropes, 7 March 1831, and 12 April 1832, HUBL, RFP. John D. Lewis made his younger brother, who had come to assist him, study the language for a year outside St Petersburg shortly after his arrival; Saul 1974, 46-48.

News on foreign trade was published in abundance in the United States. It may be considered an indicator of the central role of foreign trade that a significant proportion of this news consisted of price trends, wholesale commodity prices and changes in customs duties sent from different parts of the world. Several newspapers regularly followed the prices in the most important cities of the East Coast, such as Boston, New York, Philadelphia, Baltimore and Charleston, and published lists of arriving and departing vessels. American publications specializing in trade with Russia did not exist, but at least three newspapers discussed related issues: Degrand's, Nile's Weekly Register and Hunt's Merchants' Magazine. The latter had most articles about Russian trade and economic life, but they were mostly based on West European sources.²¹⁸

The knowledge an American merchant possessed of the market as a whole was perhaps what was most essential to his decisions, but the rationale of the decisions was naturally based on prices, and on supply and demand. Regular information and as up-to-date as possible reduced the risks. However, information about Russian markets was not available regularly, and it was often out-of-date. The flow of information from the eastern end of the Baltic Sea to North America took three weeks at best in the summer, and several months in the winter. Communications were so unreliable that letters of any importance were sent as many as four times over.²¹⁹

At the end of the 18th century, viewed from St Petersburg, the export of Russian produce to the United States was at the heart of trade relations with America. Thus correspondents in St Petersburg sent detailed price information on their export goods ("the russgoods") to North America.²²⁰ However, information about the sales prospects for colonial goods was not sent in abundance. The situation changed during the Continental System, and firms in Boston, Salem and Providence started to get more price lists for sugar, coffee,

²¹⁸ See Smith & Cole 1969, 4; Kirchner 1975, 36,176. NWR often published foreign trade figures that did not necessarily have anything to do with the reality. Of course, they showed interest of one sort in trade with Russia; e.g. NWR 1821, vol. 21, 83.

²¹⁹ E.g. Dallas 1892, 52; HSP, LNP, Letters 1810-1841; Henry Lee to Stieglitz & Co., 9 December 1817, Porter 1937, vol. II, 1313-1314; Edward James Smith & Co. to Christopher and George Champlin, 23 June 1788, and 27 June 1788, CRI 1915, 372-373. The slowness of the flow of information from St Petersburg to the United States was a problem also for the Legation. James Buchanan considered it impossible to understand that at the beginning of June 1832 the legation had not received American newspapers since January – and those newspapers were dated August the previous year. Urgent diplomatic post, however, was brought within 40 days. Yet Buchanan was convinced that post of this sort was opened and read in Russia. At least John Randolph Clay considered the American captains the best messengers; Buchanan to Livingston 3 June, 22 June, and 2/14 September 1832, NA M-35/12/1,3,7; Clay to Van Buren, 19 October 1831, NA M-35/12/14.

²²⁰ For example Edward James Smith & Co. sent Christopher and George Champlins the following information on prices at the end of 1788 (MHS, WCRIC 1788, 372): "Clean Hemp stand upon Ro.23 1/2 and 23 per Berkovitz, Outshott Ro.23, and half clean Ro.22, 12 heads Novgorod flax Ro.30 per Berkovitz, Candle tallow Ro.29 to 30, and Soap Tallow Ro.27 to 28 Berkowitz, Sail Cloth from Ro.7 to Ro.12.30 Co. per piece, Drillings 18 to 18 1/2 Co. per arsheen, first Sorts Bristles Ro.12.85 Co., 2d Sort Ro. 2 3/4 per pd. Yellow Wax Ro.15 1/2 per pd, Tarred Cordage Ro. 2 3/4 per pd."

rice, dyewood and spices.²²¹ Only from the 1820s on was information of this kind sent regularly.²²² This is an indicator of how American-Russian trade was developing in its own right. It was no longer connected to Hamburg, Amsterdam or Copenhagen as at the turn of the century.²²³

The information on prices the St Petersburg firms sent to their American trading partners often consisted of printed “price currents”, corrected or supplemented by the sender. John D. Lewis sent this kind of list monthly at the beginning of the 1820s, and in the summertime even more often. His “sending list” contained up to 120 merchants or trading firms, 110 of them in the United States. He also used to send his business associates carefully itemized pro forma invoices that clearly showed the effect of changes in the exchange rates on the development of prices.²²⁴ Information as to prices, intended as a basis on which decisions to buy and sell could be made, was sometimes thoroughly out-of-date when it arrived. The prices for Russian hemp and iron probably held most steady, and information about them sent from St Petersburg in the autumn might still hold good in the next spring, provided that the goods had been purchased in advance at winter prices.

Considering the market information sent to the United States, one may well wonder why anyone engaged in such complicated, time consuming and risky business. The correspondence exchanged constantly discussed the bad trading conditions. If changes were to be expected, even worse times were usually predicted. It is understandable that new entrepreneurs, who painted bright prospects for the future in order to promote themselves, formed an exception. John D. Lewis’s trade correspondence in particular was cautious and often thoroughly pessimistic. At the beginning of 1822, for example, he sent several prohibitions against shipping sugar to St Petersburg, as the bulk of the previous year’s shipments had not sold:²²⁵

“Money is scarce. Failures taking place almost daily. Confidence destroyed and Business nearly at End. We have no capital in this place for speculative purposes. How then can cargoes of sugar be sold well? It is impossible. Next year the case may be different – not sooner, certainly.”

Viewing the situation from Boston, Havana or St Petersburg, the amounts to be shipped to the other side of the Atlantic during the shipping season were often more significant than their price. Horace Gray of Boston concluded in 1828 that excessive quantities of piece goods and sailcloth particularly would enter the American markets in the coming summer, as “most of the Russia voyages this

²²¹ E.g. Meyer & Brückner to Benjamin Shreve, undated memorandum of 1809 (probably composed by Consul Levett Harris), PM, BSP, vol. 3.

²²² E.g. Wright & Co.’s report on trade of St Petersburg in 1828; EI, James Dunlap Gillis Papers, vol.2.

²²³ In addition to Russian price information, Rainals’s firm from Copenhagen started to send reviews of the market for colonial produce also in other regions around the Baltic in the 1820s; e.g. Rainals, P. de Conick & Co. to John H. Andrews, 4 March 1823, EI, JHAP, vol. 1/2.

²²⁴ HSP, LNP, vol. 69.

²²⁵ Lewis to John H. Andrews, 3 February 1822, EI, JHAP, vol. 1/10.

year are made up by Russian firms and a number of small shippers". It also indicated that freight from St Petersburg would be cheap. Consequently Gray decided to change the instructions given to Captain Elliot Woodberry of the *James Maury*, who had already departed for Havana, telling him to buy "bulky goods" in St Petersburg, in other words hemp or flax tow, flax, wool, hemp, iron and quills, instead of manufactures.²²⁶

It seems that trading firms started to operate more actively in St Petersburg in the 1820s, and this had an influence on the decisions made in North America. This was probably caused by the competition between John D. Lewis, Stieglitz and Brothers Cramer. For example, in 1826 John D. Lewis ordered his brother in Philadelphia to sell all the wax and hides he possessed. Stieglitz had bought large quantities of those articles, and John D. Lewis was afraid that they would be shipped to Boston and New York during the next summer, which would result in a slump in prices.²²⁷ William Ropes, who was familiar with the markets of both New England and St Petersburg, also carefully watched the quantities of goods shipped to the American market. However, at least when investing his own money, he made his decisions on the basis of prices in St Petersburg, and the American price was a secondary matter.²²⁸

Decisions on sugar purchases in Boston and Havana were often made so clearly on the basis of how much was being shipped that the price of raw sugar in Cuba or St Petersburg seems not to have been critical. It was a feature of the competitiveness of the sugar triangle that the agents in Cuba often sent north information about vessels departing for St Petersburg. In Boston it had to be decided on the basis of these "Russian lists" whether enough raw sugar was already being carried to Russia to satisfy the demand for that summer. However, the problem of the observer in Havana was that it was very difficult for him to assess whether the competitors were loading cargoes for North America, West Europe or ultimately the Russian market. For a number of years at the beginning of the 1830s Edward C. Bates tried to solve this problem during the spring. During the most active loading time in April he sent his brother in Boston almost daily information about the vessels and amounts of sugar he supposed had left for Cowes or St Petersburg. On arriving in St Petersburg he sent corresponding lists of American vessels and their cargoes leaving Russia.²²⁹ Hill & Whishaw also sent information from St Petersburg to Phelps, Dodge & Co. in New York on how much iron had been loaded or where it was to be loaded for the New York market.²³⁰

The "Russian lists" that Bates used were also sent to St Petersburg. Already at the beginning of April 1821 William D. Lewis sent a list of 40 vessels

²²⁶ Gray to Woodberry, 29 February 1828, HUBL, HGP, vol. 17.

²²⁷ John D. Lewis to William D. Lewis, 15 January 1826, and in the winter of 1826 (no date), HSP, LNP, vol. 70.

²²⁸ E.g. William Ropes to Hardy Ropes, 22 September 1832, HUBL, RFP.

²²⁹ E.g. John D. Bates to Nathan Bridge, 24 June 1830, PM, JDB, vol. 1; Edward C. Bates to John D. Bates, 9 March, 6 April, 14 April 1832, letters of 14 April to 4 May 1833, and letters of 16/28 September to 23 October 1833, PM, JDB, vol. 16.

²³⁰ Hill & Whishaw to Phelps, Dodge & Co, 19 July 1835, NYPL, PDCP, Letters 1831-35.

known or rumoured to be taking on cargoes for St Petersburg in the United States, Cuba or Brazil.²³¹ The list proves remarkably accurate when it is compared with information in STA about the vessels that sailed to St Petersburg that year. Samuel A. Fabens would send similar lists in the middle of the 1840s from Havana to St Petersburg with captains he considered reliable.²³² Secrecy was characteristic of sugar dealing, but misinformation was not as a rule spread in the way typical of Indian trading operations. However, rivals were sometimes deceived over cotton shipments: the cargo was sometimes carried to St Petersburg and not to Liverpool, which was declared to be the port of destination.²³³

Composition of "Russian lists" was sensible in that prices in St Petersburg depended on the level of imports during the shipping season. Thus, for example, in September 1817 John D. Lewis did not give John H. Andrews the information he demanded on sugar sales in St Petersburg in the autumn, as "*You are as good judges in Salem as I can be here*". According to Lewis, the prices could not be estimated before the total amounts imported were known.²³⁴ Brothers Cramer also considered it difficult to predict the markets, unless information was received on how much sugar was purchased in advance for the Russian market from Havana.²³⁵ The fact that the markets in the Baltic were limited applied to other commodities apart from sugar. In the winter of 1803 Judah Paddock, the captain of Isaac Hicks's ship the *Thames*, reported being concerned that Providence merchants and William Gray had, like him, taken on rice for Copenhagen. The cargoes of several vessels could easily overload the markets of the Baltic Sea.²³⁶

Commercial and financial contacts made London possibly the best source of information on European trade and the Russian market. Its central position became all the more evident in times of war.²³⁷ Indeed there was sometimes even too much information at times of crisis. Joseph Lee, Jr. got the following advice when he was loading sugar for the St Petersburg market in Havana in the winter of 1812: "*Dont read the American papers if you find yourselves frighten'd or diverted your plans by any fear of war, with G.B.*"²³⁸ It is possible that often the merchants "were influenced by rumors, by trumped-up alarms, and by bullish

²³¹ William D. Lewis to John D. Lewis, 5 April 1821, HSP, LNP, Letters 1810-41.

²³² E.g. Samuel Fabens to Van Sassen & Co., 8 May 1845, EI, FP, Samuel A. Fabens, Letterbook 1842-54.

²³³ Saul 1991, 111, note 52; see Porter 1937, vol. I, 106-107.

²³⁴ Lewis to Samuel Endicott and John H. Andrews, 21 September 1817, EI, JHAP, vol. 1/6.

²³⁵ Brothers Cramer to Nathan Bridge & Co., 24 September/ 6 October 1826, PM, JDB, vol. 1.

²³⁶ Paddock to Hicks, 5 February 1803, NYHS, IHP, "Paddock".

²³⁷ For example, Brown, Benson & Ives relied on information received from Thomas Dickason & Co. of London; Brown to George Page, 22 January 1796, BUJCB, BIP, V-H27.

²³⁸ Thomas Lee, Jr. to Joseph Lee, Jr. and William Oliver, 26 February 1812, Porter 1937, vol. I, 727.

talk".²³⁹ The merchants trading with St Petersburg seem to be most sensitive to rumours about Russian customs changes, which often occurred. Usually the information was false, but for example in the spring of 1845, when sugar shipments were postponed in Havana due to rumours about Russian customs changes, the information received in advance proved truer than the Americans had ever dared fear.²⁴⁰

Quite often the agents in London and on the continent sent market information to Cowes for the use of the American captains.²⁴¹ Cowes became the habitual "port of disguise" for sugar ships from the 1820s on. It was reported as the port of destination in Havana, and the vessels could continue to anywhere in Europe from there. Elsinore was another point where intelligence was sought on Baltic trade. The function of the printed and hand-written "Sound lists" was the same as that of other similar lists: the competing vessels' intentions were assessed on the basis of their information as to what had been taken on in St Petersburg.²⁴² For example, Samuel Williams was often asked to send information to Elsinore. In 1816 Peter Lander, supercargo of Benjamin Pickman's ship *Eliza Ann* was advised to follow William's instructions as to his cargo of 398,000 lbs of sugar. Though Williams considered the prospects in the Baltic poor, and local agents in Hamburg and the Netherlands gave similar reports in their letters, Lander nonetheless decided to carry the cargo to St Petersburg.²⁴³ Elsinore was also often the first stop after a voyage of several weeks, and the post for the home country was left there with a Danish agent.²⁴⁴ Elsinore and, in the last resort, Copenhagen were also places where ships' documents were revised and amended for the Russian customs. For example the captains carrying cargoes to Lewis's received help of this type from Balfour, Ellah & Rainals.²⁴⁵

²³⁹ Cole & Smith 1969,31; see e.g. William D. Lewis to John D. Lewis, 5 April 1821, HSP, WDLP, Letters 1821-22.

²⁴⁰ Samuel A. Fabens to Robert Hooper, 30 April 1845, and Fabens to Samuel C. Gray and Francis A. Grey, 10 May 1845, EI, FP, Samuel A. Fabens, Letterbook 1842-54.

²⁴¹ For example, in 1801 Benjamin Pickman of Salem instructed Joseph Ropes, the captain of the ship *John*, to carry a cargo of pepper brought from Sumatra to Salem and on to Cowes; he was to receive further instructions from Samuel Williams there. The instructions probably required that the cargo should be carried to Rotterdam, as Ropes passed Elsinore in 1801 in ballast and reported that he was sailing from Rotterdam to St Petersburg; Pickman to Ropes, 3 March 1801, EI, BPP, vol. 3; STA 1801 (901/1592); see Bruchey 1956, 350.

²⁴² Firms in St Petersburg also used information from the "Sound Lists" in making their decisions; e.g. Edward James Smith & Co. to Christopher and George Champlin, 5 September 1788, CRI 1915, 390-391.

²⁴³ The decision was probably not the best possible one, as too much sugar had been carried to St Petersburg after the war. Lander had to spend the winter of in Russia and he had trouble with changes in prices and rates; Pickman et al. to Lander, 2 March 1816, Pickman to Williams 18 April 1816, Lander to Pickman, 24 June 1816; and 26 February 1817 (O.S.), EI, BPP, vol. 2; STA 1816 (699/1499).

²⁴⁴ E.g. Benjamin Shreve to his wife, 24 July 1830, PM, BSP, vol. 30.

²⁴⁵ Lewis's notice, 19 January 1826, HSP, LNP, vol. 70; see: Anthony Thirink to Christopher Champlin, 30 November 1787, CRI 1915, 346-347.

6 AMERICAN SHIPS AND SHIPPING IN THE RUSSIAN TRADE

6.1 Ships, brigs and barks¹

Many states that protested against restrictions on trade during the colonial era resorted themselves to rather strict controls in order to protect their shipping in the 1780s, and the United States adopted a similar policy in the 1790s. The arrangement was familiar in Europe, and the figures speak for themselves of the success of American protectionism: while in 1789 only 53 percent of tonnage entering American ports was domestic, in 1796 the figure was 94 percent. The same trend can be seen in foreign trade. While only 41 percent of foreign trade was carried by the country's own vessels in 1790, the rate was 90 percent in 1795.² In practice the situation remained unchanged until the end of the 1820s. According to David M. Williams, tonnage continued to increase during the post-Napoleonic period in a manner that can be described as "dramatic": the Americans superseded the British mercantile marine on the most important international trade route, the North Atlantic.³

Between 1789 and 1828 Congress enacted about fifty tariff or other laws which directly or indirectly aimed at protecting American shipping and shipbuilding. When republican mercantilism connected the questions of

¹ Gordon Jackson (1981, 129): a "basic problem of maritime history is that landlubbers will call everything that floats a ship with the refinement that those who wish it to be known that there are things other than ships call them all vessels".

² Legislation on tonnage (Tonnage Act of July 29, 1789) and imports were among the first regulations enacted during the new constitution, and they allowed, for example, a tariff reduction of 10 percent on goods imported on domestic vessels. Foreign tonnage was also charged considerably higher tonnage duties than the Americans: foreigners, 50 cents per ton and Americans, six cents per ton; see Crowley 1990, 347-52; Taylor 1951, 128; Johnson et al. 1915, vol. II, 16-17,296; Hutchins 1941, 249-250; Nettels 1962, 56; Bryant 1967, 115; McCoy 1980, 90, 136ff.

³ The British looked for a reason for this state of affairs in external factors: the structure of trans-Atlantic trade, the building costs of American vessels and the economical design of the vessels. The list was sometimes extended to include superior operating ability and lower running costs; Williams 1988, 67, 70, 72.

navigation and trade, the result was heavy import duties. However, after Congress approved the Reciprocity Act on 3rd March 1815, the protection of navigation was gradually abandoned to the principle of reciprocity, applied first of all to direct trade and after that to so-called third countries. Simplifying somewhat, the trend can be considered evidence of the belief that American shipping and shipbuilding would beat its rivals in international competition so long as free competition prevailed.⁴ For example Minister James Buchanan had incorporated the idea in his thinking when he started to negotiate a treaty of trade between Russia and the United States in the summer of 1832:⁵

"Give to American Navigation an open sea and equal advantages with that of other Nations, and the whole civilized world must now admit, that we can surpass every competition."

The point when the United States started to allow British vessels into its ports on the same terms as its own vessels, irrespective of their port of departure and cargo, after the British Navigation Laws were repealed in 1849, can be considered the final point of this development. The country of origin, whether of vessels or their cargoes, no longer mattered. The Americans could finally also sail to the British West Indies. In practice the dissolution of the regulations meant that in the 1850s virtually free international competition prevailed in shipping on the North Atlantic. However, coastal trade remained a vestige of mercantilist policy: it was reserved for the Americans even after the British, for example, had renounced their own similar restrictions in 1854.⁶

Protection of navigation and the European wars multiplied the American tonnage at the turn of the 19th century.⁷ Estimates of the size of different countries' mercantile marine vary with the mathematical method applied, but by any yardstick the size of the American mercantile marine increased rapidly

⁴ See Taylor 1951, 128-129; Hutchins 1941, 252-253; Setser 1937, 184-188; Kirchner 1975, 88; Nettels 1962, 242; Marvin 1916, 42.

⁵ Buchanan to Livingston, 12 June 1832, NA M-35/12/2.

⁶ Before the repeal of Navigation Acts, in the mid-1840s more than 40 percent of vessels entering British ports from north and west European ports were foreign owned. Only about 70 percent of the tonnage arriving at English ports trading between the United States and Britain were American; Palmer 1991, 306, 313.

⁷ Officially announced registered tonnage figures are significantly higher than the reality. "Ghost tonnage" which often appeared in the lists consisted of sunk, sold, seized and destroyed vessels. From time to time the statistics were cleared of this tonnage (in 1811 about 200,000 tons); see North 1960, 597-598. According to Hutchins (1941, 224-231), the size of the mercantile marine was about 120,000 gross tons in the 1780s, but in 1800 was already above 500,000 gross tons. According to North (1960, 595), gross registered tonnage averaged 355,000 tons in 1790-94, and in 1800-04 about 584,000 tons. At its peak in 1805-09 the figure was 736,000 tons, and then after the war (1815-19) it went down to 676,000 tons. If "ghost tonnage" is not discounted, the resulting figures, like those of Adams (1980, 723-724), are quite different: in 1790-94, 539,000 tons on average, and in the peak years 1804-07 as much as 1,165,000 tons on average. The tonnage for 1800 uncorrected totals 972,000 tons. According to Adams, an average of 110,000 tons was built per year, and in the peak year 1811 as much as 146,000 tons.

in the early part of the 19th century. Around 1860 Britain possessed 40 percent of world trade tonnage, and the United States 22 percent.⁸

At the beginning of the 19th century American maritime strength and the competitive capacity of its mercantile marine were based above all on low, though increasing, building costs.⁹ By contrast, the level of wages was higher than that of their competitors, but overall the running costs were cheaper than those of the Europeans sailing the Atlantic routes.¹⁰ Shipbuilding was a field strongly connected with the Russian trade, not least because before the Civil War almost all iron used at docks was imported, and Russia was one of the major suppliers of iron. The same applied to hemp, cordage and sailcloth. Russian products were “essential raw materials for American shipbuilding”¹¹ and attempts to replace them with domestic products did not succeed. Depending on the type of vessel, imported materials accounted for 15-40 percent of its cost, and shipbuilders considered the high customs duties on foreign materials to be the main pitfall in their line of business, since they counterbalanced the advantages gained from the availability of cheap oak and pine timber.

⁸ In 1800 the mercantile marine of the United States was calculated at 2546 thousand tons, and that of Britain 4659 thousand tons. In 1852 Russia’s mercantile marine was 173 thousand tons, of which 123 thousand tons was based in the Baltic Sea; Kirchner 1975, 82, 87. Ville (1993, 711) presents the increase in U.K.-registered tonnage at 250 percent between 1790 and 1850, from 1.38 million to 3.57 million tons. According to Hutchins (1941, 171-172), all kinds of American registered tonnage increased five times between 1830 and 1860. Thus, the mercantile marines of the U.S. and Britain were almost of equal size in about 1850: the American, 3.5 million gross tons and the British, 3.9 million gross tons; see Davies 1978, 176. Also Douglass (1971, 96) mentions that the American and British trade tonnage were of equal size in 1860. According to Palmer (1985, 90), in 1860 the U.K. merchant marine was 4.66 million net tons, and that in the U.S. 2.55 million net tons. Thus, the respective proportions of the world tonnage would be 35.1 percent 19.2 percent.

⁹ The rapid increase in building costs is shown in Adams (1980, 725) index. Taking costs in 1790 as 100, in 1797 they were already 190. Costs did not rise above that later on, and the average index of 1805-07 is 176.4; see Williams 1988, 72.

¹⁰ See Hutchins 1941, 171-172, 177, 200-202, 237; North 1968a, 953-954; Davison 1964, 7-8; Nettels 1962, 235; Scott 1953, 413-414; Dillard 1967, 230; Graham 1956, 75; Adams 1980, 726. The price of American merchant vessels was about 50-70 percent of European ones. At the end of the 1830s the building costs of the best American vessels were \$55 per ton on average, in New England from \$46 to \$57 and in England \$120 per ton; see Sager & Panting 1990, 68-69. According to Douglass’ (1971, 96) estimate, building brigs and ships in the United States cost about \$34 per ton, but in England, in the Netherlands and in France \$55-65 per ton. McKey (1961, 433) mentions the building costs of the ship *Mount Vernon* built for Derby in 1797 as \$12 per ton. In 1791 Tench Coxe estimated American building costs to be \$33-35 per ton and European costs to be \$55-60 per ton; Adams 1980, 724. North (1966, 49) calculates that new American tonnage sold at approximately \$60 per ton before the year 1815.

¹¹ Morison 1921, 294. By a calculation published in HMM in 1844 (vol. 11, 177), a 250-ton brig for Baltic trading required 18,000 lbs iron, 2000 lbs copper, 11,000 lbs cordage, 10,500 lbs chains and anchors, and 45 pieces sailcloth. As about 60,000 tons of new merchant vessels were built in the United States in 1845, the iron imported from St Petersburg would, in theory, be approximately sufficient for building the brigs of that year. It was calculated in 1834 in NWR (vol. 26) that building a 350-ton vessel required 31,400 lbs iron, 29,100 lbs cordage, 40 bolts sailduck and 20 bolts ravenduck.

One of the salient features of Atlantic trade in this period was that cargo rates increased abruptly around 1820 and then declined to their lowest level about thirty years later. The rates are estimated to have decreased by 0.88 percent per year; a change that to all appearances was at least partially caused by the improvement in the vessels' technical properties. The size and speed of the vessels increased as the number of sails was increased and reefing was introduced. Before the coming of the railways it was as cheap to carry goods 3000 miles over the Atlantic by water as to convey them 30 miles overland.¹²

Shipping earnings were the most important element in American shipping and foreign trade at the end of the 18th century and early in the 19th century. They had a greater impact on the balance of payments than any import article. It has been emphasized above that earnings rose during the European wars. Net freight earnings averaged \$11 million in 1790-95 and reached their peak in 1806-10, when the average stood at \$33.1 million. U.S. ships were earning at least \$50 a ton at the end of the 18th century. This income made imports possible on a massive scale. During the European wars shipping played a central role comparable to that of cotton after 1820. At the beginning of the 19th century shipping earnings were able to contribute a third of total international earnings, but after 1815 their contribution on the credit side never exceeded about 10 percent and this percentage was on the decline. Foreign tonnage started to gain ground in U.S. foreign trade after 1845. According to Douglass C. North's calculations, U.S. net shipping earnings at the beginning of the 19th century were left far behind the figures reached before 1815. Before 1835 they were below \$10 million, and reached their peak (\$13.7 million) in the five years before the Civil War.¹³ North calculates the earnings from ocean-going cargo trade as 20 percent of total earnings. The estimate is based on the idea that a quarter of trade tonnage carried traffic outside the United States.¹⁴

¹² Mokyr 1990, 129-130; Hutchins 1941, 121, 300-301; North 1965, 212-213; North 1966, 95-96; see Safford 1985, 74; Harley 1988, 851-876.

¹³ If the freight rate index of 1796-1800 is 100, the rate was only 50 before the wars of 1790-92, and 66 in 1802. In 1808-13 the index rose to 125, but dropped after the war (1815-19) to 60. Shipping earnings for the years 1790-1819 have to be estimated by calculating the earnings per ton for U.S. ships, as during the wars a great part of freight earnings were made by sailing outside the U.S. From 1820 on the North has calculated freight and shipping earnings at foreign carrying trade prices. The total earnings of American shipping have been calculated by adding together the earnings from exports and the foreign carrying trade. U.S. net shipping earning figures are worked out by deducting the freight earnings of foreign ships from the above-mentioned figures; North 1960, 576-577, 596-608; North 1966, 77; see North 1958.

¹⁴ Calculated according to the index (1830=100), freight earnings for different five-year periods do not vary significantly before the end of the 1850s. Earnings from the foreign carrying trade doubled from 1820-35 to 1851-60. The freight rate index (1830=100) was at its highest in 1815 (370). The other best individual freight earning years were 1820 (136), 1831 (131), 1840 (151) and 1843 (149), and the worst 1835 (56), 1850 (53) and 1857 (48). Despite the rise in American freight earnings, the overall trend was decreasing although around 1840 the figures were higher than those of about ten years earlier. The rates were at their lowest around 1850. Total earnings in 1820-25 were \$12.2 million on average, and in 1856-60 \$23.8 million. Earnings from imports increased at the same time from \$9.7 million to \$19.0 million.

Productivity increases in ocean transportation were substantial from the end of the 17th century to the beginning of the 20th century. North considers the middle of the 19th century a turning point, as many elements of uncertainty in navigation had been resolved by that time. Moreover, the size of the vessels increased significantly from the 1820s to the 1850s, and this meant decreasing costs per ton carried. Another development was that the speed of the vessels and the size of crew decreased in relation to the size of the vessel. Improved efficiency also resulted from the expansion and settling down of the markets: it meant that loading and unloading at ports took less time. Shipbuilding costs increased, even though the vessels were built simply for trading, since it was unnecessary to take into account the possibility that they would be turned into vessels of war to such a degree as earlier.¹⁵

The proportion of the national mercantile marine engaged in American foreign trade started to decrease in the 1830s, but it still remained at a level of about 70 percent in the year preceding the Civil War.¹⁶ The British share of the remainder was more than 80 percent at the end of the 1850s, and the rest was mainly German, French and Dutch tonnage. To some extent the change, which can be considered unfavourable, can be blamed on the policy of reciprocity. However, this does not alter the fact that, for one reason or another, the competitiveness of the American shipbuilding industry and mercantile marine started to decline. The gradual transition from sail to steam started in the middle of the century, but wooden shipbuilding remained an important branch of industry in North America until the 1880s. Steam power was not yet considered a significant element in Atlantic shipping, but a "peripheral novelty".¹⁷

American trading vessels were not highly specialized before cotton was carried in large quantities, and most vessels were suitable for all sorts of maritime traffic. At the beginning of the 19th century, however, the dead-weight capacity of American ocean-going vessels was smaller than that of the British. One reason may be the close alliance between trading and shipping interests and the fact that merchant shipping was for long dominated by the business needs of small-scale merchants. Small vessels also involved fewer and smaller risks. William Gray, who probably traded most extensively in the Baltic, owned 113 vessels before 1815, but only ten of them bigger than 300 tons. In general, the vessels were rarely bigger than 400 tons, and their size grew only in the 1830s with the start of competition to carry cotton and also trade to California. The average tonnage of vessels tripled from the end of the 18th century to the Civil War. This change was linked with the differentiation between trading and transportation which occurred over the same period.¹⁸

¹⁵ North 1965, 218-221, 233.

¹⁶ See Appendix, table 16.

¹⁷ Williams 1988, 77; see Dillard 1967, 229; Harley 1973, 372-389; Safford 1985, 53; Johnson et al. 1915, vol. II, 296; Marvin 1916, 182. The proportion of foreign tonnage increased from 100,000 tons to almost 2.5 million tons relatively steadily from the end of the 1820s to the 1850s; Commerce and Navigation, 1821-60; see Sager & Panting 1990, 87-98.

¹⁸ See e.g. Hutchins 1941, 173-175, 210, 290; Morison 1921, 97; Sager & Panting 1990, 52-53; Appendix, table 14.

In the 1850s American shipbuilders produced about twice as many vessels (about 1100) as in the 1820s (about 580), but the output in terms of tonnage quadrupled as the size of the vessels doubled.¹⁹ The increase in the size of vessels was especially evident in the case of the Baltic.²⁰ The average size of a vessel that passed through the Sound was about 200 tons at the turn of the century, increasing to 300 tons at the end of the 1830s and ending up at almost 700 tons at the end of the 1850s.²¹ The size of the vessels almost quadrupled in half a century. Although the number of vessels sailing to St Petersburg dropped by about 40 percent in the same period, the carrying capacity doubled. Because of the methods of calculation, tonnage figures do not always give a true idea of a vessel's capacity, since the load capacity of vessels of the same measured tonnage sometimes varied significantly.²² In practice a vessel's size was often calculated in terms of how many boxes of raw sugar or how many bales of cotton it could carry. At least some vessels are known to have been built specifically for Russian trade, but there is little record of any possible special characteristics.²³

American cargo vessels sailing the Atlantic were generally claimed to be strong and durable. They were rather dull sailors especially to windward, although they required large amount of canvas to drive them. It may be that until the 1830s cargo-carrying capacity was considered more important than speed. According to John G. B. Hutchins, a typical American ocean-going vessel was a deep, heavy-burdened, full-rigged ship, which had three masts and

¹⁹ See Appendix, tables 14 and 15; Albion 1961, 406-407. – The average size of the vessels built in the 1820s was 150 tons, and in the 1850s 340 tons. The last figure also includes steam tonnage for foreign trade, which was about a quarter of the total tonnage built, and was mainly registered in New York. The increase is almost fourfold when the average production figures for shipbuilding are compared: 96,500 tons and 438,000 tons.

²⁰ Vessels visiting the Baltic Sea at the turn of the century were apparently somewhat bigger than average American ocean liners. Later the tonnage of the ships passing the Sound was approximately equivalent to the output of two New England shipbuilding centres, Kennebunk and Portsmouth; see Hutchins 1941, 211-212, 289-290; North 1968a, 958-959; Appendix, tables 14-15.

²¹ The average burthen of the vessels that passed through the Sound in 1830-31 (26, 159 altogether) was only 137 tons. The Americans had clearly the biggest vessels (331 altogether) with an average of 243 tons. The burthen of the British vessels (9046 altogether) was only 169 tons. The Dutch were closest to the Americans (228 tons). The smallest vessels were from the Baltic Sea region: Denmark (1439 vessels – 70 tons, Sweden-Norway 5094 vessels – 131 tons). Neither the French (141 tons) nor the Portuguese (171 tons) vessels were big. 829 Russian vessels passed through the Sound, and their average burthen was 165 tons; Report of Britain's consul in Elsinore, Francis McGregor, 5 July 1832, PRO, FO 22/110; cf. Appendix, table 22.

²² Ville 1989, 66-67, 77. Up to the Civil War, the method of calculation defined in the Tonnage Act (1773) was in use in the United States. The tonnage figure was a "measured tonnage" which was calculated upon the overall dimensions of vessels. Tonnage meant vessels' capacity in tons per forty cubic feet. Registered tons were bad indicators of carrying capacity, and shippers did not usually use them when estimating freight costs; see Morison 1921, 14; Hutchins 1941, 217, 290; Graham 1956, 78; Cuenca Esteban 1984, 53; Albion 1961, 308.

²³ E.g. William D. Lewis to John D. Lewis, 9 and 25 May 1821, HSP, LNP, Letters 1810-1841; see Ville 1989, 68-69.

usually two decks.²⁴ These “aristocrats of merchant marine” were the most widely used vessels on the Baltic throughout the period discussed. Especially in the 1830s two-masted square-rigged brigs became their competitors. The dockyards of Maine almost had a monopoly of their construction, and they were considered improved, smaller versions of ships since they had lower running costs, and were more suitable for narrow channels and shallow ports.²⁵ The American Minister to St Petersburg William Wilkins attributed the fact that his fellow countrymen gained the dominant position in Cuban sugar freight to the advantages of the sailing brig and the outstanding proficiency of American sailors.²⁶ Ten years later at least the first former part of his explanation was out-of-date, since barks took over the Havana-St Petersburg route and American brigs almost totally vanished from the Baltic Sea.

The most common type of vessel used by the U.S. merchant marine was the schooner, built in the largest numbers around the period in question.²⁷ Three-mast ships and barks were built in increasing numbers up to the middle of the 1850s, but the number of brigs remained almost the same until that time. Maine became the leading shipbuilding region of the United States in the middle of the 1830s. More than 60 percent of all brigs and almost 50 percent of all ships and barks were built there between 1836 and 1860. Excluding steam vessels, 28 percent of all the country’s vessels were built in Maine in the years in question, while the respective share of Massachusetts was 14 percent, and that of New York 18 percent.²⁸

²⁴ A very broad definition of a ship (275-350 tons) is a vessel that had three masts, at least two of them having square sails. Ships of the smaller class were often re-rigged as barks, and, on the other hand, a bark was in several classifications considered a full-rigged ship. A bark was usually a three-masted vessel with square sails on its foremast and main mast, and a gaff sail and topsail on its aftermast. Two-mast, square-sail brigs (150-250 tons) were a type in between ships and schooners (75-150 tons), and it was the most common type of vessel in foreign trade. However, American schooners on the Baltic Sea were the exception after the first years of the 19th century; see Hutchins 1941, 211, 290; Albion 1961, 305-308.

²⁵ A brig of about 250 tons was considered the most serviceable for general use. Its building costs were from \$15,000 to \$20,000 and it had a lifetime of about twenty years; see Hutchins 1941, 221; Albion-Pope 1942, 19; Rowe 1948, 107-108.

²⁶ Wilkins to Forsyth, 1 September 1835 (enclosure: Wilkins to Prince Lieven, 20 August 1835), NA M-35/13/10. G.M. Hutton, vice-consul in St Petersburg, regarded the speed of American vessels, which was gained “by the many improvements which economize time and hand-labour”, as an explanation for their competitive capacity; Hutton to Cass, 29/11 May 1857, NA M-81/5.

²⁷ Only a few schooners visited the Baltic Sea. The smallest vessel east of the Sound in the consular reports was the schooner *Dover* (67 tons), owned by E. Stanwood of Gloucester, in 1805-06. The following vessels, which visited St Petersburg in 1801, were also of a similar scale: Sweet & Parley’s (of Boston) schooner *John* (73 tons), which sailed the route Porto-St Petersburg-Boston and Samuel Hooper’s (of Salem) schooner *Betsey* (70 tons), which sailed the route Marblehead-Copenhagen-St Petersburg-Salem; STA 1805 (1339/1586); STA 1806 (278/353); STA 1801 (775/1591, 433/1371); CR 1801, 1805-06, NA T-201/1; see Appendix, table 15.

²⁸ Appendix, tables 14-15. Massachusetts built 11 percent of brigs in 1836-60 (2293), and New York 5 percent. Their proportion of ships and barks was 25 percent and 10 percent, respectively. Boston built 62 percent of tonnage in the state of Massachusetts, and Newburyport 10 percent, while New York City built 93 percent of the total for New York state; Albion 1961, 406-407.

TABLE 8 Description of American vessels passing through the Sound in 1792-1860.

Years	Ships			Brigs			Barks			Schooners			Total	
	Tons (average)	Number of ships	Tons (average)	Number of brigs	Tons (average)	Number of barks	Tons (average)	Number of schs.	Tons (average)	Number of vessels	Tons (average)	Number		
1792-93	229	16	143	23	168	2	-	-	187	41				
1801-04	247	161	152	114	-	-	100	32	196	307				
1805-09	262	181	162	114	196	6	105	25	214	326				
1830-35	337	83	231	117	196	32	181	1	264	233				
1836-40	356	127	204	95	294	66	120	1	301	289				
1841-45	396	126	242	38	301	94	-	-	339	258				
1846-50	437	77	255	25	327	128	-	-	356	230				
1851-53	554	63	295	6	355	68	-	-	444	137				
1856-60	821	121	426	5	427	70	-	-	676	196				

Notes: Data for the years 1808, 1831 and 1833 is lacking. The data for the years 1792-1809 includes all vessels that sailed to the Baltic Sea through the Sound. Data for the years 1830 and 1832 covers all vessels sailing to Copenhagen and St Petersburg as well as only to St Petersburg. Data for the years 1834-60 includes vessels that visited St Petersburg.

Sources: CR, NA T-201/1, T-195/3, and M-81/3-6.

The biggest and best vessels produced in New England dockyards at the end of the 18th century were intended for sailing to the East Indies, but attempts were made to use some big vessels also in trade with St Petersburg. The ship *Grand Turk* (564 tons), which Elias Hasket Derby had built in 1791, was estimated to be capable of carrying a cargo of 800 tons from Russia, provided that the 180 tons of iron to be included in the weight was loaded in the right way for ballast. The vessel required a crew of 30 sailors while most of the vessels on the Baltic had only about ten sailors. Vessels of such a size did not become regular visitors to the Baltic. Derby's vessel, "Salem's Great Ship", was sold to New York in 1795, as it tied up too much money for a single venture. The owner declared that the ship was "much too large for our Port & the method of our Trade".²⁹ In another context Gray stated of the vessel, "...it is the very best ship that ever I built, but it is too large for Me to manage with ease to myself".³⁰ Consular reports reveal that the Baltic did not have long to wait for a vessel of equal size: Brown & Ives' *Ann & Hope*, which sailed in May 1803 from Amsterdam to St Petersburg and later to New York, was a ship of 550 tons.³¹

Great American ships returned to the Baltic Sea in the 1840s. The first of these was the ship *St. Petersburg* (814 tons), owned by Enoch Train and Captain Richard Trask (and probably also William Ropes), which carried 241,000 lbs cotton and more than 700,000 lbs logwood from Mobile via Liverpool to Stieglitz & Co. in summer 1841. The vessel was claimed to be the biggest merchant vessel ever to have visited St Petersburg and to have been built for the export of cotton to Russia in particular.³² It was followed by, for example, the

²⁹ Derby to Moseley, 18 January 1794, and 6 June 1794, EI, DFP, vol. 3; Morison 1921, 96-97; Peabody 1926, 150-151; Fairburn 1945, vol. I, 528. The building costs of the vessel were calculated at \$30,000, but Edward Gould, Derby's agent in New York, sold it for only \$22,000. According to the agent, there was no other fault in the vessel but its size: "the ship is rather too large for any trade except with India". Marvin (1916, 213-314) probably refers to this vessel when he writes about the success of the ship *Grand Turk* as a privateer in the war of 1812. After the war, the vessel was sold to William Gray; see McKey 1961, 299, 383, 426-427.

³⁰ STA 1803 (710/1636); CR 1803, NA T-201/1. The consular records of the first years of the 19th century report 14 ships of more than 350 tons that visited St Petersburg before the Embargo. Among them were Isaac Hicks & Co.'s ship *Thames* (399 tons), which was on the Baltic Sea in 1804-05, and Asa Clapp's ship *Edward & Charles* (389 tons), that sailed in 1805-07 from St Petersburg to her home port in Portland; STA 1803 (1219/2045); STA 1804 (485/1016); STA 1805 (690/1655); STA 1806 (115/322); CR 1804-1808, NA T-201/1.

³¹ Derby to Edward Gould, 19 January 1795, EI, DFP, vol. 11.

³² The vessel had carried 1.5 million lbs cotton to Liverpool before she arrived in St Petersburg, and this was reported to be the greatest amount one vessel had carried by that time. The vessel was offered to the Russian government for 90,000 silver roubles, but no agreement was made; Gibson to Webster 22 August/3 September 1841, NA M-81/4/41; STA 1841 (1631/2580); Kirchner 1975, 89; Morison 1921, 296; cf. Saul 1991, 130, and note 92. The owner of the vessel, Enoch Train, was strongly involved in the sugar business; at least six of his vessels carried raw sugar from Havana to Europe in 1840; Trist to Forsyth 15 September 1840, NA T-20/15. According to Marvin (1916, 227), Enoch Train established a packet line from Boston to Liverpool in 1844, which competed against the Cunard Company. The ship *St Petersburg* was one of the line's four great sailing vessels. It was built at Medford by Waterman & Evell. Train's line managed to compete with Cunard's, which departed from New York, "for a dozen or more years". According to Albion (1961, 359-360),

ship *Arcole* of New York (662 tons), that carried more than 1700 bales (850,000 lbs) cotton from Apalachicola to Van Sassen in St Petersburg in summer 1848. Her return cargo contained junk, hemp, hemp yarn, and bristles. Originally, the vessel with its passenger accommodation for 30 people was intended for packet traffic between Marseilles and New York.³³

The dramatic climax of the American sailing ship period came with the era of the great clippers and their crossings to Russia played their part. The speed of the clippers was excellent, but the cargo space did not increase in proportion to building and running costs.³⁴ According to Jeffrey J. Safford's exaggerated characterization, the clippers "*symbolized the triumphant genius of American shipping and shipbuilding and perhaps as well as the emotional psyche of the nation itself – frenetic energy and industry, brute strength, great size, expansion and speed*".³⁵ American observers in St Petersburg spoke in similarly high-flown terms in the 1850s. For example Minister Seymour considered Maine-built clippers that arrived in Kronstadt the best vessels ever sailed on Russian waters.³⁶ The biggest vessel engaged in St Petersburg traffic before the Civil War was the ship *Golden Eagle* of Kennebunk (1273 tons), which was built at the Titcomb yards in 1852 and sailed the following year from New Orleans to St Petersburg carrying 5090 bales, or 2.3 million lbs, cotton. After the Crimean War she was accompanied by several cotton freighters of almost equal size, and in 1857 four other vessels of about 1200 tons visited St Petersburg.³⁷

Enoch Train was, in fact, a packet operator and the original owner of possibly the most famous American clipper, *Flying Cloud* (1782 tons), which was built at East Boston. Train sold the clipper for \$80,000 to Grinnell, Minturn & Co. in New York "to his eternal regret".

³³ PM, Fettyplace Journal (Ship Peterhoff); STA 1848 (392/658); CR 1848, NA M-81/5, and T-201/2.

³⁴ Building a full rigged clipper cost almost \$100 per ton, which is double the cost of the vessels of the 1820s. Due to the great sail area, twice the crew was needed by comparison with vessels of 300-400 tons; Douglass 1971, 97.

³⁵ Safford 1985, 53.

³⁶ Seymour to Marcy, 28 May/9 June and 12/24 July 1856, NA M-35/17/78, 81.

³⁷ CR 1853-60, NA M-81/5-6; Saul 1991, 182; Rowe 1948,123. The American vessels on the major cotton routes between the American South and Liverpool were 200-400 tons in the 1830s, but in the 1850s of any size between 500 and 1500 tons. They were significantly larger than their British competitors, and at least some of them were exclusively designed for cotton-carrying; Williams 1979, 322.

TABLE 9 Description of American vessels carrying raw sugar from Cuba to St Petersburg, 1830-1853.

	1830	1835	1840	1844	1850	1853
<i>Number of vessels</i>						
ships	14	13	18	23	8	5
brigs	23	8	13	4	1	1
barks	1	3	8	23	23	9
<i>Total</i>	28	24	39	50	32	15
<i>Burden (tons, average)</i>						
ships	306	347	377	381	403	457
brigs	254	214	249	233	295	300
barks	298	316	295	309	365	378
<i>Total</i>	281	299	318	336	371	399
<i>Cargo / vessel (tons)</i>						
ships	418	503	514	529	558	553
brigs	320	278	294	322	525	550
barks	381	489	424	414	492	492
<i>Total</i>	368	426	424	460	509	517
<i>Cargo / burden</i>						
ships	1.37	1.45	1.36	1.39	1.34	1.21
brigs	1.26	1.20	1.18	1.38	1.78	1.83
barks	1.28	1.55	1.44	1.34	1.35	1.30
<i>Total</i>	1.31	1.42	1.33	1.33	1.37	1.30

Note: The table includes only vessels that sailed directly from Cuba to St Petersburg.
Sources: CR, NA T-195, M-81/3-6; see Appendix, table 25.

Consul Hutton considered the most suitable vessel for trade to St Petersburg a vessel of about 600 tons, which was shaped like a clipper but bark-rigged. Its running costs were the cheapest. The arrival of the great cotton ships did not mean the total disappearance of small vessels from the routes between North America and St Petersburg. For example the New York bark *Azoff* (295 tons) and Ropes's bark *Sarah Bryant* (356 tons) carried cotton in 1859.³⁸ Large clippers could also cause trouble on occasion: the time gained by a rapid crossing could be wiped out by delays loading and unloading major vessels in Kronstadt. The clippers were simply too big: they were difficult to handle in harbour and they were too big for finding a suitable cargo to England.³⁹

Trade in cotton had a profound effect on American merchant shipping. In 1852, for example, almost half of the registered tonnage was estimated as being involved in carrying cotton, and the predominance of cotton led to changes in the size and construction of vessels. Whereas about 900 lbs cotton was carried per ton

³⁸ CR 1859, NA M-81/6. Bryant (1967, 274) claims that only 256 of the 2656 vessels built at American docks were "clipper-built".

³⁹ Hutton to Cass, 6 July 1857, NA M-81/5; see Seymour to Marcy, 28 May/9 June, and 12/24 July 1856, NA M- 35/17/78, 81; Saul 1991, 113.

in 1810, the amount increased in the 1850s to about 2000 lbs/ton.⁴⁰ The change can also be seen clearly in sailings to Russia. In 1845-46 ten vessels (average size 472 tons) carrying only cotton, apart from ballast, sailed from southern U.S. ports to St Petersburg. They carried 1460 lbs per ton. In 1859 there were already 31 such vessels (average size 779 tons), and according to the St Petersburg consul's shipping lists, they carried 2560 lbs per ton on average.⁴¹ The increase in the size of the vessels and their carrying capacity applied, above all, to the trade in cotton. Meanwhile the changes affecting the bulk of American cargo trading with Russia, i.e., carrying Cuban sugar, were much slighter.⁴²

The amount that could be carried and what it was worth depended of course on the space taken up by a particular type of cargo. Weight for boxes of raw sugar and bales of cotton required quite different amounts of space. For example, the ship *Geneva* (458 tons), built in 1838 and owned by merchants in New York and Marblehead, which sailed from Cuba to St Petersburg in 1843-44, could at most carry something approaching 1.5 million lbs (650 tons) of sugar, but only 650,000 lbs (290 tons) of cotton.⁴³ The bark *Hesper* (391 tons), built for local merchants in Newburyport in 1851, carried 574 tons of sugar on its first long voyage from Havana to St Petersburg in the summer of 1851, but the captain considered it a dangerously excessive amount.⁴⁴ For all types of vessel, the freighters sailing between Cuba and St Petersburg could manage 1.3 – 1.4 tons of raw sugar per dead-weight ton of the vessel, a rate which remained almost constant through the early part of the 19th century.⁴⁵

The Russian mercantile marine and its competitive capacity have not gained excellent notions in research of maritime history.⁴⁶ Despite (or because of) that, there was great interest in St Petersburg in the products of American shipbuilding, and the Americans considered the Russians, especially the Russian government, potential buyers of their ships. The first American offer discussed at ministerial level was probably Robert Fulton's proposal presented

⁴⁰ Hutchins 1941, 246-247, 265. The carrying prices of cotton from New Orleans and New York to Europe decreased abruptly at the same time. As cotton needed significantly more space than import goods, the carrying prices of the latter decreased to an extremely low level. It was almost impossible to participate in this competition with foreign vessels, especially as American coastal traffic was reserved for domestic vessels only; see North 1966, 126.

⁴¹ CR 1845-46, 1859, NA M-81/4, 6. A bale was taken as weighing 480 lbs.

⁴² In 1830 the average size of vessels that sailed directly from Cuba to the Sound was 281 tons, and of those that sailed from Cuba to St Petersburg it was 371 tons in 1850. The vessels carried an average of 368 tons of sugar in 1830, and 509 tons in 1850; CR 1830, 1850, NA T-195/3, M-81/5.

⁴³ Thomas Hale to Eben Hale, 11 September 1838, PM, HP, vol. 5; STA 1843 (2806/3841); STA 1844 (667/1862).

⁴⁴ Thomas Pritchard to John Cushing, 21 April 1853, 4 October, 1853, PM, Thomas Pritchard Letterbook; Ship Registers of the District of Newburyport, Massachusetts, 1789-1870; CR 1853, NA M-81/5.

⁴⁵ Cf. Ville 1989, 77-79; Cuenca Esteban 1984, 56. Carrying prices were defined on the basis of the cargo ton: 2240 lbs of, for example, metals, but also logwood and fustic, was calculated as a ton. A cargo ton was also taken as, for example, 1830 lbs (net) of coffee in bags or 1600 lbs (net) coffee in casks; HMM 1841, vol. 5, 81.

⁴⁶ See Kirchner 1975, 90-91.

by John Q. Adams to build steamboats for traffic between Kronstadt and St Petersburg.⁴⁷ Almost simultaneously there was unchallenged proof of the excellence of American shipbuilding with the appearance of the *Savannah*, a regular full-rigged ship with a 380-ton hull, which is considered the first steamship to have crossed the Atlantic. It was shown in Copenhagen, Stockholm and St Petersburg in 1819. Minister Campbell considered the visit to St Petersburg “a triumph of American seamanship”, and praised the captain’s “skill and enterprise as well as patriotism”.⁴⁸

In 1830 the steam corvette *United States* (675 tons) sailed from Bordeaux to St Petersburg under the command of Captain John Wilson of New York. The Elsinore consul reported its owner to be Josiah Baker. According to Normal E. Saul, the builder of the vessel was the most famous naval architect of those days, Henry Eckford. Though apparently offered to the Russian government, since Consul Gibson reported a deal as having been made, the vessel seems to have ended up in somewhere quite different, i.e., in the Ottoman Empire.⁴⁹

One deal that did come to fruition concerned the steam corvette *Kensington*, which the Russian government purchased in New York for \$300–400,000. After various incidents the vessel ended up as the flagship of the tsar’s Baltic fleet in 1831.⁵⁰ The purchase of the steam frigate *Kamchatka* was even more large-scale. The vessel arrived in St Petersburg in the autumn of 1841, and though according to U.S. Minister Todd the British disparaged it as an expensive ship and poor sailor, he “felt no little pride in her as a specimen of American genius”.⁵¹ Collaborative enterprises begun in the 1850s were stopped by the Crimean War, but in July 1859 the Russian navy in Kronstadt acquired *General-Admiral*, a steam frigate with a displacement of 7000 tons, built in New York by William H. Webb.⁵²

⁴⁷ Fulton’s licence was transferred to the Scottish -born Charles Baird, who started a steamboat service between Kronstadt and St Petersburg in November 1815; Saul 1991, 69-70,132; see USR 1980, 643, 719, 887-889.

⁴⁸ Campbell to John Q. Adams, 25 September 1819, NA M-35/6; see Saul 1991, 89-90; Kirchner 1975, 90; Davies 1978, 137; Marvin 1916, 222. The vessel’s voyage from Savannah to Liverpool took 27 days, during which the steam engine was used for 80 hours. The engines were used to a considerably greater extent in the month’s cruise on the Baltic Sea; Albion 1961, 313-314.

⁴⁹ Gibson to Van Buren, 4/16 August 1830, M-81/2; STA 1830 (383); CR 1830, T-201/1; Saul 1991, 132.

⁵⁰ Saul 1991,116. According to Minister George M. Dallas, the frigate *USS Independence*, which visited St Petersburg in the summer of 1837, increased the fame of American shipbuilding in Russia. The vessel carried Dallas, who liked impressive gestures, to his posting. Tsar Nicholas, Navy Minister, Prince Aleksandr Menshikov, and the Minister of Foreign Affairs, Count Nesselrode, visited the vessel. According to Dallas, both the frigate and its crew’s proficiency deeply impressed the Russians; Dallas to Forsyth, 2 August 1837, NA M-35/13/5; Saul 1991, 131; Dallas 1892, 8.

⁵¹ Todd to Webster, 6/18 June 1842, NA M-35/14/17. The construction of the ship was widely noted also in the United States. It was claimed to be the biggest vessel ever built there, and its displacement reached 2468 tons and building costs \$450,000; Saul 1991, 133-134.

⁵² Albion (1961, 310) also mentions the screw warship *Japanese* sold to the Russian navy.

6.2 Captains and crews

The shipowner-merchants of New England were the dominant entrepreneurs in U.S. trade with Russia, but practical business dealings and even major decisions were very often left to the captains and supercargoes. The masters of the vessels played a central role and commercial success depended very much upon them: they chose, hired and directed the crew, and were in charge of the vessel's sailing condition, and the loading and unloading of cargo. The captain's role was all the more important the more distant the markets involved. Other places comparable to St Petersburg in this respect were, for example, ports in India, the Mediterranean and South America: they were all relatively unknown markets with few permanent trading contacts. In St Petersburg, the role of the ships' officers was central also because trade with Russia was connected first to trade with the Mediterranean and later the West Indies. Business transactions often carried out in several different faraway ports on the same voyage created situations that were impossible to decide about in advance in Salem or Boston. The captains' role was especially crucial during the Napoleonic Wars due to the constantly changing market situations, blockade orders and the threat of seizure.⁵³

Owners of vessels often furnished their captains with several potential routes and cargo plans. However, the fact was, as Horace Gray of Boston, who usually invested much paper and trouble in these plans, told Captain Elliott Woodberry in January 1827:

*"These instructions you will consider as only an expression of my opinion as I am at present advised, and as circumstances might alter these opinions, I authorize & request you to make any deviations from them in whole or in part which you may think are for my interest."*⁵⁴

The interests Gray meant were several, especially as the vessel in question was chartered.⁵⁵ Although instructions to captains were often very loose with regard to major decisions, they could at the same time include highly detailed instructions about the maintenance of the vessels, loading, the use of spirits, cleanliness on board and the dietary necessity of vegetables.⁵⁶ It seems that instructions on financing arrangements were generally considered more binding than, for example, recommendations as to trading partners. However, in the sugar triangle the instructions for dealings in Havana had to be so loose that the captain, who was the purchasing agent, had plenty of room for

⁵³ E.g. Thomson & Bonar to Josiah Orne, 25 February 1802, EI, Price Currents, St. Petersburg; see Ville 1989, 68, 85.

⁵⁴ Gray to Woodberry, 1 January 1827, HUBL, HGP, vol. 17; see McKey 1961, 212; Sager & Panting 1990, 85.

⁵⁵ E.g. Edward C. Bates to John D. Bates, 8 June 1833, PM, JDB, vol. 16.

⁵⁶ For example the ship *Grand Turk's* Captain Moseley was advised by Derby to exercise extreme caution with inflammable hemp. Moreover, the captain was reminded that "if you go to Russia you will not put too much Iron in the bottom, but stow it amongst the Hemp least the ship should be too stiff"; Derby to Moseley, 18 January 1794, and 6 June 1794, EI, DFP, vol. 3; see McKey 1961, 234-235, 415-417.

manoeuvre. This was due to possible fluctuation in prices.⁵⁷ As a matter of course captains were expected to take into account instructions from a company's own agents, the financier of the operation or European trading partners on their home ground. For example, captains working for Henry and Horace Gray had to follow instructions from Joshua Bates at least as far as they concerned Cuban sugar and produce carried from the Mediterranean to St Petersburg.⁵⁸ Not all captains enjoyed equal freedom of action. The officious Stephen Girard for one gave his ships' officers as well as Russian trading houses detailed instructions, which he expected be followed, as to financing and what was to be sold and purchased.⁵⁹

In the early part of the period it was normal for vessels' captains also to be owners or shareholders of cargoes and vessels.⁶⁰ However, as a rule the captains received payment, based on significantly differing criteria depending on who was paying whom, the route, the cargo and the vessel. For example Parsons' Captain Thomas Hopkins was promised \$20 per month for taking the brig *Sarah* to St Petersburg and back in 1795. In addition, he was to receive three percent on the freight procured, as well as half the proceeds of cabin passages. Moreover, the captain was promised "three shillings and four pence Massachusetts currency per day in port during our business when you have no commission".⁶¹

Captains were often given five percent primage for their own use, that is, a share in the gross freight capacity of the ship, or sometimes a percentage of freight revenue. The primage could be distinct from the rest of the cargo, but employers liked to connect it with their business in one way or another, for when the ships' officers had a stake in the financing, they were more committed to the success of the venture. The Americans involved the captain with the cargo probably more often than the British. English employers preferred to pay regular wages.⁶² Primage, defined in different ways, was common throughout period discussed, though, for example, Grays of Boston gradually replaced this practice with cash payments. Elias Hasket Derby for his part only introduced

⁵⁷ E.g. Horace Gray to Henry King, 16 September 1823, Henry Gray to Joshua Orne, 2 November 1824, 22 July 1825, and Gray to Barnabas Hopkins, 18 August 1825, HUBL, HGP, vol. 17.

⁵⁸ E.g. Horace Gray to John Eldridge, 25 November 1825, HGP, vol. 17.

⁵⁹ E.g. Girard to Bulkeley, Russell & Co., 10 November 1796, ASP, GP, mf-series 2, reel 13, no. 102 (printed in USR 1980, 308-309); STA 1797 (801).

⁶⁰ For example the cargo of the ship *Thames* that Isaac Hicks sent to the Baltic Sea in 1799 was shared in the same proportion as the vessel's ownership. Hicks himself owned a quarter of each, Captain Judah Paddock one eighth, Jonathan Jenkins one eighth and Boltens of Savannah half; Davison 1964, 111; see STA 1799 (515/1243); Sager & Panting 1990, 85. The fact that captains were very often part owners of the vessel and the cargo was sometimes even considered an advantage by the Americans; see Williams 1988, 73.

⁶¹ Parsons to Hopkins, 3 November 1795, HUBL, EGPP. – In addition to primage, E.H. Derby paid regular wages and additional compensation of £100 to Captain John Green, who took the ship *Henry* to London and St Petersburg. Green, obviously like Derby's other captains, was left without sales commission; Derby to Green 22 March 1796, EI, DFP, vol.4; see also Derby to Nathan Buffington, 15 June 1784, EI, DFP, vol. 5 (printed in USR 1980, 213).

⁶² Williams 1988, 73; see Porter 1937, vol. I, 46-49, 83; Finley 1979, 40-41; Ville 1989, 80-81.

the practice in the 1790s, when Captain Benjamin Hodges of the ship *Grand Turk* obtained a five ton share “for his personal speculation” and 5 percent of the volume of the return cargo.⁶³

At least Grays of Boston defined the captains’ compensation case by case. The captain of the brig *Patriot*, Elliott Woodberry, who was sent to the Mediterranean and thence to St Petersburg, was paid \$25 per month and given five tons primage and one percent on net sales in Leghorn and St Petersburg. A further half a dollar per ton was paid for inspection of the shipped hemp.⁶⁴ Grays paid another captain, Adam Knox, \$500 and gave him the right to ship products on his own account, provided that their value did not exceed one twentieth of the value of the entire cargo, with a weight limit of three tons.⁶⁵

By way of an incentive Parsons of Boston offered Ignatius Webber, captain of the *Reliance*, sent to Copenhagen and St Petersburg, one percent on the net sales price he managed to get for his cargo. Webber’s regular wage was \$20 per month, with four percent primage if he bought same goods as Parsons. He was also paid the actual expenses of his stay in St Petersburg.⁶⁶

According to Elisha Douglass, the provision of considerable freight space for private venture together with captains’ high rates of commission attracted competent officers to the merchant marine.⁶⁷ However, according to David M. Williams, the competence of the officers was due to the fact that, at least in British eyes, both captains and ordinary sailors were professionally more highly respected in the United States than in England.⁶⁸

Early in the 19th century, it was quite usual to consign export products to the captain: “...as the command of them may be of use to you in making your arrangement in St. Petersburg.”⁶⁹ This opened up the possibility of business dealings the American employer never found out about.⁷⁰ This was a well-known fact, and Parsons’ warnings about deducting the St Petersburg “bribes” from his captains’ wages were probably unavailing.⁷¹ On the other hand, captains and

⁶³ After adopting the practice, Derby sometimes even gave each sailor a “private adventure” of, for example, 800 lbs. Possibly the most common compensation for the captain was five percent on the cargo out and ten percent on the home cargo; McKey 1961, 300, 418, 423-424.

⁶⁴ Gray to Woodberry in January 1822, HUBL, HGP, vol. 16.

⁶⁵ Gray to Knox, 14 November 1822, HUBL, HGP, vol. 17. Captains’ commission on the sale of hazardous products was often higher than the usual. For example Thomas Lee, Jr. and Patric Tracy Jackson, promised Captain Charles Parsons five percent commission for selling a consignment of indigo in St Petersburg; Lee and Jackson to Parsons, 7 April 1815, Porter 1937, vol. I, 759-760.

⁶⁶ Parsons to Webber, 9 June 1798, HUBL, EGPP.

⁶⁷ Douglass 1971, 96.

⁶⁸ Williams 1988, 74. The annual income of a captain of a packet line sailing from the United States to Europe was about \$5000 per year, and these captains were considered the best-paid men of their profession; Albion 1961, 49.

⁶⁹ Horace Gray to Woodberry, 1 January 1827, HUBL, HGP, vol. 17.

⁷⁰ For example, William D. Lewis warned his brother in the spring that the Boston brig *Hesper’s* captain, departing for St Petersburg, in whose name was a part of the cargo, had a “rough exterior and bargainer”; William D. Lewis to John D. Lewis, 21 April 1821, HSP, LNP, Letters 1810-41.

⁷¹ Parsons to Ignatius Webber, June 9, 1798, HUBL, EGPP.

supercargoes were able to provoke competition between St Petersburg firms for their own or their employers' benefit. Brown & Ives, for example, actually required this of their officers.⁷² Moreover, the conditions for this were good as the company's vessels sailed to St Petersburg in ballast with rather generous letters of credit, but all the same Brown & Ives, as well as their captains, seem in fact to have remained loyal customers of Smith & Co. and Brothers Cramer.

How much the captain was paid depended also on whether or not there was a supercargo on board. The supercargo looked after the interests of the cargo owners, and so a captain free of those responsibilities would receive slightly less in remuneration. Supercargoes were also the shipowners' agents when a vessel was chartered. They also had to assess the dependability of trading partners in the unknown market of the Baltic region. Usually the owners of the vessel and the cargo had such similar interests that the captain could easily manage both roles. However, supercargoes were in charge of the purchase of the cargo, and they ultimately decided on its sale.⁷³ They were prominent in the Cuban sugar trade in particular. For example Joseph Ingersoll, a supercargo working for Henry Gray in 1825, was left to decide whether to carry a sugar cargo consigned to him to St Petersburg or to leave it in Copenhagen.⁷⁴ The high number of supercargoes participating in trade with St Petersburg can be considered an indicator of the primitive character of American trade with Russia.

The remuneration of supercargoes was often calculated on the same basis as that of the captains. In 1816 the supercargo Peter Lander (Leander), Jr. of the ship *Eliza Ann*, partially owned by Benjamin Pickman, was allowed one percent commission on sugar and logwood purchases in Havana, two percent of net sales in St Petersburg and one percent of the purchase price of the return cargo.⁷⁵ Trading firms worried not only about the personal dealings of the captains but also those of the supercargoes. For example, Brothers Cramer claimed in 1831 that supercargoes earned more than captains, and sometimes even more than the owners of the vessels and their cargoes.⁷⁶ On the other hand, John D. Lewis had

⁷² E.g. Brown & Ives to Martin Page, 12 March 1805, BUJCBL, BIP, V-G34.

⁷³ Christopher and George Champlin of Newport immediately hired supercargoes when they started their trade with Copenhagen and St Petersburg in 1785. Brown & Ives followed the same practice later. The same men (for example Benjamin Pierce, Samuel Lawton, Robert Robinson) served, when necessary, either as captains or supercargoes; Hedges 1968, vol. II, 49-51; STA 1788 (438/977), STA 1795 (127/582, 436/904); see Porter 1937, vol. I, 82; Baxter 1945, 302; Morison 1921, 112-113; Howes 1894, 23.

⁷⁴ Gray to Ingersoll, 20 June 1825, HUBL, HGP, vol. 16; see Porter 1937, vol. I, 82-83; Howes 1894, 10. The central role of supercargoes in the sugar trade continued until the 1840s, when Havana companies started to have their own agents in St Petersburg. Once the purchases were direct and payments were managed by London, the importance of supercargoes declined; e.g. Tigerstedt 1940, 444 - 445.

⁷⁵ Pickman et al. to Lander, 2 March 1816, EI, BPP, vol. 2.

⁷⁶ "Completely unriskey" extra earnings were claimed to reach as much as \$2000 with the right arrangements; Brothers Cramer to John D. Bates, 10 October 1831, PM, JDB, vol. 17.

already declared ten years earlier about the complainers: "Cramers cram their captains with presents and they return praise the Cramers".⁷⁷

American sailors and officers are often credited with being more skilled and better paid than, for example, their British counterparts.⁷⁸ It is difficult to prove the first statement, but the American level of payment was markedly higher than that of rival merchant navies over the whole period discussed. Moreover, food and accommodation were claimed to be better on American vessels. On the other hand, American traders had fewer crew per carrying ton than the British and thus outlay on the crew was probably comparable. Generally speaking the crewing of North American trading vessels was considered economically the most efficient in the first half of the 19th century.⁷⁹ According to John Hutchins, the competitive capacity of the American mercantile marine was maintained "mainly through hard man-driving and superior seamanship on the part of the officers".⁸⁰

The size of a sailing vessel's crew was a major factor, in fact possibly the most significant factor in the cost of sea transport and this was bound up with the question of crews' and officers' wages, a crucial factor in competitiveness. Wages possibly accounted for about 30 percent of variable costs.⁸¹ They were dependent on several different factors, the most important relating to the size and rigging of the vessel and the nature of her cargo. David M. Williams's research shows that the size and cargo of American and British trading vessels defined the necessary size of the crew in Liverpool's transatlantic trade. The type of vessel and its rigging were not directly related to the number of men hired per hundred tons of ship's burden.⁸² Williams's ratios of manpower to ship's burden for Liverpool shipping are for the most part in line with those of American vessels sailing to Russia.

⁷⁷ John D. Lewis to William D. Lewis, 7 June 1821, HSP, WDLP, Letters 1820-21.

⁷⁸ See Williams 1988, 60, 75.

⁷⁹ See Douglass 1971, 96; Williams 1980, 110-111, 120-122; Press 1981, 48; Palmer & Williams 1997, 114. It was generally considered that American vessels carried 20 percent fewer men. According to an often cited calculation, American vessels required four men per 100 tons, but British vessels five men and a ship-boy. The British view was that this was a result of the design and technology of American vessels; Williams 1988, 74-75.

⁸⁰ Hutchins 1941, 306; see Taylor 1951, 125-126. In another context, Hutchins (1941, 172) argues that "despite the efficient organization of American enterprises and the man driving of the shipmasters, the cost of operating American vessels was considerably above that of the nations of Western Europe throughout the period 1789 to 1914, the differences in prices of new ships are not taken into account".

⁸¹ See Williams 1980, 107; Davis 1962, 58; Davis 1978, 169-97; Keene 1978, 682; Ville 1987, 130.

⁸² Williams 1980, 128; see Lucassen & Unger 2000.

TABLE 10 The men-ton ratios of American vessels in the Russian trade, 1802-53.

Tonnage	1802-07		1836-40		1850-53	
	vessels	men/ 100 tons	vessels	men/ 100 tons	vessels	men/ 100 tons
0-99	12	8.19	-	-	-	-
100-199	175	6.32	13	4.81	2	4.23
200-299	144	5.32	128	4.55	33	4.16
300-399	49	4.36	111	4.09	63	3.58
400-499	1	4.00	27	3.93	49	3.17
500-599	-	-	2	3.94	18	3.04
600-699	-	-	1	3.04	5	2.90
700-799	-	-	-	-	6	2.99
800-899	-	-	-	-	2	2.73
900-999	-	-	-	-	2	2.50
1000+	-	-	-	-	2	2.22
Total	381	5.51	282	4.25	182	3.32

Note: Men-ton ratio calculated including captains.

Sources: CR, NA T-201/1, M- 81/3-6

The average size of American vessels visiting St Petersburg doubled during the half a century, and at the same time the size of crew per hundred tons burden halved. The bigger the vessel the fewer men were needed in proportion. Improvement in manning levels is visible in every range of tonnage, and for all rigs.⁸³ New England square-topsail schooners under one hundred tons, used at the beginning of the century, required four times the number of crew by comparison with the ships of over 1000 tons that carried cotton from southern ports 50 years later.

TABLE 11 Description of American vessel, their tonnage and men-ton ratios in Russian trade, 1802-53.

Description of vessels	1802-1807			1836-40			1850-53		
	number	tons	men/ 100 tons	number	tons	men/ 100 tons	number	tons	men/ 100 tons
Schooner	23	2 331	7.85	-	-	-	-	-	-
Brig	137	21 856	6.21	91	21 320	4.62	7	1 924	3.79
Bark	-	-	-	61	18 191	4.13	98	34 967	3.39
Ship	221	56 909	5.13	130	46 710	4.13	77	40 589	3.22

Sources: CR 1802-07, 1835-40, and 1850-53, NA T-201/1, and M-81/3-6.

In transatlantic trade with Liverpool the manning levels of American vessels were, compared to trade with St Petersburg, approximately the same as in the 1830s, but at the beginning of the 1850s they decreased significantly.⁸⁴ The men-

⁸³ By consul Gibson's reckoning, altogether 1555 American vessels (438,197 tons) and 18,292 sailors visited St Petersburg in 1819-44, and the men-ton -ratio was 4.53; Gibson to Buchanan, 4/16 July 1845, NA M-81/2. The ratio can also be calculated in a different way: in 1830, American vessels arriving in New York had one sailor per 20 tons burden, and in 1850 the ratio was 1:31; Albion 1961, 398; North 1968a, 961, fig. 3; see Lucassen & Unger 2000, 130.

⁸⁴ Williams 1980,121. American vessels sailing to Liverpool had a considerably lower men-ton ratio than British ones.

ton ratio decreased for all types of vessels in the early part of the 19th century. Rigging had some influence on this, since brigs needed more crew in relation to tonnage than barks and ships throughout the period. In the middle of the century, the men-ton ratio was at its most economical, but this is mainly to be credited to the big cotton vessels.⁸⁵

In the 1840s on the routes between North America or Cuba and St Petersburg brigs gave way to barks, which were considered advantageous though they were the slowest cargo carriers. Ratio for ships and barks sailing out of Havana is much the same. The men-ton ratio of the big sugar-carrying ships was also rather low, at 2.92 for vessels over 500 tons.⁸⁶ The cargo did not significantly affect the size of crew. There was no difference between the Havana sugar traffic and sailing between Boston and St Petersburg. Only the large cotton vessels form a group of their own in this respect.

TABLE 12 American vessels sailing from Cuba to St Petersburg and their men-ton ratios, 1836-53.

Description of vessel	1836-40		1850-53	
	number	men/100 tons	number	men/100 tons
Brigs	46	4.48	4	4.08
Barks	40	4.11	26	3.17
Ships	81	4.19	31	3.37
Total	167	4.23	61	3.32

Notes: Note: Men-ton ratio calculated including captains.

Sources: CR 1836-40, and 1850-53, NA T-201/1, and M-81/3-6.

Though the regulations were highly specific as to the rights and duties of sailors as well as methods of hiring and discharging, daily life on the sea often followed different practices. A law of 1790 prescribed that sailors should have written contracts covering duration of hire and wages. The regulations were not always obeyed, and even the threat of severe penalties did not prevent several captains from following their own rules at foreign ports. It was the duty of consuls to prevent arbitrariness and look after the seamen's rights. They were not totally powerless in this struggle, but how willing they were to interfere was another question. Consuls were often highly dependent on captains who were their customers and partners, and thus they were usually unwilling to oppose them in public.⁸⁷ In the words of Abraham Gibson, consul

⁸⁵ Williams 1980, 112-113. For 1850-53 all the barks in table 11 are below 600 tons. The men-ton ratio of ships of the same size (60 altogether) is higher than that of barks: 3.49. Differences between vessel types are considerably smaller than with Liverpool traffic.

⁸⁶ The men-ton ratio of ships (burden 300-399 tons) in Cuban sailing was 4.07 in 1850-53 and for barks of the same size 3.34. Liverpool's highest men-ton ratios were for Newfoundland, Chile/Peru and West Indies traffic, and by far the lowest on North Atlantic routes; Williams 1980, 118-119.

⁸⁷ E.g. Gibson to Clay, 1/13 June 1827, and 20 August 1827, NA M-81/2; John Randolph Clay to Edward Livingston, 12 May 1832, doc. C, NA M-35/12/24; see Morison 1921, 259-60; Homans 1858, 544; Bryant 1967, 115. John Randolph Clay, who disapproved of captains' arbitrariness in many ways, gave American ships' officers credit for the

in St Petersburg "...in all human probability, the Merchants private interests would be paramount to the consuls official duties."⁸⁸

All the troubles of the Baltic piled up in Elsinore, where consuls were kept active by wage disagreements, contested interpretations of hiring contracts, the settlement of disputes and problems dealing with diseases.⁸⁹ According to the account given by Edmund Lewis Rainals, captains from Havana in particular put some of their crew ashore without a second thought and hired Danish sailors, who were paid only half the rate of North American sailors and two-thirds the rate of those from Havana. New sailors were registered in the crew list under the names of those left ashore.⁹⁰ The same practice also occurred sometimes at Swedish ports.⁹¹

The problem in St Petersburg was not so much the hiring of new sailors, but men being left ashore because of disease or behaviour that was allegedly recalcitrant. The same applied to the crews of vessels that were sold, who were then left to Russia.⁹² Crews who stayed over winter and did not always, at least in the consuls' judgement, behave exemplarily, form a group of their own. Sailors marooned in St Petersburg due to the early winter, for example in the autumn of 1856, caused "much trouble and anxiety" by fighting with each other and quarrelling with their captains. "*Breaches of the peace have been numerous, serious and several times fatal.*"⁹³

abolition of spirits, wine and beer on their vessels. For some reason Clay claimed that almost all American vessels sailed "upon the temperance principle"; Clay to Buchanan, 2/14 May 1846, NA M-35/15/7. – Also Williams (1988, 75, 79) claims that the fact that American vessels were "temperance ships" was considered to improve their competitive capacity: in the 1830s it was calculated that three quarters of American vessels arriving in Liverpool had been teetotal as far as the ship's crew was concerned.

⁸⁸ Gibson to Buchanan, 8/20 November 1845, NA M-81/4.

⁸⁹ E.g. Rainals to Forsyth, 31 December 1837, NA T-201/1; Rainals to Jackson, 31 May 1842, and Rainals to the Secretary of State, 20 June 1843, NA T-201/2. Even after the abolition of Sound dues in 1857, Elsinore remained the place to solve problems that had come about during the crossing; e.g. V. P. M. Epping to Cass, 26 February 1859, NA T-201/4.

⁹⁰ Rainals to Forsyth, 19 June 1836, NA T-201/1; Rainals to Buchanan, 10 January 1849, and Rainals to John M. Clayton, 23 July 1849, NA T-201/2; Rainals to Webster, 3 January 1852, NA T-201/3; Gibson to Buchanan, 15 February 1849, NA M-81/5; Kirchner 1975, 88.

⁹¹ E.g. Schroeder to Marcy, 21 July 1855, NA M-45/9/152.

⁹² E.g. John Levett Harris to the Secretary of State, 14/26 September 1817, Gibson to Adams, 12/24 July 1820, Gibson to Clay, 1/13 June, and 20 August 1827, NA M-81/2; Gibson to Webster, 19/31 December 1841, NA M-81/4; Croswell to Cass, 27 May 1859, NA M-81/5.

⁹³ In 1856 306 vessels had to stay in Kronstadt over winter, and their crews spent their time quarrelling in harbour bars. For some reason the most furious fights took place between British and American sailors. The Americans were significantly fewer in number, but they got support from Swedish, Danish and Norwegian sailors. Consul Hutton considered the great number of foreign sailors a reason for the fact that the crews of American vessels were insubordinate to their captains; Hutton to Marcy, 29 December 1856, and Hutton to Cass, 7/19 May 1857, NA M-81/4-5; Commercial Relations 1858, 84-85. According to Consul Levett Harris, 70 American sailors, who had to overwinter in St Petersburg in 1812-13 behaved quite differently. They established a

A law of 1817 prescribed that two-thirds of an American trader's crew had to have American citizenship. Later the proportion was raised to three-quarters. Consular returns show that three-quarters of the 12,400 sailors visiting St Petersburg in 1834-53 were Americans.⁹⁴ While it is difficult to establish how far from the truth this figure was, the proportion of non-Americans was nonetheless more than just a quarter. The so-called "foreigners law" was often eluded by hiring either in North America or, more often, in the West Indies men who were given a false American identity. Comical situations were not always avoided at the ports of destination when men had forgotten their new names and places of residence during the voyage.⁹⁵

European traders arriving in the United States suffered most from the problem of fugitive sailors. British sailors' defections to American vessels were highly frequent, whereas American sailors' rarely jumped ship at European ports. However, six sailors did leave Isaac Hick's ship *Robert Bolton* while the vessel was being repaired in Liverpool. The strict Captain John Morris was probably to blame for the incident.⁹⁶ Sailors fleeing also from American vessels were not exceptional either in the West coast of the Atlantic. In 1810 part of Josiah Ornes ship *Doris'* crew already vanished before the departure. The captain had to pay for those taken in the place of the fled ones wages of \$35 per month he considered unreasonable.⁹⁷

Troubles also occurred on the East coast of the Atlantic. For example the captain of the bark *Wallace* of Boston hired in fall 1833 a crew for a year for voyage to Havana. Some men left the vessel without permission when she stopped in Amsterdam, and the captain did not agree to hire them again if they did not accept to a decrease in their wages from \$16 per month to \$10 per month. In any case, the vessel sailed to Boston, further to Havana and from there to St Petersburg in summer 1840. Consul Gibson had a rather arduous task before the disagreement was settled.⁹⁸

In the middle of the 1830s, sailors on European routes were paid from \$10 to \$15 per month. In 1826 Henry Gray paid the captain of the ship *Albion*, George Lee, who had visited St Petersburg several times, \$60 per month for

school for themselves and 40-50 men took part in its activities; Harris to Monroe, 20 February 1813, NA M-81/2.

⁹⁴ CR 1834-53, NA M-81/3-5; Morison 1921, 107-108. By William Gray's reckoning, in 1813 only one fifth of the crews of the American mercantile marine were foreigners. Their proportion was estimated at a quarter in the 1820s, but it probably increased later. The great proportion of foreigners may be partially explained by the fact that, regardless of the high wages, the mercantile marine was short of manpower; Taylor 1951, 125-126.

⁹⁵ E.g. Hutton to Cass, 7/19 May 1857, NA M-81/5/4; Commercial Relations 1858-84.

⁹⁶ Morris to Hicks, 28 May, and 2 June 1806, NYHS, IHP (Ships West Point & Robert Bolton, 1805-06).

⁹⁷ Captain Chamberlain to Orne, 14 May 1810, EI, OFF, vol. 20/4. In Philadelphia the wages of an able-bodied seaman varied from \$20 to \$30 per month. Before the wars the monthly wages were below \$15. Real wages did not increase by the same proportion due to the increase in prices; Adams 1980, 276.

⁹⁸ Gibson to Forsyth, 28 August/ 10 September 1840, NA M-81/4; CR 1939-40, NA T-201/2, and M-81/4; STA 1939 (2029/3578); STA 1849 (2259/3400).

taking the ship to Charleston and from there to St Petersburg with a cotton and rice cargo. The mates were paid \$20 and \$25. Moreover, the captain and two mates had primage of five tons to carry their own cargo. Cook and steward were paid \$15 per month, and nine sailors from \$9 to \$14 per month.⁹⁹ In some cases, also the crew was granted a privilege. Only one sailor and the cook of Benjamin Pickman's ship *John*, which sailed under the command of Captain Joseph Ropes, crew of 13 men was left without it in 1801. The sailors' monthly wages were between \$16 and \$20, and their primage 600-800 lbs.¹⁰⁰

"My sailors are very troublesome here running in depth every place they can", wrote the Captain Charles Holden on the crew of his ship *General Hamilton*, when the vessel was being loaded late in fall 1809 in Wilmington for Amsterdam and St Petersburg.¹⁰¹ If conclusions could be drawn on the basis of captains' complaints of this sort only, members of crews would be rather miserable and restless people. However, the crew was written about only when matters turned problematic from the ships officers point of view. One of the most usual reasons for complaints was the crews poor health. For example in 1851, the Captain Thomas Pritchard got in trouble in Havana with his fever patient crew. However, the captain managed the vessel to the sea and believed that his men's condition would improve before St Petersburg: "... as soon as I get into colder weather".¹⁰² Trading houses' papers rarely discuss sailors' demands for, for example, better food or payment. However, "overdriving and other manifestations of exploitation" were part of the traders' routines.¹⁰³ This was partially caused by the fact that sailors changed vessels and employers very often. Thus, it was very rare that a vessel had a permanent crew.¹⁰⁴

Brown, Benson & Ives's Captain William Rodman, who had visited the Baltic several times, complained in November 1792 that John Hopkins alias John Bowen, a member of his ship *Hamilton* which was to sail to St Petersburg, was put in prison in Havana "... for assaulting a Whore House, Breaking Windows, abusing Both White & Black Prostitutes". After his impudent behaviour in the court also, Hopkins/Bowen was imposed so heavy fines that he could not pay them.

⁹⁹ Gray to Lee, 9 June 1826, HUBL, HGP, vol. 17. In 1810, Josiah Orne's schooner *Betsey* (83 tons) required a captain, a crew of 4-5 men, a mate and a cook. On voyage to St Petersburg the crew was paid from \$12 to \$19 per month, the mate and the captain \$25. Captain's primage was 5 percent of cargo space and that of the mate Benjamin Trask 20 cwt; EI, OFP, vol. 20/2; see Morison 1921, 110-111; Seaburg & Paterson 1971, 147; Kirchner 1975, 89, note 11; Press 1981, 48; Williams 1994, passim.

¹⁰⁰ EI, BPP, vol. 3. The "boy" mentioned in the crew list got \$10 monthly wages and a privilege of 500 lbs.

¹⁰¹ Holden to Brown & Ives, 30 November 1809, BUJCBL, BIP, V-G34.

¹⁰² Pritchard to Henry Johnston, 2 April 1851, PM, Thomas Pritchard, Letterbook.

¹⁰³ Porter 1937, vol. I, 108.

¹⁰⁴ See Seaburg & Paterson 1971, 141; Ville 1987, 95-94. Morison (1921, 106) claims that the "native deep-sea proletariat" never came into being in Massachusetts, but "successive waves of adventure-seeking boys" served on board and many of them later became ships officers.

The owners and the captain of the vessels also refused to pay. When Hopkins had been calming down in jail for 18 days, the captain arranged to get him free.¹⁰⁵

In spring 1818, the Portsmouth captain of the brig *Hannah*, Ruben Randall, was thoroughly dissatisfied with his crew of nine men that the owners of the ship, Henry and Alexander Ladd, had hired and with which he was supposed to carry a cotton and rice cargo from Savannah to St Petersburg. He asserted that the crew consisted of prime men, but according to Randall, two of them, George Green and William Jones, were "two wornout men of wars one with one hand and the other hand with two fingers". Moreover, many men were not healthy and not even as strong as the 17 years old ship-boy William Crowningsbury. 19-years old William Cole was totally helpless on sea, but a "Devil in port". In addition, the cook had to be watched all the time. The mentioned three sailors, Cole, Jones and Green, fled in Savannah, and the captain had to pay one man out of jail with three dollars. Randall considered only his mate proficient.¹⁰⁶

Revolts were exceptional on traders. However, one occurred on the Newport ship *William Engs* in July 1838. The crew that was mainly hired in Liverpool refused to follow orders, since the vessels did not sail to Boston but, against the agreement, to Havana, where Captain George Vaughan intended to load a sugar cargo for St Petersburg. The sailors disagreed. The two most stubborn ones were whipped and the whole crew was kept on board five weeks "before the revolt took place". Havana police had to finally interfere; the revolting men were arrested and condemned.¹⁰⁷

6.3 "All trying to get home first"¹⁰⁸

According to Douglass C. North, the improvements in the efficiency of ocean shipping were due more to improvements in economic organization than to technical developments. Nevertheless, the increase in the size of vessels also had some effect on productivity. Meanwhile, the difference in the time spent in port is an essential consideration when looking at the period as a whole. The general trend was for a greater reduction in the time spent in port than in time

¹⁰⁵ Rodman to Brown, Benson & Ives, 21 November, and 5 December 1792, BUJCBL, BIP, V H15; see Hedges 1968, vol. II, 41-42.

¹⁰⁶ Randall to Henry and Alexander Ladd, April 9 1818, and the ship's papers of the brig *Hannah*, HUBL, WFP, vol. 5.

¹⁰⁷ William Clark to Forsyth, 25 May 1839, NA M-T20/7. The ship *William Engs* took sugar for St Petersburg via Boston, but her entry to the Baltic Sea was delayed until October and the ship had to overwinter in St Petersburg; STA 1838 (2980); STA 1839 (1183); CR 1838-39, NA M-81/3-4.

¹⁰⁸ Judah Paddock to Isaac Hicks, 4 June 1804, NYHS, IHP, 1804, "Paddock". The quotation derives from Captain Paddock's description of how his fellow countrymen paid exorbitant prices and gave bribes when they tried to get their vessels loaded as quickly as possible in St Petersburg.

at sea.¹⁰⁹ Nathan Rosenberg has emphasized that technical changes, for example improvements in sails and rigging, should also be recognized as cost-reducing factors.¹¹⁰

TABLE 13 The time American vessels spent on the Baltic Sea, 1791-1850.

Year	To and from St Petersburg with cargo		To and from St Petersburg with ballast		All vessels to and from the Baltic Sea	
	Days	Vessels	Days	Vessels	Days	Vessels
1791-92	67	4	62	20	58	58
1801-02	60	5	56	84	56	153
1816	60	30	50	23	52	80
1830	57	40	-	-	26	74
1840	54	47	46	2	51	68
1850	49	38	59	1	50	50

Sources: STA 1791-92, 1801-02, 1816, 1830, 1840, 1850; CR 1791-92, 1830, 1840, and 1850, NA M-81/4-5, T-195/3-5, and T-201/2.

The time spent in port and at sea on American passages to St Petersburg can be to some extent deduced on the basis of STA and the consuls' shipping lists.¹¹¹ The time American vessels spent on the Baltic Sea decreased by about ten days in 60 years, when all vessels entering the Baltic Sea are included, those that only went to Copenhagen as well as those that spent several months in St Petersburg. The change is considerably more significant if the fact is considered that more and more voyages were made to St Petersburg. The clearest illustration of the changes that occurred is probably a comparison of the time taken by vessels that sailed to Kronstadt fully loaded and took on a cargo there: it decreased by almost 20 days in 60 years.¹¹² To all appearances the changes

¹⁰⁹ North 1968a, 953, 961; North 1981, 166; cf. North 1965, 213. North (1960, 597) estimated that foreign port costs were equivalent to about 20 percent of the earnings of sailing ships.

¹¹⁰ Rosenberg 1972, 33. – The competitiveness of American freighters can also be explained by savings in labour costs, which were achieved by “numberless contrivances” that facilitated work; Williams 1988, 75.

¹¹¹ The length of time spent at Baltic ports can be deduced on the basis of the customs clearance dates reported in STA, assuming that the actual time at sea did not vary significantly. – John D. Lewis calculates that the voyage between Elsinore and St Petersburg took 11 days on average in 1816. The result of a comparison between the records of STA and the consul to St Petersburg is also 11 days, provided that vessels did not call at intermediate ports. In 1850 the corresponding figure is 10 days; STA 1840,1850; CR 1840,1850, NA M-81/4-5; HSP, LNP, Letters 1819- 41; see Crosby 1965,63. – The quickest voyages from Elsinore to St Petersburg lasted 6-7 days in 1840, but for example the bark *Indian Queen* of Bath took only four days for the passage in 1850. On the other hand, it was not unusual to spend three weeks on the voyage (the brig *Rome* of Boston in 1840 and the ship *Chicora* of Boston in 1850); STA 1840 (649); STA 1850 (430, 6108). – Derby's ship *Grand Turk* left St Petersburg under the command of Captain Moseley on 16 October 1794, but only reached the Sound over a month later (20 November) due to bad winds; Peabody 1926, 147; STA 1794 (1467). Champlins' brig *Elisabeth* had “a tedious passage of 22 days” between Copenhagen and St Petersburg in 1788; Benjamin Peirce to Christopher and George Champlin, 6 July, 1788; MHS, WCRIC, vol. 1788, 376; STA 1788 (438).

¹¹² According to STA, the 14 American vessels that sailed directly from Elsinore to St Petersburg and back in the 1780s spent an average of more than 80 days on the Baltic

took place before the 1830s, since the shipping lists of consuls in St Petersburg indicate that vessels (282 altogether) spent an average of 28 days unloading and taking on cargo in 1836-40, and in 1850-53 the time taken was almost the same: 27 days (182 vessels).¹¹³

The time spent in St Petersburg could be prolonged for numerous different reasons, amongst them the fact that ship owners had the cables or sails of their vessels repaired or replaced there, as Russian materials and labor were cheaper than American.¹¹⁴ Benjamin Pickman ordered Joseph Ropes, captain of the ship *John*, to ensure that the vessel would be "in complete order for the longest India voyage" when she left St Petersburg.¹¹⁵ The Russians' slow working pace and "interruptions of numerous holidays of the Church" were, according to several Americans, a cause of delay. The first problem could be partially solved by extra roubles, but the second was insurmountable.¹¹⁶

Calling at more than one port naturally extended the time spent on the Baltic Sea. The American vessels (75 altogether) that carried a full cargo east from the Sound in 1801 and, as reported in Elsinore, stopped in Copenhagen on the way to St Petersburg or on the way back, spent an average of 15 days more than those that only visited St Petersburg. By contrast, those that sailed to St Petersburg in ballast made the voyage only four days faster than those that sailed with a cargo.¹¹⁷

The easiest part of the sugar triangle was the passage from New England to Cuba. The voyage to Havana lasted a month or two – depending on stops (for example in Charleston or Savannah). The first vessels sailing to St Petersburg waited off the Havana coast for their cargo of sugar as early as the end of January, but most of them arrived in May. Most vessels departed from Cuba for the Baltic in April, or in some years only in May. The length of stop in Havana varied between two weeks and two months, but in 1835-40 it was 33 days on average.¹¹⁸

The longest passage of the sugar triangle, that from Havana to St Petersburg often took more than two months. The Boston ship *Courier* sailed

Sea. However, according to a survey made in St Petersburg, American vessels (22) spent only 38 days in port in 1790; Kirchner 1975,14.

¹¹³ CR 1836-40, 1850-53, NA M-81/3-5. The time spent in port by vessels that unloaded and took on a full cargo decreased from 30 days to 28 days between the end of 1830s and the beginning of the 1850s. For those that arrived or departed in ballast, the corresponding figures were 20 and 15 days.

¹¹⁴ E.g. Stephen Girard to Myles McLeveen, 12 February 1810, USR 1980, 640-641. At the end of the 18th century the covering of the vessel's bottom with metal was preferably done in Hamburg or Bordeaux; see McKey 1961, 429.

¹¹⁵ Pickman to Ropes, 3 March 1801, EI, BPP, vol. 3 (Ship John). The vessel had arrived with pepper from Sumatra shortly prior to her departure for St Petersburg, and after St Petersburg she was sent immediately to Calcutta.

¹¹⁶ Parsons to Webber, 6 June 1798, HUBL, EGPP; John Q. Adams to Robert Smith, 24 August/5 September 1810, NA M-35/2 (printed in USR 1980, 691-697).

¹¹⁷ STA 1801-02; CR 1801-02, NA T-201/1. Those sailing to Stockholm in ballast were back on the Atlantic markedly quicker than those sailing to St Petersburg even when the difference in distance is taken into account. However, the former only took on iron, whereas 10-15 different products were taken on in Russia.

¹¹⁸ CR 1836-40, NA T-20/7-15 (the calculations include 57 vessels).

under the command of Captain Lewis Russell from Havana to East of Bourbon in ten days, and on to the Grand Bank of Newfoundland in 22 days. Then the problems began. The voyage to the Faroe Islands took 26 days, and from there to Elsinore another nine days. Altogether, the passage from Havana to the Sound took 67 days, and William Ropes, the supercargo of the vessel, described the voyage as “tedious and boisterous”.¹¹⁹ The Salem ship *Peterhoff* made a somewhat similar voyage in the spring of 1848. The vessel sailed with favourable winds from Havana to Newfoundland in 16 days making a speed of 7-8 knots. According to the supercargo, Henry Fettyplace, Captain Lewis Endicott may have changed course too early in order to avoid possible icebergs, and the vessel faced three weeks of bad winds. The voyage to St Petersburg took 60 days altogether.¹²⁰

However, these two voyages were not exceptionally long. Records kept by John D. Lewis show that the voyage from Havana to St Petersburg took 87 days on average in 1816, and from Boston to St Petersburg 50 days, while vessels sailing from New York spent a week longer at sea.¹²¹ When the records of the consul in Havana and STA are compared, it becomes clear that vessels sailing directly from Havana to St Petersburg spent an average of 57 days on the voyage from Cuba to Elsinore in 1835-40. The speed made by the vessels apparently increased somewhat in subsequent years, as in 1850-53 the corresponding time taken was 52 days.¹²²

The passage north of the Grand Bank and Scotland was considered the most favourable route from the West Indies and from the United States to the Baltic. “*Immense Ice Bergs, surpassing in Sublimity of Effect the Alps of Savoy and Switzerland*”¹²³ were not met every day, but neither were they rare on this route. Sometimes vessels on the way from Cuba to St Petersburg were ordered to Cowes, but usually Elsinore and Copenhagen were the first ports of call after a voyage of about two months. Thus it is no wonder that the Danish ports seemed so pleasant that the crew were not readily allowed to go ashore.¹²⁴

The route from the Sound to St Petersburg, “in the bottom of the bag”, was considered rather dangerous for the inexperienced.¹²⁵ Many captains therefore took on a pilot in Elsinore, arranged for example by Balfour, Ellah, Rainals & Co. for navigation of the Baltic Sea. Captain John Morris, who commanded Isaac Hicks’s ship *Robert Bolton* (341 tons) in 1806¹²⁶, and Benjamin Shreve of Salem in 1830, were amongst those who did so. The latter had already sailed the

¹¹⁹ William Ropes to Hardy Ropes, 2 June 1830, HUBL, RFP; STA 1830 (839/2375).

¹²⁰ PM, Fettyplace Journal (ship *Peterhoff*); Kirchner 1975, 93.

¹²¹ HSP, LNP, Letters 1810-41.

¹²² CR 1835-40, 1850-53, NA T-20/7-15, 23-27; STA 1835-40, 1850-53. The calculation includes 49 vessels for the former period and 32 vessels for the latter.

¹²³ John Randolph to Van Buren, 1 August 1830, NA M-35/12; see Crosby 1965, 60, 80.

¹²⁴ Report from the Select Committee (1856), V, 27; Howes 1894, 11.

¹²⁵ Forbes to J.B. Murray & Son, 12 September 1817, HUBL, FFP, A-3.

¹²⁶ NYHS, IHP (Ships West Point & Robert Bolton 1805-06). The captain of the ship *Peterhoff*, Lewis Endicott, hired two pilots at \$80 each in Elsinore. Their expertise was also used at the St Petersburg customs, and they helped to unload and load cargo; PM, Fettyplace Journal (Ship *Peterhoff*).

Baltic Sea earlier as a supercargo, and in his experience the northern waters were unpredictable: “ ... near the land, in thick weather, my anxiety is almost insufferable”.¹²⁷ Sometimes a pilot for the Baltic was taken on already in London.¹²⁸ The fact that the Baltic Sea was unpredictable shows also in insurance rates. The rates from Cuba to the Baltic Sea were about two percent until the end of August, and three percent thereafter. This was about one percent higher than to the ports of the North Sea. The scaling of the insurance rates was most clearly evident in October and November, when they were at five to six percent for vessels crossing the Atlantic bound for St Petersburg.¹²⁹

Americans were often among the first to arrive at Kronstadt.¹³⁰ They were often sailing in ballast, having left their cargo in Amsterdam, Antwerp or Hamburg. In the spring of 1797 Ezra Bowen was one of the most eager captains striving to reach St Petersburg. He was in command of Stephen Girard’s ship *Voltaire* and under orders to arrive at St Petersburg as early as possible. Bowen was already at Elsinore by 17 April, ready for his first Baltic voyage, but he had a four-week struggle with the ice of the Gulf of Finland before he was able to reach Kronstadt. According to Bulkeley, Russell & Co., who arranged the return cargo for the ship, the ship was the first American vessel to leave St Petersburg and was through the Sound by 10th June.¹³¹

Vessels hastened to St Petersburg usually because the shipowner-merchants wanted their consignment of Russian goods to be the first of the season in Boston or New York. Prices were usually at their highest in spring and at their lowest in late autumn when a “fleet of Russiamen” returned to New England.¹³² One example of this was Nathan West of Salem in February 1828 ordering Captain James Gillis to ensure that his was the first vessel to sail from Russia to New York.¹³³ Likewise Samuel Sanford of Boston emphasized

¹²⁷ Shreve to his wife, 24 July 1830, PM, BSP, vol. 20. Sailing the Baltic Sea sometimes produced experiences of a different sort. William Fairburn (1945, vol. I, 547) mentions Captain James Howland of New Bedford, who commanded a vessel on the Baltic Sea at the age of 18 and “soon afterwards went on a honeymoon voyage to the Baltic with his still younger bride”.

¹²⁸ E.g. HUBL, WFP, no. 4 (Ship Vonolancet).

¹²⁹ HMM 1839, vol. 1, 366-367.

¹³⁰ E.g. John Randolph Clay to John Forsyth, 21 April/3 May 1836, NA M-35/13/4. - Minister to Denmark, William Irwin, criticized his fellow countrymen in 1846 for that the British carried much cotton to the Baltic Sea before the American vessels arrived. The first American vessel in the year discussed was the bark *Mauran* (348 tons) of Providence that sailed from New Orleans to St Petersburg and passed Elsinore on 20 April; 1629 vessels had sailed eastward through the Sound before her. According to consuls in Elsinore and St Petersburg, the American vessel carried 450,000 lbs of cotton, but according to STA, she only had 428,000 lbs of the product; STA 1846 (224); Irwin to Buchanan, 22 June, 1846, NA M-41/5/84; CR 1846, NA T-201/2, and M-81/4.

¹³¹ STA 1797 (206/601); Bowen to Girard, 2 March, 19 March, 25 March, and 8 May 1797; Bulkeley, Russell & Co. to Girard, 19 May 1797, APS, GP, mf-series 2, roll 16 (no. 82, - 106, 158, 168, 198).

¹³² William D. Lewis to John D. Lewis, 20 November 1821, HSP, LNP, Letters 1810-41.

¹³³ West to Gillis, 27 February 1828, EI, James Dunlap Gillis Papers, vol. 1.

that his sheeting and raven duck had to be carried on the first possible vessel to the markets of New York and Boston.¹³⁴

Late autumn sailing on the Baltic and the North Atlantic was avoided as far as possible.¹³⁵ It was possible to spend the winter in St Petersburg, but this occurred extremely rarely, in fact only when ice prevented the return journey. Four vessels faced this problem in 1834, and eight in the autumn of 1856.¹³⁶ In most years after the 1830s not a single vessel stayed in Russia. The port of Kronstadt was opened usually in April and became frozen up in November. However, differences between years were great.¹³⁷

The numerous shipwrecks suffered by American vessels provide evidence of the dangers of sailing on the Baltic. Apparently three vessels were lost in 1836: A. & C. Cunningham's brig *Caribbea* at the beginning of October off the Karlskrona coast, the ship *Malo* of Boston, and S. C. Gray's brig *Charlotte* at the end of October on the shore of Gotland. These cases point up the dangers of making voyages late in the autumn. The first vessel had visited Pillau earlier in the summer and the *Charlotte* had been to St Petersburg, and so they had started their return journeys later than usual. The *Malo*, for her part, had sailed from Havana later than was usual.¹³⁸ Vessels used to sail together from Havana to St Petersburg at least part for safety reasons. For example in 1838 two brigs from Portland, the *Rapid* and the *Sun*, sailed the route together and also together brought back lumber from Wiborg for Bordeaux.¹³⁹

¹³⁴ Sanford to James Harris, 6 December 1823, HUBL, Samuel Sanford, Letterbook.

¹³⁵ Champlins' small brig *Bayonne* (100 tons) took 43 days to sail from her home port to Elsinore in 1793, as she had been "in easterly weather with a rain and for 28 days". Though the captain, Samuel Lawton, was not on the Atlantic for the first time and was already in Copenhagen by the beginning of July, he did not want to continue to St Petersburg fearing a the return voyage late in the autumn with a vessel that "proves somewhat leaky". So he took on a cargo in Copenhagen and was already back in the Sound on his return on 4 August; Lawton to Christopher Champlin, 10 July, and 17 July 1793, MHS, WCRIC, vol. 1793, 462-463; CR 1793, NA T-201/1.

¹³⁶ CR 1834, 1856, NA M-81/3, 5. The immediate consequence of several vessels spending the winter there was that carrying charges dropped in the summer when vessels fully loaded in the winter were the first to reach the Boston and New York markets that year; Hutton to Cass, 6 July 1857, M-81/5.

¹³⁷ In the first two decades of the 19th century, Kronstadt was opened at the earliest on 22 March (1822) and at the latest on 12 May (1829). In 1812-13 the port was already closed on 26 October, but in 1826 only on 10 December; John Bookers report, 23 April 1837; PRO, FO 181/140.

¹³⁸ STA 1836 (1191/1627/2920, brig *Caribbea*); STA 1836 (160/697/2534, brig *Charlotte*); STA 1836 (2524, ship *Malo*); CR 1836, NA T-201/1, M-81/3, T-195/4. Other wrecked vessels were, for example, the bark *Thalia* of Newburyport, which lost almost a million lbs Havana sugar in summer 1834, and the bark *Frederik* (of New York), which lost a major part of her cargo on her second voyage to the Baltic Sea off the Hamina coast late in the autumn of 1839. Also the ship *Germany* (448 tons) of Boston and the bark *Casper* (349 tons) of Providence were wrecked off the Gotland coast in the autumn of 1842. When they left St Petersburg, they carried 16,800 poods iron and 16,200 poods hemp. The ship *Hedron* of Boston lost 573,000 lbs Charleston cotton on the Baltic Sea in summer 1848; CR 1834, 1839, 1842, 1848, NA M-81/3-5, T-201/1-2, T-195/4; STA 1834 (2060); STA 1839 (486/1388,3622); STA 1842 (1809,2420); STA 1848 (419); Todd to Webster, 12/29 November 1842, NA M-35/14/22.

¹³⁹ STA 1838 (1768/2905, 1769/2906); CR 1836, NA M-81/3.

The return journey from St Petersburg to North America took approximately as long as the passage from Cuba to Russia, clearly longer than crossing the Atlantic eastwards from Boston to St Petersburg.¹⁴⁰ At the turn of the 18th and 19th century the passage from Elsinore to New England took two months. The arrival and departure dates in the Sound and in Salem of 73 vessels are available for the years 1801-07. They show that crossing the North Atlantic took 64 days on average.¹⁴¹ In 1821 William D. Lewis considered a voyage of 51 days from St Petersburg to Boston faster than normal.¹⁴² This justifies Hardy Ropes' claim that the firm's ship *Chicora's* (467 tons) voyage from Boston to St Petersburg and back in 98 days was extraordinary.¹⁴³ The voyage of Elias Hasket Derby's reputedly fast ship *Astrea*, from Salem to St Petersburg and back took only 140 days in 1787, including 47 days in Kronstadt. She took only six days to sail eastwards from Gothenburg to St Petersburg.¹⁴⁴

Vessels of similar type sometimes differed greatly in speed. According to Captain Martin Page, who sailed several times to St Petersburg for Brown & Ives, his employers' ship *Arthur* (267 tons) sailed before the wind at 10 knots, whereas the ship *General Hamilton* (247 tons), in principle similar in construction, made only six knots or a little more. Against the wind the former made six and a half knots, and the latter under three knots. Page somewhat reluctantly took the latter vessel under his command, "the worst of any ship I ever saw", and sailed her either to Emden or to Amsterdam with a cargo of rice and cotton in at least two years. The journey back to Providence was made via St Petersburg.¹⁴⁵ Page regarded the fact that he won a race between five vessels sailing from Amsterdam to St Petersburg in summer 1806 as a tribute to his own skill and not the vessel. Page was particularly elated because two of the vessels he had beaten were Americans, "coppered and the fastest sailing ships belonging to New York and Baltimore".¹⁴⁶ The return journey in the autumn was by no means such a

¹⁴⁰ See North 1968a, 962-963; Hutchins 1941, 219-220; Taylor 1951, 145.

¹⁴¹ STA 1801-1806; CR 1801-07, NA T-201/1; Hitchins, *Digest of Duties*. In 1792 (eight vessels) the voyage took 56 days on average, and in 1793 (six vessels) 60 days. The calculation does not include two vessels that needed more than four months for the crossing; STA 1792-93; CR 1792-93, NA T-201/1. Those who left late in the autumn for the return crossing reached their destination sometimes only in the following year. Captain John Gatchell's bark *Colonel Howard* of Baltimore passed Elsinore on 11 November 1836, but arrived in Baltimore only at the end of January 1837; STA 1836 (3044); CR 1836, NA T-201/1; Kirchner 1975, 131. Howes (1894, 18-23) mentions the winter 1827-28 as being extremely hard. His vessel was the second to arrive in North America of ten vessels that left Elsinore between 25 October and 10 November, and he arrived only on 4 April 1828.

¹⁴² William D. Lewis to John D. Lewis, 10 October 1821, HSP, LNP, Letters 1810-41.

¹⁴³ The vessel visited the Baltic Sea twice in 1849, spending only a month there each time. As well as Boston she also visited Savannah on the second voyage; Hardy Ropes diary, HUBL, RFP; STA 1849 (291/188, 769/1340).

¹⁴⁴ The speed of the new ship *Astrea* was claimed to be as much as 260 nautical miles per day, but only half of that when the ship became older; Hardy Ropes diary, HUBL, RFP; STA 1849 (291/188, 769/1340).

¹⁴⁵ Page to Brown & Ives, 10 May 1805 and 24 June 1806, BUJCBL, BIP, V-G34; STA 1805 (1319/2127), STA 1806 (309/481); CR 1805-06, NA T-201/1.

¹⁴⁶ Page to Brown & Ives, 11 July 1806, BUJCBL, BIP, V-G34.

great success, and Page reported to Providence that the *General Hamilton* had set the “slowness record” between St Petersburg and Newport: 122 days.¹⁴⁷

A British report made in connection with the abolition of the Sound dues considered it possible to make three voyages to St Petersburg or four to Riga in one season.¹⁴⁸ The Americans did not have similar opportunities, as it took 7-8 months to sail the sugar triangle.¹⁴⁹ On the other hand, direct crossings from the North America to the Baltic Sea even twice a year were not rare, though unusual, at the beginning of the 19th century. At the turn of the century the vessels that did visit the Baltic twice a year often first took a cargo to a west-European port and then sailed again to St Petersburg for their return cargo.¹⁵⁰ This practice was perhaps started by John Patten of Boston, who sailed from Cadiz to the Baltic in March 1791. He took a cargo of tallow and cordage from St Petersburg to Lisbon and returned to St Petersburg in August with a cargo of sugar and fruit. He passed the Sound for the fourth time in mid-October carrying hemp, cordage and iron for Marblehead.¹⁵¹ Joseph Knapp of Salem was another of the first captains to sail east of the Sound twice in the same summer. First he carried a cargo of sugar and rum from Salem to Copenhagen early in spring 1800, and returned to the North Sea at the end of July reporting that he was carrying a cargo of tar taken on in Wiborg to London. At the end of September Knapp returned to the Baltic in ballast and brought back iron, hemp, cordage and even 3137 pieces of ravenduck as well from St Petersburg.¹⁵²

Joseph Cook of Salem was perhaps the first captain to sail twice in one summer from North America to the Baltic. In the summer of 1802 he sailed to St Petersburg first via São Miguel and the second time via Lisbon on Edward Allen’s brig *St. Michel*.¹⁵³ Two or three vessels at most sailed twice a year

¹⁴⁷ Page to Brown & Ives, 2 December 1806, BUJCBL, BIP, V-G34; STA 1806 (309/481).

¹⁴⁸ Report from the Select Committee, 1856, 37.

¹⁴⁹ However, for example in 1830 R.G. Shaw’s (of Boston) brig *Magnet* was reported as visiting the Baltic Sea twice, but she had spent the winter in Cowes before getting to Copenhagen in April. The vessel returned to Havana in ballast and carried a cargo of sugar from there to St Petersburg in the autumn. The homebound cargo consisted of hides and pelts for Livorno; STA 1830 (111/151, 3091/3575); CR 1830, NA T-195/3.

¹⁵⁰ For example Captain Isaac Clark of Boston passed Elsinore 24 April carrying a cargo of rice from Savannah to Copenhagen. After that, he took a Danish cargo to Dunkirk in 26 May, and on 28 June returned from Boston (!) to St Petersburg in ballast. Clark passed Elsinore for the fourth time on 18 August carrying Russian hemp and iron to Boston; STA 1795 (17/125, 308/666).

¹⁵¹ STA 1791 (48/480/1078/1339).

¹⁵² STA 1800 (369/1182, 1663/2065).

¹⁵³ STA 1802 (292/1008/2038/2777); CR 1802, NA T-201/1. At least from the beginning of the 1830s on, the brothers A. & C. Cunningham had their vessels sail regularly twice a year via Copenhagen to German ports. For example in 1830 the brig *Eliza Ann* (137 tons) visited Copenhagen, Pillau and Gothenburg twice under the command of Captain John Barnicoat. In 1836, the brig *Caribbea* (174 tons) was to have sailed the route Boston-Copenhagen-Königsberg twice over, but the vessel was wrecked during her second voyage on the Baltic Sea before she reached the Sound; STA 1830 (59, 220, 2095, 2709); STA 1836 (1191/1627/2920); CR 1830, 1836, NA T-195/3, T-201/1, and M-81/3.

between North America and St Petersburg.¹⁵⁴ The ship *Czarina* (218 tons) sailed two voyages regularly, and at least between 1830 and 1842 often also had time to visit Copenhagen and Havana.¹⁵⁵ William Ropes & Co.'s vessels sailed almost regularly twice a year between St Petersburg and North America. They spent a shorter time than usual at both American and Russian ports. The time spent on voyages decreased considerably as advance preparations were made as far as possible for the next voyage at ports of arrival and departure.¹⁵⁶

The St Petersburg trade created a group of vessels and captains that almost regularly every year sailed east of Elsinore.¹⁵⁷ These groups continued to exist for as long as shipowner-merchants dominated Russian trade, that is, until the 1840s. Only when traffic specialized in carrying freight and tramp vessels became usual did vessels and captains change almost completely every year in the consular reports and STA. One of the longest serving captains going to St Petersburg was Phineas Drinkwater of Portland, who took Asa Clapp's vessels among others to the Baltic for almost a quarter of century from at least 1804 on, though not every year. John E. Giddings of Salem also took Joseph Peabody's ship *Augustus* (246 tons) about ten times to the Baltic Sea in the 1820s and at the beginning of the 1830s.¹⁵⁸ Lewis Endicott, one of the owners of the ship *Peterhoff* from Salem, had

¹⁵⁴ The number is difficult to estimate on the basis of STA alone, although captains with the same name from the same city appear in accounts of the same year. Moreover, the same vessel sometimes visited St Petersburg under the command of a different captain. For example in summer 1830 the Bostonian Sam Austin's ship *Ninus* (256 tons) visited the Baltic Sea first under the command of Martin Nichols and later under John Austin; STA 1830 (1029/1220/3590/3600); CR 1830, NA T-195/3.

¹⁵⁵ In 1832 the brig passed Elsinore as follows: on 27 March sailing from Boston to Copenhagen/St Petersburg; on 21 May from St Petersburg to Boston; on 11 September from Boston to St Petersburg; on 11 November from St Petersburg to Boston. John Dwyer was captain on the first voyage, and Wolston Dixey on the second. In the next year Dwyer was the captain on both voyages, and in 1834 Dixey. In 1835 Dixey made the first voyage and Dwyer the second. In 1841 the brig *Czarina* was the last American vessel that left St Petersburg, and in spring 1842 the first to arrive in the Baltic; STA 1830 (1029/1220/3590/3600); CR 1830, NA T-195/3. In the 1820s Curtis & Baylies made similar double voyages to Copenhagen and Pillau also on the brig *Cipher*. Cunninghams of Boston continued this trade later. For example in 1839 the brig *Eliza Ann* visited Copenhagen early in the summer and Pillau late in the summer; STA 1830 (59/220, 2095/2709); CR 1830, NA T-195/3; see Howes 1894, 10.

¹⁵⁶ E.g. Hardy Ropes diary 1851, HUBL, RFP. Ropes' ship *Volga* (573 tons) was the only vessel that sailed three times from North America to Russia in one navigation season; CR 1856, NA M-81/6.

¹⁵⁷ The names of vessels can be considered an indicator of these regular connections, especially as several vessels with such names sailed to St Petersburg for many years. These vessels had names such as "*Azoff*", "*Cronstadt*", "*Czarina*", "*Kremlin*", "*Kutusoff*", "*Ladoga*", "*Moscow*", "*Neva*", "*Nicholas I*", "*Odessa*", "*Peterhoff*", "*Petersburg*", "*St. Petersburg*", "*Riga*", "*Rouble*", "*Russian*", "*Siberia*", "*Stieglitz*", "*Strelna*", "*Tsar*", and "*Volga*".

¹⁵⁸ The vessel sailed the sugar triangle Salem-Cuba-St Petersburg-Salem always carried to St Petersburg a similar-sized cargo of sugar, somewhat more than 500,000 lbs, as well as some coffee. Her return cargo to Salem consisted of iron, hemp and several manufactures. The ship *Augustus* arrived regularly at Elsinore among the last Americans and returned to Salem only at the very end of the year, sometimes only at the beginning of the next year. The vessel visited the Baltic Sea for the last time in 1837 after an interval of four years, but at that time her captain was H.T. King, and she was assigned to a different task: she brought iron from Stockholm. Captain

an even longer career. He reported in 1850 having sailed for 23 years between Havana and St Petersburg.¹⁵⁹ One of the regular sailers between St Petersburg and Boston was the bark *Garland* (233 tons) belonging to Parsons. She sailed the Baltic in 1815-18 under the command of Charles Parson and in 1819-23 under Daniel Low. At least in 1831 and 1836 she sailed twice to the Baltic. She specialized in carrying rice from Charleston to Denmark and often returned to North America via Gothenburg.¹⁶⁰ In addition the brig *Cronstadt* (273 tons), owned by J.B. Wales & Co. of Boston, which sailed the sugar triangle for almost 20 years, can be considered as belonging to the same group.¹⁶¹

6.4 The home ports: the dominance of Massachusetts and Maine

Almost 3300 American vessels sailed to Russia through the Sound between 1783 and 1860. According to STA, they came from 73 different places on the East coast of the United States. More than two-thirds of the vessels were from Massachusetts and altogether four-fifths from New England.¹⁶² The figures are based on the assumption that the home town (STA: *hjemsted*) of the captain as recorded in STA was also the home port of the vessel. This interpretation is not uncontentious as the meaning of *hjemsted* in the records is widely discussed: it may refer to the captain's place of residence, the vessel's port of registration or the place of residence of its owner.¹⁶³ The question cannot be settled definitively with respect to American vessels that passed the Sound even though in addition to STA the shipping lists and biannual reports of the consuls in Elsinore,

Giddings sailed to St Petersburg with the ship *Carthago* (426 tons) in 1837, and with the ship *Duxbury* (309 tons) in 1838-44; CR 1838-44, NA M-81/2-4, and T- 201/1-2; e.g. STA 1837 (2603/3218); STA 1844 (152/1159).

¹⁵⁹ Endicott to Daniel Webster, 16 September 1850, NA T-201/2. STA shows Captain Lewis Endicott making altogether 20 voyages to the Baltic Sea between 1825 and 1852 on several different vessels. Captain Aaron Endicott visited the Baltic, probably with Peabody's vessels, 13 times. Samuel Endicott made five journeys, Nathan Endicott seven and Moses Endicott three. Richard Trask was yet another regular sailor to St Petersburg. He commanded vessels belonging to Sam Train & Co. and Enoch Train from the end of the 1820s until the beginning of the 1840s, for example the brig *Edward* (238 tons) the brig *Oregon* (205 tons) and the ship *Forum* (294 tons); e.g. STA 1830 (939/2374); STA 1832 (127/1133); STA 1838 (110/1634); CR 1830,1832,1838, NA T-195/3-4, T-201/1, M-81/3.

¹⁶⁰ The vessel was commanded by, for example, Gorham P. Low, Benjamin Burrows and in 1836-38 Nathan Shittemore. The information on the bark *Garland's* regular voyages to the Baltic Sea in the years 1815-28 is mainly based on the appearance of her captains in the Sound customs accounts. If the vessel remained the same, she visited the Baltic Sea regularly for a quarter of century; e.g. STA 1815 (787/1197); STA 1836 (55/93, 2535/2629; CR 1815-38, NA, T-201/1-3, and M-81/2-3.

¹⁶¹ Moses A. Low and Edward Hatch served longest as her captains; CR 1830-47, NA T-195/3-4, and M- 81/3-4.

¹⁶² Appendix, table 23. The vessels that visited the Baltic Sea came from altogether 95 different home ports (home port of 12 vessels unknown).

¹⁶³ See Johansen 1983a, 17; Heckscher 1942, 183. In the shipping lists of the U.S. consuls in the Baltic ports, the home port of a vessel is without exception the same as the residence of the owner and captain.

Copenhagen and St Petersburg are also available. In principle the place of origin should not have caused problems once the vessel was recognized as American in Elsinore: the captains had no reason to lie about their home port. Even the slightest reason for claiming to be non-American was removed in 1826 when the United States was granted the status of “a privileged nation” in Elsinore.

The records are most contradictory about the place origin of American captains/vessels in the early phase of the period discussed. In the years 1783-1806 about 900 American vessels visited St Petersburg. Most of them reported the same home port on the way eastwards and their return westwards, but the entries do not tally in 119 cases.¹⁶⁴ For example, three vessels belonging to William Gray of Salem were registered in 1801 under a “wrong” home port. One was registered as being from Savannah, which was the vessel’s loading port, and two from Boston, their port of destination.¹⁶⁵

In 101 of the above-mentioned 119 contradictory cases, the home port was altered to the correspond with the vessel’s destination when the vessel sailed west through the Sound. This gives a reason to assume that the port of destination is the “correct” home port. However, the notes about ownership made by the Elsinore consul in the shipping lists of 1801-06 do not support this assumption. Information is available on the owners of 71 vessels for which STA has contradictory entries as to the home port in the years in question. Although the place of residence of the owner can also be considered the true home port of a vessel,¹⁶⁶ only 27 of the 71 vessels reported their home port (and port of destination) as being the same as the place of residence of the owner when they sailed westwards.¹⁶⁷ No reason can be found for the inconsistency. Perhaps the question of the home port was of little importance either to those registering

¹⁶⁴ Derby’s famous ship *Astrea* is a good example. Her captain, Benjamin Hodges, who was also from Salem, reported on the way west from the Sound that he was sailing to his home port of Boston, and the vessel’s cargo was also consigned to Boston; STA 1787 (1038). However, in 24 cases it is more a question of imprecise than contradictory entries in the records: in many cases, for example, “Rhode Island” is particularized as Newport or Providence, “America” as Gloucester or “New England” as Salem. In totally contradictory cases, the port recorded in STA on the vessel’s way east from the Sound is considered the home port in question.

¹⁶⁵ STA 1801 (177/977, ship *Rising States*, 299 tons); STA 1801 (1446/2144, ship *Wells*, 205 tons); STA 1801 (1377/2119, ship *Williams*, 182 tons); CR 1801, NA T-201/1.

¹⁶⁶ According to Albion (1961, 268), a managing agent or “ship’s husband” was appointed for vessels that had several owners. He took care of the vessel and the vessel was usually registered at his place of residence. Very often vessels built at small ports in New England under joint ownership chose a New York shipping agent or broker as managing agent, since it was easiest to arrange cargoes from that port.

¹⁶⁷ There were more “correct” entries for home ports when vessels sailed east than west: 40 of the captains of the 71 vessels reported the home port as being the same as the owner’s place of residence. For example, in 1804 Boston was recorded as the home port of the Bostonian Eben Parsons’ brig *Byfield* on her way to Russia, but on her return the home port (and port of destination) was put down as New York; STA 1804 (861/1676); CR 1804, NA T-201/1. Even when the home port of a vessel was put down as the same in both directions, it was not necessarily “correct”. For example, in 1804 Charleston was recorded at Elsinore as the home port of the brig *Betsey* under Captain Phil Crandon, and Charleston was also the vessel’s port of departure and destination. However, the owners of the vessel were from Gloucester; STA 1804 (368/859); CR 1804, NA T-201/1.

themselves or those compiling the registers. In some cases there is also reason to assume that the custom officer confused the home port either the port of loading or, perhaps more often, with the port of destination.¹⁶⁸

The cases of inconsistency reveal differing ideas of a home port. For Captain Robert Robinson, sailing the ship *Hope* (290 tons) for Champlins, the home place was usually the same as the port of loading when he was sailing eastwards, and the same as the port of destination when he was sailing westwards.¹⁶⁹

- in 1795: from New York to Copenhagen with sugar: homeport New York
- from St Petersburg to Newport with iron: homeport Newport
- in 1796: from Charleston to Copenhagen with rice: homeport Charleston
- from St Petersburg to New York with iron and hemp: homeport New York
- in 1800: from Hamburg to the Baltic Sea with ballast: homeport Rhode Island
- from St Petersburg to Newburyport with iron: homeport Newburyport
- in 1803: from Liverpool to St Petersburg with ballast: homeport Newport
- from St Petersburg to New York with iron and hemp: homeport Newport

The contradictory registration of home ports in STA decreased markedly after 1815, although there were still seven in 1816 and four in 1817. Sailing via Havana did not bring it to an end either.¹⁷⁰ In 1832-50, there are only 15 contradictory home port records for more than 1000 vessels. It was not impossible for the consuls in Elsinore and St Petersburg to give different information as to home ports from STA. However, there are only perhaps five such cases between the mid-1830s and the year 1850.¹⁷¹

If vessels' home ports are considered the criterion, American merchant shipping between both Havana and the United States and Russia was clearly dominated by the northeastern states of Massachusetts, Maine and Rhode Island.¹⁷² Counting by the number of vessels, Massachusetts kept a clear leading position until the 1850s, when Maine-registered vessels began to be in the majority. The same trend is also shown very clearly in tonnage figures.

¹⁶⁸ The cities whose names began with "New" in particular seem to have caused problems for the custom officers in Elsinore (Newburyport, Newport, New York particularly, and sometimes New Bedford). Certain spelling mistakes also occur repeatedly: for example Norfolk is "Nordfolk"; e.g. STA 1795 (436/904); STA 1802 (19-97/2858); STA 1803 (259/1422); STA 1830 (2,1556); see Johansen 1983a, 19-22.

¹⁶⁹ STA 1795 (436/804); STA 1796 (677/1881); STA 1800 (1130/1614); STA 1803 (1022/1658); CR 1803, NA T-201/1. Very often the home port of Champlins' or Brown, Benson & Ives' vessels is put down simply as Rhode Island; e.g. STA 1788 (438/977, 837/1268); STA 1790 (645/1103, 597/1104); STA 1799 (516/1310).

¹⁷⁰ In 1817 Captain Charles Church reported his home port to be Bristol, RI, when he carried sugar from Cuba to St Petersburg, but when he returned to the Sound with a cargo of iron for Boston, his home port was also put down as Boston; STA 1817 (2456/2934).

¹⁷¹ When Captain J. Graham took the brig *Independence* from Havana to St Petersburg with a cargo of sugar in 1840 and then went on to Malaga with lumber taken on in Wiborg, the captain/vessel was put down as from Philadelphia in Elsinore. The consul in Elsinore was in agreement, whereas the consul in St Petersburg had it that the vessel was from Portland, ME; STA 1840 (1240/2490); CR 1840, NA M-81/4, and T-201/2; cf. Keene 1978, 685, note 11.

¹⁷² Vessels from Maine (Portland 25, Kennebunk 4, Bath 2) are included in the Massachusetts figure before 1820.

TABLE 14 Changes of American vessels' home ports visiting St Petersburg in 1806 according the Sound Toll Accounts.

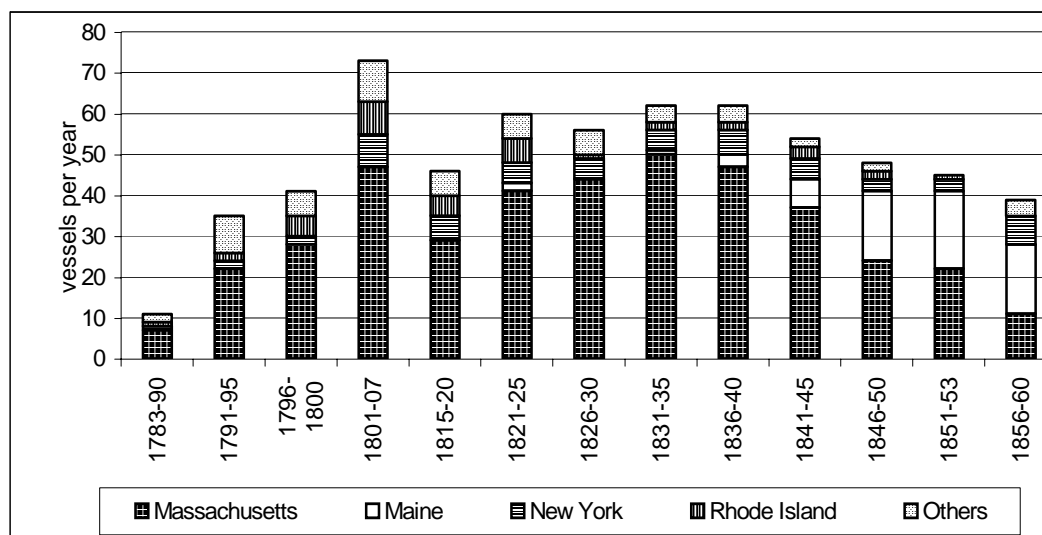
Vessel's number in STA	Ship's name	Captain	<i>Eastbound</i> Departure/ Home	<i>Westbound</i> Home/ Destination	Owner's home port
79/292	Bonetta	Jacob Endicott	Lisbon/Salem	New York/ New York	Salem
130/294	William Gray	J. Putnam	Savannah/ Savannah	New York/ Salem	Salem
158/324	Lydia Head	Th. Sranwood	Gloucester/ Gloucester	Salem/Salem	Gloucester
184/333	William	Charles Church	São Miguel/ New Bedf.	Newburyp./ São Miguel	New Bedford
186/348	John	Samuel Swett	Boston/Boston	Philadelphia/ Philad.	Newburyport
223/357	Miranda	A. Wassworth	Amsterdam/ Boston	Portsmouth/ Boston	Portsmouth
225/347	Thomas	J. Samson	Bilbao/ Plymouth	Duxbury/ Boston	Plymouth
277/424	Henry	William Groves	Salem/ Salem	Boston/Boston	Salem
279/422	George	Jonath Evolet	Newburyp./ Newburyp.	Boston/Boston	Newburyport
291/465	Argus	Charles Holden	St Croix/ Providence	Boston/Boston	Providence
313/552	Alert	Shubael Snow	Caen/ Providence	Boston/Lisbon	Providence
315/470	Philanthropist	Thomas Dennis	Marblehead/ Marblehead	Boston/Boston	Boston
412/558	Industry	Josiah Bartlet	Amsterdam/ Newburyp.	New York/ New York	Newburyport
429/645	Native	Joseph Young	London/ Portland	New York/ New York	Portland
526/644	Martha Wash.	Jacob Parker	New York/ New York	Nantucket/ Nantucket	Nantucket

Sources: STA 1806; CR 1806, NA T-201/1.

The rise of the shipping and shipbuilding industries of New England, and especially Massachusetts, was accelerated at the turn of the century by the unusual conditions in Europe. Boston was perhaps most reluctant to reconcile itself to the ever-increasing lead taken by New York, which in fact dated back to the end of the 18th century. However, New England dominated the American mercantile marine. In 1806-10 Boston's share of the total tonnage was 36 percent and that of New York only 18 percent. However, after 1815 the tonnage of New York increased markedly faster than that of Boston. The registered tonnage of the latter averaged from a half to two-thirds of New York's aggregate tonnage in the four pre-Civil War decades. Already by the end of the 1850s a third of the mercantile marine was registered in New York, double the amount registered in Boston. New York was already a metropolis of a million inhabitants.¹⁷³ The

¹⁷³ Appendix, tables 17 and 18. The tonnage of both Boston and New York quadrupled between 1834 and 1855. By contrast, the fleets of, for example, Philadelphia and Salem shrank; Hutchins 1941, 244; Morison 1921, 213; ASPCN I 1832, 897.

tonnage figures do not correspond to the distribution of trade between ports, as the value of New York's foreign trade was five times that of Massachusetts.¹⁷⁴ The percentages of maritime activity Robert G. Albion has calculated for 1821-60 show that New York had a very clear leading position with respect to both the value of trade and tonnage figures. Its only serious competitor in domestic exports was New Orleans with its cotton.¹⁷⁵



Source: Appendix, table 23.

FIGURE 1 Home states of American vessels in Russian trade, 1783-1860.

It was a general trend in American foreign trade before 1815 that the registration of vessels was more widely scattered than import and export activity itself. Foreign trade was concentrated on New York, Boston, Philadelphia and Baltimore.¹⁷⁶ The development of American mercantile shipping on the Baltic differed significantly from the general trend, since in the first years of the 19th century twice as many Boston and Salem ships visited St Petersburg as New York ships. In 1803-07 more than 50 percent of the tonnage visiting Russia originated in Massachusetts and less than 20 percent was from New York. Massachusetts' share even increased after 1815. In the 1830s, for instance, 85 percent of the vessels were from there, while New York's share

¹⁷⁴ Cf. Appendix, tables 17 and 18. Satisfactory statistics on exports and imports for each port are not available before the year 1856. The import and export figures of most states are close to the figures of their major port. Massachusetts is the most significant exception, but even there Boston's share was 85-90 percent of the imports of the entire state; see Bruchey 1967, 227.

¹⁷⁵ Appendix, table 19. In 1860 New York had 52 percent of foreign trade and 33 percent of the registered tonnage. Yet only 5 percent of square-rigged vessels were built there. The Maine had only one percent of foreign trade, but it built 43 percent of the square-riggers (New England 77 percent); Albion 1961, 267. In the 1790s Massachusetts' share of exports was 15 percent, and in the first decade of the 19th century 22 percent. The corresponding figures for New York were 20 percent and 22 percent and for Pennsylvania 20 percent and 16 percent; ASPCN 1832, 927-928; see Shepherd 1988, 30ff.

¹⁷⁶ North 1966, 42-43; Pitkin 1835, 35; Appendix, table 19.

was only 10 percent. In the following decade the situation became a little more equal when six Boston vessels visited St Petersburg for every one from New York. In terms of tonnage the ratio was 4:1 in favour of Boston.¹⁷⁷

In 1843 *Hunts Merchants' Magazine* covered the different roles of Boston and New York in foreign trade. The New York's imports were three times those of Boston, but three-quarters of the total was "on foreign account", whereas the corresponding proportion for Massachusetts was below a fifth. Moreover, the bulk of New York's imports were carried on Massachusetts vessels, and the same applied to the profitable sugar trade between Cuba and St Petersburg: half of the vessels involved in it were from Massachusetts. The magazine considered Boston's trade more useful for the national economy than that of its competitors because of its freight incomes. According to the magazine, the foreign trade statistics gave a superficial and understated picture of the commercial importance of Massachusetts.¹⁷⁸

In addition to Boston, several small cities in Massachusetts that earned their living from shipping were, in terms of number of ships and tonnage, strongly involved in sailing to the Baltic at the beginning of the 19th century. In 1806, for example, vessels from 14 Massachusetts cities passed through the Sound. Salem was the most important of the minor ports. Before the War of Independence it was known only as a fishing port, but privateering in wartime made it a significant centre for long distance trading for a few decades.¹⁷⁹ In a number of years at the beginning of the 19th century there were more than 20 Salem vessels in the Baltic, a quarter of the total number of American vessels there, and more than from any other single American port. The war of 1812-14 was a turning point for Salem as well as for several other minor cities in New England (e.g. Marblehead, Newburyport, Plymouth). Salem vessels on the Baltic Sea sometimes still numbered about ten a year in the 1820s, but later they became rare. Salem vanished from the statistics of Russian imports and exports earlier than did Salem vessels from the route to St Petersburg and back.¹⁸⁰

¹⁷⁷ According to shipping lists of consular returns, the proportion of Massachusetts tonnage was 50 percent in St Petersburg in 1835-60, and that of Boston 45 percent; CR 1835-60, NA M-81/3-6; see Appendix, table 24.

¹⁷⁸ The magazine considered the statistics of 1841 to be well descriptive of the situation. It showed "registered seamen" numbering more than 4000 in Massachusetts, but only 1800 in New York; HMM 1843, vol. 9, 426-429. The leading position of New York was above all based on trade with western Europe. Also Albion (1961, 74, 375) remarked that Boston's competition in the Mediterranean and the Baltic was advantageous to it. However, New York's standing was strengthened by the fact that many Bostonians sailing to far away markets often brought their cargo to be sold on the bigger market of New York.

¹⁷⁹ See Morison 1921, 30, 96-97; Crosby 1965, 65; Phillips 1939, *passim*. New England also traded with the Mediterranean. For example, in 1798-08 half of the American tonnage that visited Leghorn originated from the region. New England merchants also dominated sailing to Bordeaux until the Embargo; Keene 1978, 696; Marzagalli 1998.

¹⁸⁰ The Salem mercantile marine was about 8000 tons at the beginning of the 1790s, but by 1807 it had already reached 43,600 tons. In the latter year 152 vessels were involved in foreign trade, but in 1815 only 58; HMM 1857, vol.16, 165. In addition to Boston, Salem, Newburyport and Marblehead, mentioned in Appendix (table 23), vessels were sent to St Petersburg mostly from Plymouth (51), Duxbury (38), New Bedford (37), Beverly (24) and Gloucester (19). As late as 1850-53 John Dwyer of

Up until the 1820s Rhode Island's contribution to commerce with St Petersburg was considerable because of its several major trading houses. There were up to ten vessels from Providence, Newport and Bristol on the Baltic Sea, but later Rhode Island's contribution shrank to almost nothing. Portsmouth was on much the same level as Providence with respect to the number of vessels.¹⁸¹

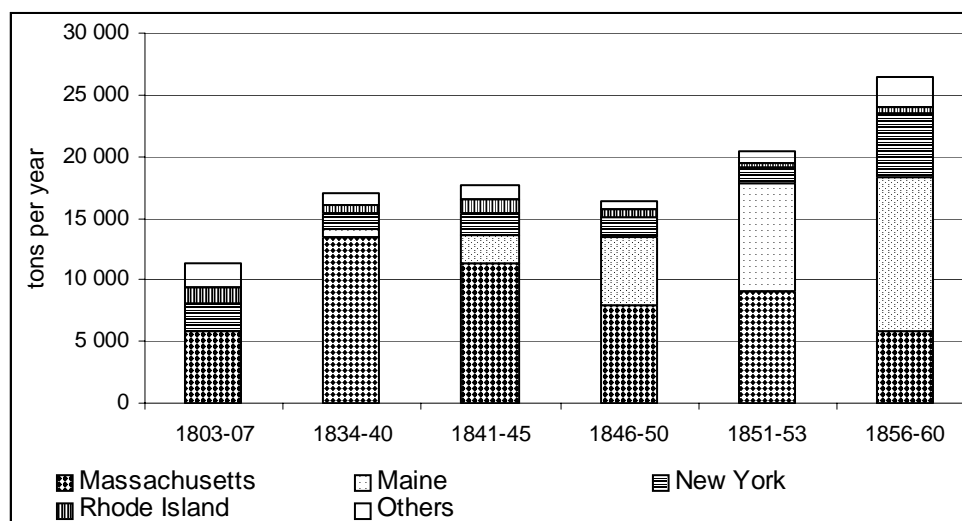
Maine rose to become by far the most important home port for merchant vessels, and this was one of the most significant developments in American sailing to the Baltic. Bath became "the largest shipbuilding port in the world", and it had the third biggest merchant marine in the United States (after New York and Boston). In the 1850s Maine built 70 percent of American brigs, 50 percent of barks and 20 percent of schooners.¹⁸² The shipping lists of the consul in St Petersburg include altogether 32 places in Maine which are recorded as the home ports of vessels visiting Russia. Four-fifths (127) of the vessels that visited St Petersburg in 1856-59 were built in Maine, and barely a fifth (18) in Massachusetts.¹⁸³

Salem sailed annually the route Charleston-St Petersburg-Boston on the bark *Neptune* (237 tons), and a Bostonian captain of the same name continued to sail the same route with the bark *Lyman* (370 tons) in 1857-59. The ship *Peterhoff* (494 tons) was also among the last Salem vessels to go to St Petersburg, sailing the route Havana-St Petersburg-Boston in 1853 under Captain Henry E. Woodberry. The last vessel from Marblehead, the bark *Francis* (460 tons), was destroyed by fire in Kronstadt in the autumn of 1853. The last vessel from Beverly visited St Petersburg in 1822, the last from Duxbury (the brig *Messenger*, 213 tons) and the last from New Bedford in 1851 (the ship *Tropic*, 512 tons). However, the bark *Volant* (387 tons) from Plymouth and the bark *Helper* (392 tons) from Newburyport visited St Petersburg later on: STA 1848 (229/504); STA 1850 (3652/5062); CR 1834-60, NA M-81/3-6.

¹⁸¹ The last vessel from Newport (the brig *Canonises*, 215 tons) visited St Petersburg in 1840, and from Bristol in 1849 (the bark *Empress*, 246 tons), while the last vessel of Providence reached St Petersburg by the Havana route in 1858 (the ship *Sea Duck*, 399 tons). Vessels from Providence sometimes engaged also in carrying cotton. The last of these was the ship *Marshall* (1046 tons) that sailed the route New Orleans-St Petersburg-Bordeaux; STA 1840 (1608/2980); STA 1849 (537); CR 1858-60, NA M-81/6.

¹⁸² Homans 1857, 9; Hutchins 1941, 285; Rowe 1948, 142-144. In 1844 Maine's registered tonnage was 129,000 tons, while in 1856 it was 193,000 tons. Maine's vessels were characteristic sturdy freighters of low cost, with their freight-carrying capacity being their most significant characteristic. A considerable proportion of the vessels built at Maine's dockyards were sold and registered outside the state. In 1836-40 the major part, 26 percent, of tonnage built in Maine was produced in Bath, but significant numbers of vessels were also produced in Waldoboro (22 percent), Portland (13 percent) and Belfast (9 percent) region; Albion 1961, 406-407; Appendix, tables 14 and 15.

¹⁸³ CR 1856-60, NA M-81/5-6. Vessels from Maine were most often registered at the following ports: Bath (56 vessels), Portland (47), Kennebunk (30), Richmond (20), Bangor (79), North Yarmouth, Damariscotta, Bowdoinham, Augusta, Belfast, Rockland, Saco, Thomaston and Brunswick.



Source: Appendix, table 24.

FIGURE 2 Home states of American tonnage in Russian trade, 1803-1860.

For example in 1839 altogether 15 New York vessels (and thus presumably in the possession of local merchants) visited Russia, but in 1842 only two, and in 1846 not a single one. The number varied rather significantly between different years. Unlike Boston vessels, vessels from New York seldom sailed regularly to Russia.¹⁸⁴ Vessels from New York also sailed to Cuba more rarely than vessels from New England. The voyage of the ship *Isaac Hicks* (495 tons), owned by the trading firm of Macy, in the summer of 1832 can be considered fairly typical. The vessel carried rice and cotton owned by William Ropes and Goodhue & Co. to St Petersburg, and brought back a cargo of iron, hemp, cordage and feathers that were consigned to Goodhue & Co. and Barings in London.¹⁸⁵ At the end of the period discussed the great cotton ships registered in New York raised that city to the level of Massachusetts in tonnage figures.

Vessels south of the New England ports, except for New York, rarely visited Russia. Vessels from Philadelphia and Baltimore were most abundant at the turn of the century and in the 1820s, but after that vessels registered there were exceptional.¹⁸⁶ The fact that Charleston and New Orleans later became major ports for exports to Russia did not change the matter. Vessels departing from the South for St Petersburg were usually registered in New York or New England.¹⁸⁷

¹⁸⁴ The ships *Neva* (361 tons), *Plato* (329 tons), *Florence* (298 tons), *Elsinore* (597 tons) and *Arcole* (663 tons) made an exception to the rule. The first of them visited the Baltic in 1834 and 1838-39, the ship *Plato* in 1835-36 and 1841, the ship *Florence* and the ship *Elsinore* in 1843-45, and the ship *Arcole* in 1848-49 and 1858; CR, NA T-201/1-2, T-195/3, and M-81/3-6.

¹⁸⁵ STA 1832 (1070/2067); CR 1832, NA T-195/3; CR 1849-58, NA T-201/1-2, T-195/3, M-81/3-6.

¹⁸⁶ The last vessel from Philadelphia, the bark *Sarah Hand* (282 tons), visited St Petersburg in 1851; CR 1851, NA M-81/6.

¹⁸⁷ 14 New Orleans vessels visited St Petersburg, and 11 from Savannah. Some vessels built in Maine were registered at cotton ports at the end of the period; e.g. the bark *Edisto* (356 tons), registered in Charleston in 1851-52; CR 1851-52, NA M-81/5.

6.5 The ports of departure: Boston, Havana and Amsterdam

According to STA and complementary consular records, about 4800 American vessels passed the Sound eastbound in 1783-1860, and about 3300 of them sailed to Russian ports, which meant in practice to St Petersburg. Elsinore records show that a third of those sailing to St Petersburg had taken on their cargo in the United States, a third in Cuba and a third were sailing from southern or western Europe.¹⁸⁸ Before 1815 most American vessels that sailed to the Baltic departed from European or North American ports. North America's importance mainly depended on flourishing exports to Copenhagen. Cuba then became the most important region of departure for voyages to St Petersburg because of the trade in raw sugar. At the same time departures from European ports to St Petersburg became less common and completely stopped before the Civil War. Cotton made North American cities major ports of departure; and in the 1850s they exceeded Cuban and European ports in importance. Over all, however, the American vessels sailing through the Sound to St Petersburg came from 129 different departure ports, 29 of them American.

If the years of the Continental System are excluded, it may be said generally of the STA information on departure and home ports that the captain had no reason not to declare the true port of origin. To all appearances, laden vessels' ports of departure are entered "correctly" as a rule. However, exceptions existed. According to STA, the ship *Coliseum* (259 tons) of Boston carried 445,000 lbs of sugar and 45,000 lbs of pepper from Boston to St Petersburg in 1837, but according to consuls in Elsinore and St Petersburg, the vessel had also visited Havana, Matanzas and Antwerp. It is most probable that the pepper was from Boston and the sugar from Cuba. The cargo was intended for the Antwerp market but for some reason it was carried to St Petersburg.¹⁸⁹

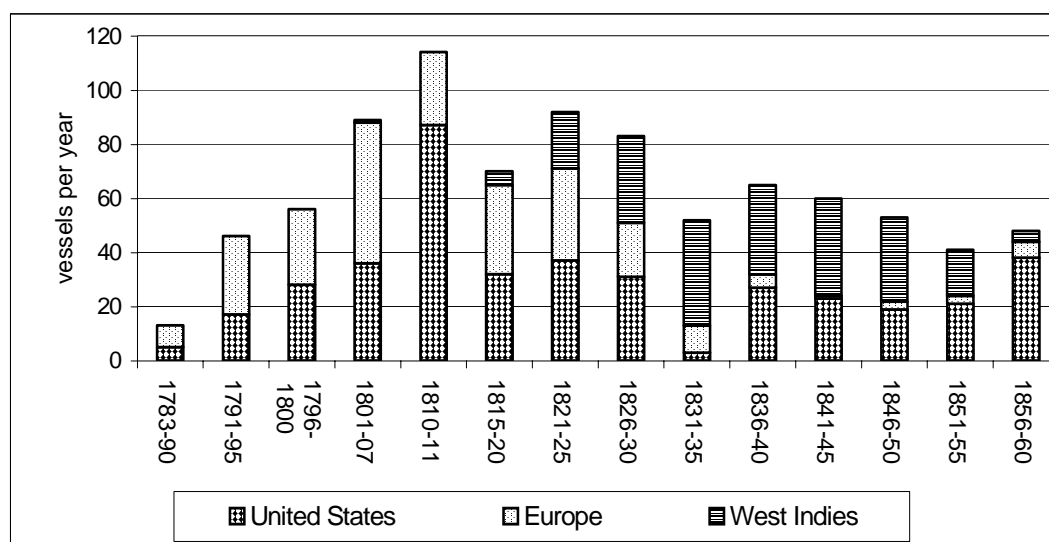
The custom of reporting the last port visited as the port of departure causes a slight distortion in the statistics for loading ports and exports. This means that the real port of departure of a vessel that left a part of her cargo in Hamburg, Amsterdam or Liverpool, remains unknown.¹⁹⁰ The remaining cargo such vessels carried to the Baltic was, however, rather small. It is also a problem to determine the exporting country where the cargo was loaded. STA

¹⁸⁸ Two thirds of the 1500 vessels sailing to Danish, Swedish and German ports departed from the United States and the rest mainly from North Sea ports.

¹⁸⁹ STA 1837 (2822/3203); CR 1837, NA M-81/3, and T-201/1.

¹⁹⁰ Most of the obscurities with vessels going eastward from the Sound concern the departure ports of vessels sailing in ballast. Thus they have no influence on import and export rates. For example, James Mayer of Boston reported both St Sebastian and Gothenburg as his port of departure when sailing in ballast to St Petersburg in the summer of 1815; STA 1815 (1055/1480). Sometimes part of the cargo "disappears" in between the port of loading and the port of destination. The cargo of William Gray's ship *Hind*, commanded by John Bickford, contained for example 600 barrels of tar, 10 barrels of turpentine and 37 chests of Hyson tea when the vessel departed from Salem on 17 June 1790. However, the cargo did not include those products a month later in Elsinore; Gray 1914, 27; STA 1790 (946).

would only record one port of loading. These cases mostly relate to the United States and Cuba. Moreover, cargoes taken on in the United States usually originated from several cities, but STA generally only records the port where the vessel last added to her cargo.¹⁹¹ Sometimes two ports of departure were recorded, no distinction made as to the cargo. This practice was quite usual with the Cuban sugar ports Havana and Matanzas.¹⁹²



Source: Appendix, table 25.

FIGURE 3 Areas of departure of American vessels passing through the Sound eastward, 1783-1860.

¹⁹¹ For example, in 1793 the brig *Three Friends* was loaded by Brown, Ives & Benson in Providence and New York for Ryberg & Co. In STA only New York is mentioned as a port of departure; STA 1793 (157). On the specification of ports in different countries: e.g. logwood and lignum vitae the bark *Gulnare* (of Boston) carried in 1835 were from Boston, but her sugar, coffee and cigars from Havana; STA 1835 (2095); CR 1835, NA T-201/1, and M-81/3. On the specification of American ports of loading, e.g. the ship *Chicora* of Boston (496,800 lbs of cotton from Mobile, 134,800 lbs of sugar from Boston; according to the consul of St Petersburg, 522,900 lbs and 138,400 lbs, respectively); STA 1845 (82); CR 1845, NA M-81/4. A few vessels stopped briefly in North America on their way from Havana to the Baltic; their port of departure was reported for example as Salem or Providence, but their cargo was from Cuba; e.g. STA 1830 (1740); CR 1830, NA T-201/1 (brig *Augustus*); STA 1845 (749); CR 1845, NA T-201/2, and M-81/4 (ship *Washington*).

¹⁹² If STA states, for example, "fra Baltimorre og Amsterdam", the most probable port of loading is considered the first port of departure. When two American ports are reported ("fra Boston og New York"), the first is selected. However, if for example Boston and Havana are reported as ports of departure for cargoes of sugar, Havana is chosen as the port of export. Havana is considered the port of departure of all vessels sailing from there and Matanzas, irrespective of their cargo specifications or intermediate ports (e.g. Cowes or Amsterdam). In the spring of 1816 George Richardson of Plymouth reported that he was sailing from Wilmington with a cargo of 128,600 lbs of sugar. In cases of this kind, Wilmington is considered the vessel's port of departure, regardless of the fact that the vessel had, according to John D. Lewis, also visited Rotterdam; STA 1816 (324); HSP, WDLP, Lewis Letters 1808-28.

Most of the obscurities concern the information about the departure port of vessels sailing eastwards in ballast. Usually the vessels were registered as leaving from where the cargo was offloaded, that is, from a European port, but in some cases it was a North American city. Crossing the Atlantic in ballast is an improbable event, yet cannot be totally excluded. For example on 3rd May 1790 Captain Robert Service of Philadelphia reported that he was on the way from Philadelphia to St Petersburg in ballast. It is possible that the cargo of iron, hemp, sailduck and ravenduck the vessel brought back from St Petersburg was intended to reach the American market, in this case New York, as the first cargo of the year, as Service passed Elsinore westbound as early as 26th May.¹⁹³ STA states that two of William Gray's ships, the *Howard* and the *Iris*, sailed in ballast from Salem to Elsinore in 1805, but according to the consul in Elsinore they arrived in ballast from London and Amsterdam.¹⁹⁴ The same applies probably to most vessels registered as sailing from the United States in ballast: the intermediate European port was not reported in Elsinore. However, in 1798 a vessel owned by the Goodhue family of Salem was sent to the Baltic Sea "in ballast not carrying any goods at all of any kind".¹⁹⁵

The vessels in the ballast category probably also include the American vessels that passed through the Sound claiming to be British. Already in 1784 at least two such vessels sailed from London to St Petersburg.¹⁹⁶ The great difference in the numbers of American vessels sailing eastwards and westwards in some years can also be explained by this practice. Another, though unlikely, possibility is that the vessels used some other passage than that through the Sound.¹⁹⁷

The departure ports data in the shipping lists of the consuls in Elsinore and St Petersburg ("where from" and "ports touched") are somewhat more informative than those of STA, but they also tend to be undependable about the ports of loading. By contrast, the vessels' sailing routes are sometimes reported in great detail.¹⁹⁸ According to the consul in St Petersburg, the ship *Talma* under

¹⁹³ STA 1790 (350); STA 1784 (1454), and STA 1795 (308).

¹⁹⁴ STA 1805 (287/1111, 391/1267); CR 1805, NA T-201/1.

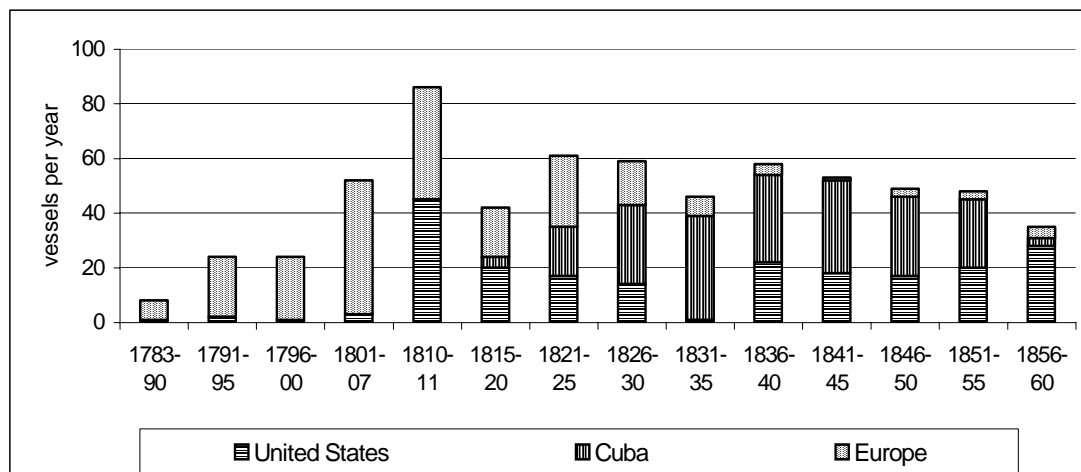
¹⁹⁵ Stephen Goodhue to Benjamin Goodhue, 23 May 1798, EI, GFP, vol.1. However, the vessel did not sail to St Petersburg, for her captain was probably instructed in England to sail to Archangel.

¹⁹⁶ STA 1784 (Storbritanniske skibe, 444, 466).

¹⁹⁷ According to STA, 80 American vessels sailed eastwards and 103 vessels westwards in 1796. The difference consists of 26 vessels that do not appear on lists of those sailing eastwards, and of three vessels that are not reported as having returned. There are even three vessels that, according to STA, sailed twice westwards but eastwards not at all, and a vessel that sailed twice westwards but only once eastwards. The group contains only seven vessels that departed from St Petersburg, and the most of the rest brought lumber and grain from Danzig, Memel or Riga for Spain and Portugal. Thus it is possible that the vessels sailed eastwards through the Belts. Some vessels also spent the winter on the Baltic Sea.

¹⁹⁸ Quite a few sugar ships departing from Cuba visited some West European ports before they arrived in St Petersburg. According to STA, in 1843 40 vessels left Havana, and according to the consul in St Petersburg, at least seven visited Liverpool, two Antwerp and one Bordeaux and Cowes; CR 1844, NA M-81/4. STA has an exceptional route record for the ship *Reliance* of Boston: "fra Boston i Amerika

Captain William Thomas had sailed the route Boston-Batavia-Cowes-Rotterdam-London-Matanzas-London-Matanzas-St Petersburg in 1838. STA records only the last phase of the voyage, with sugar from Cuba to St Petersburg.¹⁹⁹ In some cases, consuls and STA report totally different ports of loading, but these cases only number about five in the 1830s and 1840s.



Source: Appendix, table 25.

FIGURE 4 Areas of departure of American vessels passing through the Sound to Russia, 1783-1860.

The American vessels that sailed to the Baltic Sea before 1810 can be divided into two major groups: first, those carrying colonial produce from the United States to Copenhagen, and second, those sailing in ballast from western European ports to St Petersburg. A large number of the vessels belonging to the first group continued to St Petersburg either in ballast or with a cargo. For example, in 1796 80 American vessels sailed to the Baltic through the Sound, and only three of them had departed from North America bound for St Petersburg. One of them had left the major part of her cargo probably in London, and the other two reported St Petersburg as their port of destination as well as Copenhagen. In the same year 24 vessels sailed from the United States to Copenhagen fully loaded. U.S. exports to the Baltic were directed above all to Copenhagen. However, St Petersburg was also attractive and 43 American vessels sailed there, 25 of them completely in ballast. The westbound traffic from the Sound supports the idea of the significance of St Petersburg. 63 vessels

sidst fra Cork"; STA 1847 (787); CR 1847, NA T-201/2. In some cases, STA and the consuls give contradictory information about the route. For example, John Holland & Co.'s ship *Pocahontas* (Capt. Thomas Oakes), which visited the Baltic Sea in the autumn of 1801, sailed Hamburg-St Petersburg-Copenhagen-North America according to STA, but according to the consul in Elsinore, sailed Gothenburg-Copenhagen-Boston; STA 1801 (1781/2051); CR 1801, NA T-201/1.

¹⁹⁹ CR 1838, NA M-81/3, T-201/1, and T-195/4; STA 1838 (1560/2319). For example in 1839, the ship *Flavius* of New York sailed from New York via Antwerp to Stockholm with 22,700 lbs of cotton according to the consul in Elsinore. However, STA leaves out Antwerp, where the cargo was probably mostly unloaded. The loading port of cotton was in any case New York; STA 1839 (2226); CR 1839, NA T-201/2.

returned from there to the Sound fully laden in 1796. 17 of them had apparently left their cargo in Copenhagen and continued from there to the Gulf of Finland. Only 15 vessels sailed from Copenhagen to the Sound and all but two probably carried to the United States Russian products bought in Denmark.

Before 1810 the role of American ports of loading and thus also the contribution of U.S. domestic exports to Russian trade is rather insignificant. In the years 1793-1807 about 560 vessels sailed to St Petersburg through the Sound, but only about forty of them reported in the Sound that they had departed from North America.²⁰⁰

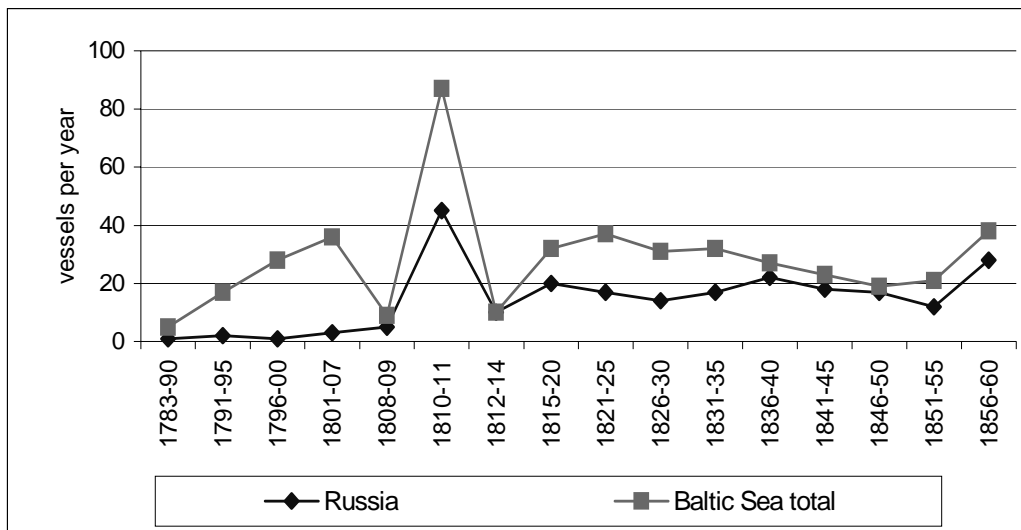
Political decisions quickly affected commerce and shipping. In 1795-96 Hamburg was the major departure port for vessels sailing to St Petersburg (22 vessels). Jay's Treaty and French reactions to it showed up in the unusually large volume of traffic from British ports to St Petersburg in the summer of 1796. The threat of French privateers showed in the fact that not a single vessel sailed in 1797 with wine and fruit from São Miguel to St Petersburg, though in the previous year there had been 11. 14 vessels sailed from France to the Baltic in 1795, but only one in the five years after that.²⁰¹

Before the embargo year of 1808, voyages to St Petersburg might be linked to wide-ranging operations geographically. Brown & Ives's ship *John Jay*, for example, carried Russian products from Providence to Bombay and Canton in 1796. The voyage was repeated the next year, but the captain, Daniel Olney, got into trouble over the return cargo due to lack of funds. In the spring of 1798 he took a freight from the Dutch East India Company for Caspar Voght in Hamburg. From him he received a letter of credit and purchased such a great quantity of iron and hemp in St Petersburg in the autumn that the vessel was, according to him, "completely filled" and "very deep". Captain Olney met with a storm in the English Channel on his way back, and he was forced to take his damaged ship to Lisbon. The vessel only returned to Providence from a voyage of almost two years in March 1799.²⁰²

²⁰⁰ None of the 16 vessels that ended up in Reval and Riga reported an American port of departure. Only a few vessels sailed to St Petersburg with a cargo. For example, in 1791 12 vessels sailed to St Petersburg, all in ballast except one that carried 225,000 lbs of sugar from Lisbon. 14 American vessels sailed to the Baltic Sea fully laden in 1794; 12 of them reported Copenhagen as their port of destination, one Stettin and one St Petersburg. According to STA, only one of the 88 vessels that sailed to St Petersburg in 1804-05 carried any considerable cargo, the brig *Zerviah* owned by Butler & Wheaton, which departed from Providence carrying 170,000 lbs of tobacco. The statistics for 1806 show the situation even more clearly: 107 vessels sailed to the Baltic Sea, and 54 to St Petersburg. Only one of the latter group, Jacob Barker's small schooner *Martha Washington* from New York, carried her cargo directly to St Petersburg; STA 1805 (1133); 1806 (526); CR 1804-06, NA T-201/1.

²⁰¹ Appendix, table 25.

²⁰² Hedges 1968, vol. 1, 64-67; STA 1798 (1332/1799). Voyages from the Baltic Sea to the East Indies were rare. However, Benjamin Goodhue's brig *Adventure* from Salem loaded on Russian iron, cordage and Spanish dollars left Copenhagen for the East Indies in the summer of 1800. The large cargo of coffee and rum the vessel had carried from Salem to Ryberg & Co. had approximately the same value as the cargo sent to the East; Ryberg & Co. to Benjamin Goodhue, 9 August 1800, EI, GFP, vol. 2; STA 1800 (739/1378).

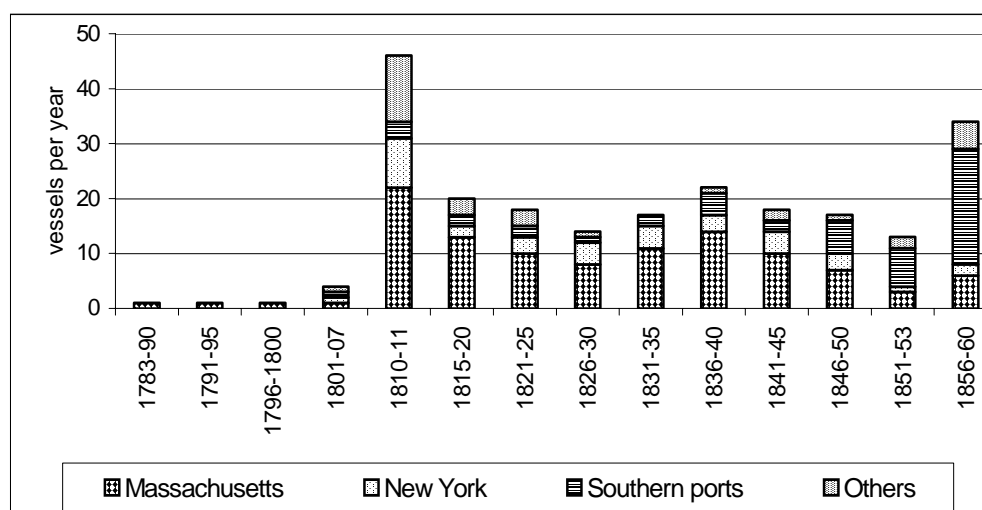


Source: Appendix, table 25.

FIGURE 5 Destination of American vessels departing from the United States and passing through the Sound eastward, 1783-1860.

The number of direct passages from the United States to Russia increased considerably after 1815. However, in the 1820s about half of the vessels that sailed directly cross the Atlantic to the Sound went on to Copenhagen, Stockholm or German ports. In the next decade St Petersburg's proportion again increased, and by the end of the period under study American sailing to the Baltic Sea was already totally concentrated on Russia. If the information as to the vessels' port of departure is considered an indicator of shipping, about half of the 2000 vessels departing from North America and sailing to the Baltic went directly to Russia in the period from 1783 to 1860. About half of them had departed from Massachusetts. Boston came to dominate the statistics by the 1830s at the latest, and in the end it was the only port in New England that had any ships sailing to Russia. Two thirds of the more than 650 vessels that sailed from Boston to the Baltic in the period under discussion ended up in St Petersburg. By contrast, only a quarter of the 200 vessels that departed from Salem ended up there, and a third of those that departed from Rhode Island. The export connections of other New English shipping ports gradually came to an end, which strengthened Boston's dominant position. The last vessel for St Petersburg left Newport in 1836, Salem in 1837 and Providence in 1842.²⁰³

²⁰³ Providence was the last port of call of the bark *Virginia* (248 tons) of New York, on her way from Havana to Russia. Captain John E. Giddings's ship *Carthago* (426 tons) made the last return voyage between Salem and St Petersburg. The bark *Casper* (349 tons) of Providence got wrecked off Gotland coast on her way back from St Petersburg. The last vessel to sail from New Bedford to St Petersburg was the ship *Braganza* (470 tons) in the summer of 1839; her home port was apparently an intermediate port like that of the *Virginia*. The last vessel from Beverly left for St Petersburg in 1820, Gloucester in 1821, Marblehead in 1828, Plymouth in 1835 (the ship *Harvest*, 294 tons); the ship *Aquetnet* (329 tons), which left Bristol in 1837, was the last vessel of that town that made a return voyage to St Petersburg. The last vessel that left Newburyport, in 1841, was also a sugar carrier that sailed to St Petersburg via her home port. Vessels that departed from Rhode Island seldom sailed directly to



Source: Appendix, table 25.

FIGURE 6 American ports of departure of U.S. vessels passing through the Sound in trade with Baltic Russia, 1783-1860.

It was not only from small New England towns that exports to St Petersburg came to an end. For example, Philadelphia had three or four vessels departing for St Petersburg every year at the beginning of the 19th century, but in the 1830s only one on average, and none at all after the voyage of the bark *Independence* in 1845.²⁰⁴ New York's standing as a port of export to St Petersburg, as well as a home port of vessels engaged in this trade, was insignificant in relation to its position as the centre of U.S. foreign trade. Only two or three vessels departed from there for Russia each year, although departing foreign trade tonnage totalled 802,000 tons in 1846-50. The corresponding figure for Boston was 363,000 tons, for Philadelphia 111,000 tons, and for the cotton ports together 689,000 tons.²⁰⁵

Without exception the cargoes of vessels that departed from New England, New York and Philadelphia included a variety of goods, often both American produce (cotton, rice, tobacco) and re-exports (sugar, coffee, spices). In that respect they differed from cargoes from the South, which were mainly made up of rice or cotton, and even more clearly from those from Cuba, made up almost entirely of sugar together with small consignments of coffee. The selection of produce the brig *Forester* (263 tons), owned by the Boston firm John Brown & Co. and under the command of Captain Thomas Stoddard, carried from Boston to St Petersburg in the spring of 1833 can be considered a rather representative general cargo. The cargo and the vessel were owned by Samuel Hooper and R. G. Shaw. STA and the consul in Copenhagen gave rather divergent information on the cargo:²⁰⁶

St Petersburg. More than 70 had already sailed to Copenhagen before 1812, but only 33 to St Petersburg by 1860.

²⁰⁴ STA 1845 (500/1175); CR 1845, NA M-81/4.

²⁰⁵ Appendix, table 20.

²⁰⁶ STA 1833 (484); CR 1833, NA T-195/3.

<i>Article</i>	<i>Sound Toll Accounts</i>	<i>Consular report</i>
Sugar	221 800 lbs	229 000 lbs
Coffee	205 800 lbs	212 000 lbs
Rice	27 000 lbs	28 500 lbs
Pepper	15 500 lbs	15 500 lbs
Logwood	27 000 lbs	12 tons
St.Martin wood	106 300 lbs	-
Hochewood	-	47 tons

Export from the South, mainly Charleston and Savannah, to the Baltic was quite active at the end of the 18th century and beginning of the 19th, but this was mainly the export of rice to Copenhagen. Several decades later, at the end of the 1840s, Charleston and Savannah again became major ports of export, but this time centred upon cotton, which was traded with Russia. New Orleans with its Mississippi valley cotton was by far the most important southern port for St Petersburg. In 1856-60 almost half of vessels arriving in St Petersburg from the United States were from there. Mobile, was also important, rising to become the third most important export port of the United States. The brig *Sterling* of Boston carried the first cotton cargo from there to St Petersburg in the autumn of 1840.²⁰⁷

About a third (907) of the American vessels that sailed to Russia through the Sound came from Cuba. The rise of the sugar triangle in the 1820s and its decline in the years of the Crimean War was the most significant single factor in American shipping to the Baltic Sea. However, according to STA not a single vessel sailed directly from Cuba to St Petersburg before 1815,²⁰⁸ while in the 1830s there were on average 35 per year, and in the peak year of 1844 there were 51. Cuban sugar shipments were totally dependent on the Russian market, since in the whole period only about fifty vessels arriving at the Sound from Cuba were on the way to ports outside Russia. As the level of North American exports decreased in the 1840s and sailing in ballast from western Europe came to an end, more than 60 percent of vessels going east from the Sound sailed the sugar triangle.

The Baltic sugar triangle came into existence rather belatedly, considering that already in the 1780s Spain had permitted the Americans to trade with several of its possessions in the West Indies, e.g. Cuba and Puerto Rico. Later licences to trade were reneged on and subsequently renewed, but at least in the years 1795-99 and 1804-06 Americans were allowed to sail to Spanish possessions. In 1796 the official number of American vessels to visit Havana was 150, but in 1801 it was already more than 800. The sugar trade with

²⁰⁷ STA 1840 (3401/3895); CR 1840, NA M-81/4. Altogether 31 cargoes of cotton carried from Mobile to Russia on American vessels by 1860. Richmond and Apalachicola were other, lesser cotton ports. The first cargo of cotton from Richmond to St Petersburg was carried by the brig *Essex* of Newburyport (273 tons) in the summer of 1840. The vessel sailed via Liverpool, and according to STA, carried 120,100 lbs of cotton. According to the consul of St Petersburg, the amount was somewhat larger: 126,400 lbs; STA 1840 (1216/2299); CR 1840, NA M-81/4.

²⁰⁸ In the summer of 1815 there were two, one carrying coffee and one sugar; STA 1815 (743, 1064).

northern Europe perhaps depended most of all on the fact that by orders of 1818 and 1822 Spain declared Havana and Matanzas free commercial ports.²⁰⁹ Trade and navigation between the U.S. and Cuba surged in subsequent decades and it was reckoned that the Americans would soon have a total monopoly of the Havana carrying trade. An average of 503,000 tons of American tonnage arrived in the Spanish West Indies in the years 1844-60.²¹⁰

Carrying sugar from Havana and Matanzas to the Baltic made up only a fraction of American shipping operations in Cuba. In 1837, for example, according to the local U.S. consul, 581 American vessels departed from Havana and only five of them were registered as sailing to St Petersburg. However, the reports of the consul in Havana were, to put it mildly, rather incomplete. According to the consul, 66 vessels departed for the Baltic in 1835-40, but according to STA, 192 arrived. The corresponding numbers for 1850-53 were 41 and 107.²¹¹ The difference is probably mainly due to the fact that some Americans left Havana for St Petersburg via Matanzas, some via the United States, and some reported their port of destination as Cowes or simply Europe. On the other hand, there were cases where in Havana it was reported that St Petersburg was the port of destination but in fact the vessel returned to the United States.²¹² It is probable that when a European port of destination was not revealed it was simply not known prior to instructions received at, for example, Cowes. Thus in 1840 at least two vessels reported in Havana as sailing to Cowes ended up in St Petersburg, also one that was to "sail to Matanzas and Europe" and one to St Petersburg via Matanzas.²¹³ Very few American vessels departed for St Petersburg from Cuba or the West Indies from any other port than Havana or Matanzas.²¹⁴ At most seven or eight vessels sailed from the Brazilian

²⁰⁹ See Friginals 1976, 42; Nettels 1962, 17-18; Williams 1970, 362; Goebel 1938, 302-303; Bryant 1967, 210; Cuenca Esteban 1984, 30; Setser 1937, 147-148; Ely 1964, 456; Albion 1961, 166. However, customs and port duties were lower for Spanish than foreign vessels.

²¹⁰ Homans 1858, 951; see Nettels 1962, 226-227; Bruchey 1956, 78-79, 263; Kirchner 1975, 134.

²¹¹ CR 1835-40, 1850-53, NA T-20/6-7, T-120/1; M-81/3, 5.

²¹² In 1835 at least one of the 16 vessels bound for St Petersburg from Havana sailed to Plymouth and one to Boston. They departed for the Baltic only after that; e.g. STA 1835 (1989, 1998); CR 1835, NA T-20/7. In 1844 the bark *Detroit* of Bath (292 tons) changed her captain in Boston, and the bark *Peru* was repaired at her home port after proving to be leaky. In the following year the ship *Washington* of Newburyport (371 tons) stopped at New York to get damage to the cargo and vessel repaired; STA 1844 (613/1783, 271/2122); STA 1845 (749/1705); CR 1844-45, NA T-201/2, and M-81/4.

²¹³ The vessels reported St Petersburg as their port of destination in Havana sailed to the Baltic Sea almost without exception. In 1835-40 only three vessels the consul of Havana mentions did not arrive at the Sound and in St Petersburg; in 1850-53 three vessels did not arrive; STA 1835-40; CR 1835-53, NA T-20/6-7, T-201/1, and M-81/3, 5.

²¹⁴ 12 vessels sailed from Santiago de Cuba and eight from Trinidad de Cuba. Coffee in particular was carried from Santiago to St Petersburg while the cargoes from Havana and Matanzas consisted almost exclusively of raw sugar. For example the brig *Cyprus* (199 tons) owned by R.G. Shaw of Boston took 179,700 lbs of coffee and 173,600 lbs of sugar from Santiago to St Petersburg in the spring of 1830. In 1832 the ship *Plato* of Duxbury (205 tons) carried 362,500 lbs of coffee to St Petersburg; STA 1830 (931); STA 1832 (1590); CR 1830 and 1832, NA M-81/2-3, T-201/1, and T-195/3-4.

coffee and sugar ports in the 1820s.²¹⁵ American vessels sailing to St Petersburg started from 17 different West Indian and South American ports of loading.

It might appear that crossing from North or South America or the West Indies to northern Europe could be considered a more “natural” route for exports than sailing from western or southern European ports to the Baltic. However, the latter became an essential component of American trade links with the Baltic as far as shipping was concerned. In the period 1783-1860 about 1400 vessels departed from European ports for the Baltic Sea. Three-quarters of them were declared to be sailing to St Petersburg, while the remainder consisted mainly of vessels sailing from North Sea ports to bring back iron from Stockholm or else declared to be sailing to “the Baltic Sea”. The majority of the latter also ended up in St Petersburg.²¹⁶

Roughly the same number of vessels departed for Russia from European ports as from Cuba and North America. “The European group” was crucially different from the others in the matter of exports, as it mainly consisted of vessels sailing in ballast. However, this “ballast group” was especially important at the end of the 18th century and the beginning of the 19th century for U.S. trade with Russia, when almost all American merchant shipping to Russia operated via southern European or North Sea ports. The long period of war does not by itself explain this since the Americans still practised “European coastal sailing” about twenty years after the wars. Even so, the war years created a somewhat odd situation with Lisbon and São Miguel becoming the most important “ports of export” in the Russian trade. Relations between America and Iberia had long traditions since Cadiz and Bilbao were well-known ports for the export of codfish and the import of salt into the U.S. already before independence. Moreover, the wines of Madeira and the Azores were favoured by the Americans.²¹⁷

The export of foodstuffs to Spain and Portugal became a major branch of American trade during the Revolutionary Wars. According to their own reports, seven or eight vessels sailed directly from Portuguese ports to St Petersburg every year. In 1783-1860 more than 250 vessels ended up in St Petersburg from Spanish and Portuguese ports. Lisbon was the most important port of departure but especially in the early part of the period São Miguel in the

²¹⁵ Altogether 45 vessels departed from Brazil: 20 from Pernambuco, 12 from Rio de Janeiro, 11 from Bahia and two from Laguna. The brig *Volant* (165 tons), owned by William Gray, was one of the first vessels to sail from South America and the West Indies to the Baltic; she carried a cargo of sugar taken on in French Guadeloupe in the spring of 1793. The first vessel to sail from Central America was the ship *Mary* (255 tons), belonging to Cobb & Clapp of Portland, which carried a cargo of mahogany and logwood from Honduras to St Petersburg in 1807. Logwood was also carried from Laguna on the south coast of Brazil, for example in 1853 by the bark *Juanita* of Boston (358 tons); STA 1793 (942); CR 1793, 1807, 1843, NA T-201/1, M-81/6; Appendix, table 25.

²¹⁶ British Baltic sailing was different. For example, in 1852 only 53 of the 1193 vessels that sailed to the Baltic had departed from anywhere else but Britain. 1895 vessels sailed west through the Sound, and only ten to other than British ports; McCulloch 1854, 567.

²¹⁷ See Nettels 1962, 17; Porter 1937, vol. I, 11.

Azores was also important. Usually vessels sailing from the south to the Baltic with a cargo of fruit and wine arrived at the Sound either late in the autumn or early in the spring.²¹⁸

Cargo traffic from the Mediterranean to St Petersburg was at its height in the 1820s. Especially Gallipoli in Italy but also Messina, Malaga and Marseilles became frequently used ports for the purchase of olive oil and fruit. Vessels bound for St Petersburg left from 15 different ports east of Gibraltar.²¹⁹ The first vessel to sail from the area was the brig *Lucy Ann* (235 tons) owned by Wilson & Co. of New York, which carried wine from Barcelona to St Petersburg in July 1802. The last vessel to depart from east of Gibraltar was William Ropes' ship *Ladoga* (867 tons) which carried sulphur from Catania in Sicily to St Petersburg in 1856.²²⁰

John H. Andrews of Salem was one who took part in trade with the Mediterranean. His ship *Rebecca* carried a cargo of cotton and sugar from Charleston to Marseilles in February 1827. Finding a homeward cargo was a problem, since 22 American vessels were waiting in Marseilles for suitable freight at the beginning of March. Andrews, who was the supercargo of his ship, had at first planned to take a cargo of olive oil from Gallipoli to St Petersburg as in the previous year, but to the delight of his partners in Marseilles he finally decided to buy a full cargo of oil and fruit from them and, disregarding all warnings, try out the Baltic market. The *Rebecca's* cargo included 1500 gallons of olive oil, 34,600 lbs of almonds, 5600 lbs of raisins and 50 pipes of "imitation Madeira". Andrews at first planned to leave all these in Copenhagen, but then decided to sail on to St Petersburg. Only the raisins and almonds sold there and the rest of the cargo had to be left in store with Andrews' long-term partner, John D. Lewis.²²¹ Sailing between Spain or Portugal and Russia remained on the sidelines of American trade for the whole period discussed. Later on wine and fruit were traded for Baltic lumber.²²² Trade in Cuban sugar sometimes also involved sailing to the Mediterranean. For example, Grays of Boston often sent their vessels to the Mediterranean at

²¹⁸ Geographically also the Azores island of Fayal (7), Madeira (10) and Teneriffe (3) belonged to the same group. The first to sail to St Petersburg from these islands was probably Captain Hudson Bishop of Boston, who carried 1200 boxes of fruit from São Miguel in May 1794 and, unusually, returned to the same port with a cargo of iron. The last vessel to leave from the islands was the bark *J.D. Carver* of Rockland, (413 tons), which carried salt from Teneriffe to Riga in the summer of 1856; STA 1794 (544/1132); CR 1856, NA 81/6. In addition to Lisbon, other ports of departure were Porto (6) and Setubal (2). The most important Spanish ports on the Atlantic side were Bilbao (12) and San Sebastian (2); see Morison 1921, 87.

²¹⁹ 24 vessels left from Gallipoli (in 1804-28), ten from Malaga (1803-48), five from Messina (1818-28), seven from Marseilles (1820-27) and four from Gibraltar.

²²⁰ STA 1802 (1910); CR 1802, 1856, NA T-201/1-2, and M-81/6.

²²¹ Balfour, Ellah, Rainals & Co. to Andrews & Page, 15 June 1826; John P. Andrews to John H. Andrews, 2 March, 17 March, and 15 July 1827; Fitch Brothers to John H. Andrews, 8 March 1827; Jos. Osgood to Andrews & Page, 26 December 1827, EI, JHAP, vol. 2/6-8.

²²² E.g. In 1838 the brig *Montana* of Boston (224 tons) took 488 pipes of wine from Madeira to St Petersburg and returned to the island with lumber; STA 1838 (2639/3386); CR 1838, NA M-81/3, and T-201/2.

the end of the year and the captains were instructed to sail from there to Havana for the sugar season. After carrying Cuban sugar to St Petersburg the vessels returned late in the autumn to New England.²²³

In the period 1783-1860 American vessels mostly used two French and three British ports of departure. The most often mentioned French cities were Le Havre (altogether 40 times) and Bordeaux (129), and the most important British ports were London (78) and Liverpool (77). Almost without exception vessels sailed from there to St Petersburg in ballast. There were 24 ports of departure altogether on the British Isles. 21 vessels departed for St Petersburg from French, Spanish and Portuguese ports on the Atlantic.²²⁴ The first vessels from that area arrived in St Petersburg in the 1780s from Bilbao, Cadiz, Le Havre and Lisbon. The last vessels to sail the route were the brig *Salisbury* of Newburyport, which sailed to St Petersburg in October 1845 in ballast, and the brig *Haider* (156 tons) of New York, which carried salt from Porto to Riga in October 1853.²²⁵

Between 1783 and 1860 about 500 vessels departed from North Sea ports for St Petersburg in ballast, approximately as many vessels as departed from Massachusetts fully laden. Traffic between the North Sea and Russia was at its busiest in the first half of the period discussed. In 1801-07, for example, an average of 24 vessels a year sailed the route, which accounts for almost a third of those sailing to St Petersburg through the Sound. From 1828 to 1860 an average of only one vessel a year used the same route. About a third of the vessels that left from North Sea ports for St Petersburg sailed from Amsterdam and this is almost the same number of vessels as departed from New York. Antwerp and Rotterdam were almost as often the port of departure as Salem. The German free ports on the North Sea, Hamburg and Bremen, were especially important in the 1790s, and again about ten years after the Napoleonic Wars.²²⁶ There were altogether 17 ports of departure around the North Sea. The last vessel to sail from the region to St Petersburg was the New York ship *Nicholas I* (596 tons), which was sold to a Russian-American Company.²²⁷

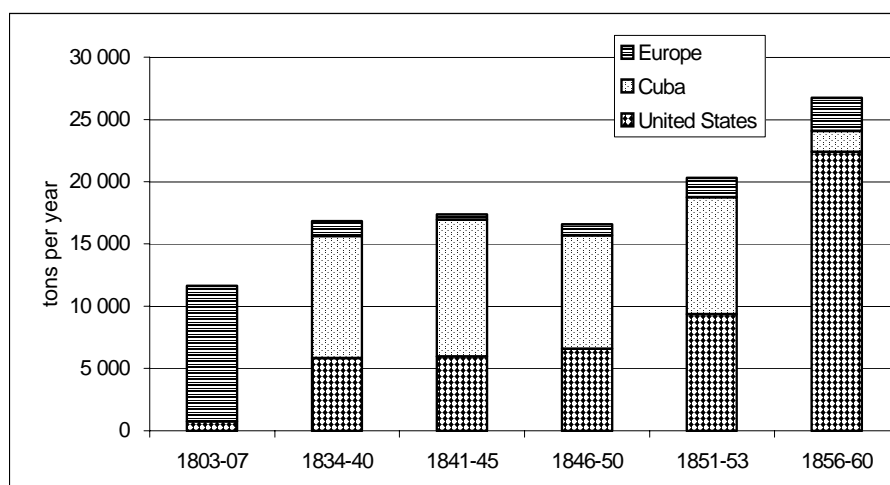
²²³ E.g. Horace Gray to Elliott Woodberry, 22 September 1825, HUBL, HGP, vol.17.

²²⁴ Appendix, table 25. Other frequently occurring ports were Trieste (5), Nantes (4), Hull (7), Belfast (5), Londonderry (4), Dublin (11), Galloway and Waterford. The four last, together with London, appear as ports of departure from the 1780s on.

²²⁵ Appendix, table 25; STA 1845 (2010); CR 1845, 1853, NA T-201/2-3, and M-81/4-6.

²²⁶ Appendix, table 25. In the years of the Continental System, Tönningen, Altona and Emden were also common ports of departure. In the early part of the period some American vessels went on from Gothenburg to St Petersburg, but later the vessels leaving from Gothenburg sailed almost regularly to Stockholm. In 1828-35 an average of 42 American vessels arrived at the free port of Hamburg, and the U.S. share of its trade was estimated at about five percent; Woodside to the Secretary of State, 3 December 1839, NA M-41/4. On American sailing to Antwerp, see Veraghtern 1988b, 53-65.

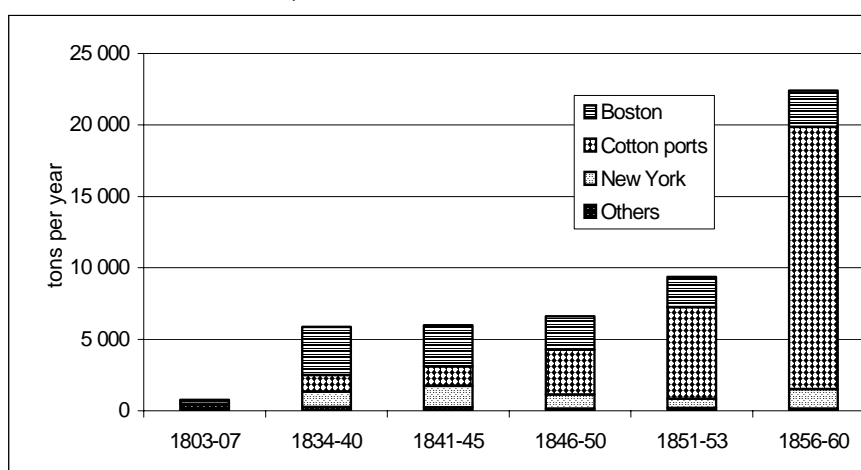
²²⁷ STA 1850 (3618); CR 1851, NA M-81/5.



Source: Appendix, table 28.

FIGURE 7 The origin of American tonnage arriving in St Petersburg, 1803-60.

Records of the tonnage of American vessels kept by the consuls in St Petersburg and Elsinore help give a clearer picture of the American shipping recorded in STA. The most significant development was that although the number of vessels sailing to St Petersburg decreased, their carrying capacity actually increased. In terms of tonnage, the transportation of raw sugar dominated American shipping in the 1830s and 1840s: 55 percent of the tonnage that arrived in St Petersburg in 1834-53 was from Cuba, and 40 percent from the United States. The southern cotton ports and Massachusetts (in practice, Boston) contributed about 40 percent of the tonnage that arrived in St Petersburg from American ports, and New York about 15 percent. 70 percent of the tonnage that arrived in St Petersburg in the five years before the Civil War had sailed from New Orleans, Mobile or Charleston.²²⁸

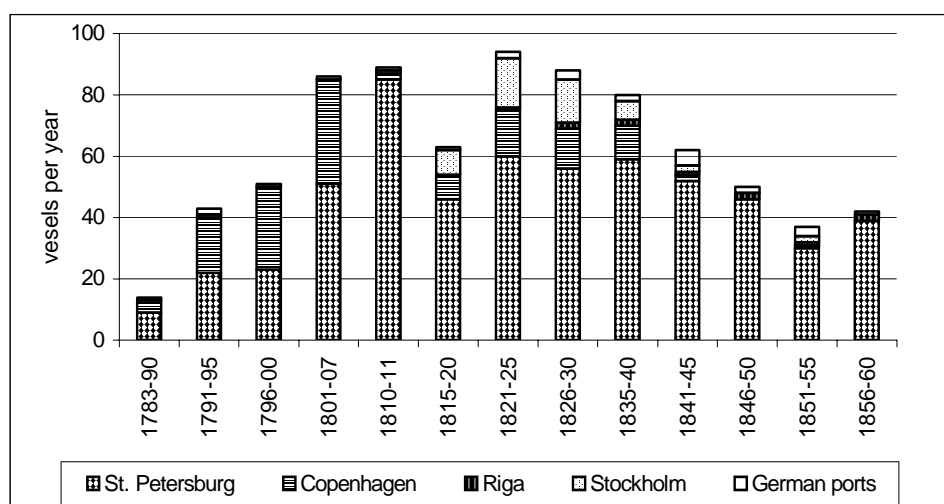


Note: Cotton ports are Charleston, Savannah, Mobile, and New Orleans.
Source: Appendix, table 28.

FIGURE 8 American ports of departure of U.S. tonnage arriving in St Petersburg, 1803-60.

6.6 The destination on the Baltic Sea: Copenhagen or St Petersburg?

About 4800 American vessels sailed eastward through the Sound in the years 1783-1860, 3300 of them to Russia. St Petersburg was by far the most important port of destination (3200 vessels). Copenhagen (770 vessels) was the only port that threatened its dominant position, and only at the beginning of the period. The Swedish ports (mainly Stockholm) and German cities (Stettin, Königsberg and Pillau) remained rather insignificant in terms of the total number of vessels. Shipping to Copenhagen especially but also to some degree to Stockholm, was connected with American sailing to St Petersburg. By contrast, sailing to German ports was not directly connected with Russian trade although the same American houses transacted business in both areas. Stettin had about the same share of American shipping to the Baltic as Riga.²²⁹



Source: Appendix, table 26.

FIGURE 9 Ports of destination of American vessels passing eastward through the Sound, 1783-1860.

It is impossible to determine beyond doubt on the basis of STA alone whether American vessels in the Baltic sailed to the port of destination declared in Elsinore, and whether they departed from the Baltic port registered in the customs accounts. For example, in 1795 five vessels declared that they were sailing to St Petersburg when passing through the Sound eastward, but when they returned to Elsinore, Copenhagen was registered as their port of departure.²³⁰ Sometimes information provided by the consuls and by STA

²²⁹ Appendix, table 26. 79 vessels sailed to Stettin through the Sound in the period discussed, and 49 returned. The corresponding numbers for Königsberg are 37 and 31, for Pillau 20 and 37, for Memel 16 and 20 and for Danzig 7 and 20.

²³⁰ Captain Ephraim Lombard of Boston declared St Petersburg as his port of destination when he arrived at Elsinore on 18 June 1795 in ballast. The vessel returned to Elsinore with a cargo of iron on 30 August, and reported Copenhagen as the port of

differs with respect to routes on the Baltic Sea. For example in 1804 the ship *Aurora* (234 tons) from Salisbury sailed, according to STA, to the Baltic via Charleston and Cowes, but according to the consul in Elsinore, to Copenhagen. According to STA, the vessel returned from Copenhagen to "America" in ballast, but according to the consul, the ship sailed to Liverpool in ballast.²³¹ The information STA provides on American vessels does, however, correspond with the shipping lists of consuls in Elsinore and St Petersburg with respect to Russian ports of destination and departure, apart from some minor exceptions.²³² By contrast, the number of vessels recorded in American and Russian statistics on foreign trade are somewhat at variance.²³³

According to Walter Kirchner the Russian statistics record a much larger number of vessels than STA and the consular reports. This is partly because of traffic to Archangel, the Black Sea and Russian America, but above all because a distinction is not always made between the figures for the West Indies and North America. According to the Russian statistics, an average of eight more vessels (including ballast vessels) entered the country from the 1820s on than according to STA (in the 1850s consular reports). The differences were at their greatest after the Crimean War.²³⁴

departure. There had been time to sail to St Petersburg, and it is possible that Copenhagen was only an intermediate port. By contrast, Captain Th. Long of Providence, who intended to sail from Hamburg to St Petersburg in ballast, was on the Baltic only from 11 September to 13 October, and probably could not have brought a cargo of iron from the eastern end of the Gulf of Finland in such a short time. Long reported Copenhagen as his port of departure when sailing westward; STA 1795 (82/736, 829/1020). Similarly, it is difficult to judge whether Thomas Simons of Salem obtained his cargo from St Petersburg or from Copenhagen. The captain intended to sail to St Petersburg when he sailed eastward from Rotterdam in ballast (10 August 1786), but on his way back he reported taking on his return cargo in Copenhagen; STA 1786 (893/ 1180).

²³¹ STA 1804 (57/97); CR 1804, NA T-201/1.

²³² According to calculations by William Irwin, Minister to Denmark, altogether 1209 American vessels sailed eastwards through the Sound in 1828-43, and 1198 westwards. The figures are virtually the same as the corresponding 1212 and 1200 vessels recorded in STA; Irwin to Buchanan, 3 June 1847, NA M-41/5; Appendix, table 26. Biannual consular reports were more detailed than STA with regard to ports of destination of vessels sailing to the Baltic Sea. They might be defined more precisely afterwards when the vessels returned to Elsinore. On the other hand the reports from Elsinore and Copenhagen do not include some vessels which visited the Baltic at the beginning of the year; e.g. STA 1832 (1/4).

²³³ According to the Russian statistics, altogether 789 American vessels entered the country in 1834, 1836-39 and 1841-49, and 737 of them reached St Petersburg; Kirchner 1975, 94-95; cf. Appendix, table 26. It is, however, pure coincidence that according to Russian statistics, 1384 vessels sailed from the United States to St Petersburg in 1824-49, exactly the same number as STA reports sailing through the Sound to St Petersburg. The so-called Kronstadt reports also record almost the same number of American vessels as STA, for example 33 as the total number of vessels in 1784-87; see Bolkhovitinov 1975, 96. Pitkin's (1816, 236-237) statistics ("taken from Russian accounts") are almost identical with STA figures. According to Pitkin, 723 vessels left St Petersburg for the United States in 1783-1804, and according to STA 732.

²³⁴ According to Russian statistics, 896 American vessels entered Russia from the United States in 1824-60 (1835 and 1849 excluded), but according to STA and the consuls only 637. The corresponding numbers for the West Indies were the other way round: 713 and 870. The total number of American vessels adds up to either 1928 or 1757.

TABLE 15 American vessels sailing from Russia according to different sources, 1834-50.

Source	Number of vessels
<i>Sound Toll Accounts:</i>	
- American vessels from Russia	826
- American vessels from Russia to the United States	547
<i>Commerce and Navigation:</i>	
- American vessels from Russia to the United States	579
<i>Kirchner:</i>	
- American vessels from Russia	821
- American vessels from Russia to the United States	533
<i>Consular Returns (St Petersburg)</i>	
- American vessels from St Petersburg	768
- American vessels from St Petersburg to the US.	514

Sources: Appendix, table 26; CR 1834-50, NA M-81/3-5; Commerce and Navigation, 1834-50; Kirchner 1975, 94-95.

All the 944 American vessels that arrived at St Petersburg between 1833 and 1850 recorded in the consular reports are also recorded in the Sound Toll Accounts, but not all the vessels declared in Elsinore to be sailing to St Petersburg (960) ended up there. The difference is caused by the fact that in some cases a vessel has been attributed a “wrong” port of destination in Elsinore, when for example a cargo of Cuban sugar recorded as on the way to St Petersburg was in fact carried to Riga.²³⁵ In any case, the figures reveal that the Americans did not use any other passage but the Sound for exports to St Petersburg in the 1830s and 1840s, and that STA can be considered a reliable source for research into Russian trade, at least as revealed by shipping movements. The shipping lists of John D. Lewis for the years 1817-21, drawn up by himself and his brother, also support this claim. They show altogether 288 American vessels departing from St Petersburg, while the corresponding figure in STA is 286.²³⁶

One of the greatest problems for the study of American shipping on the Baltic Sea and the analysis of the export trade show up between St Petersburg and Copenhagen. For example, in 1796 Captain Christopher Grant of Marblehead declared that he was carrying a consignment of 154,000 lbs of rice and 500 lbs of indigo from Charleston to Copenhagen. He might have done so, but not necessarily. Neither Elsinore customs records nor consular reports reveal whether he actually carried his cargo to St Petersburg, which is where he

Cuban traffic is also included with U.S. trade in the Russian statistics, especially in the 1820s, but mistakes also occur later: according to Russian statistics, 16 American vessels arrived from Brazil in 1847, but STA and the consuls do not record a single one. Instead, they report the same number of vessels sailing from Cuba to Russia. In 1850 and 1853 Russian statistics do not mention American vessels that arrived from the West Indies, which numbered about fifty according to the consul in St Petersburg. For 1856-60, Russian statistics recorded 74 more vessels than did the American consuls in St Petersburg.

²³⁵ This happened with Captain P.H. Shirley of Marblehead in 1836 with the brig *Hardy* and a cargo of almost 800,000 lbs of sugar, although according to the consul in Elsinore, the vessel was initially intended for Riga; STA 1836 (1300/2048); CR 1836, NA T-201/1, and M-485/1.

²³⁶ HSP, WDLP, Letters 1808-28; Appendix, table 26.

took on his return cargo.²³⁷ Questions of this sort were left unanswered in many cases before the 1830s, whereas from that time on the data can be compared with the returns of the consuls in St Petersburg.²³⁸ Aage Rasch has come to the conclusion that vessels declaring Copenhagen as their port of destination did in fact leave their cargo there.²³⁹ However, this does not apply in all cases. For example, Joseph Peabody's ship *Mount Vernon* sailed to Copenhagen according to both STA and the consul in Elsinore, but the information Captain Samuel Endicott sent to his employer shows that at least a part of the cargo of sugar, coffee and pepper ended up in St Petersburg.²⁴⁰

According to STA, Captain George Pearce of Gloucester took a cargo of rice, sugar and rum to Copenhagen in 1816, but John D. Lewis in St Petersburg claimed in his shipping list that Pearce's vessel had arrived fully laden at John Venning's. On the other hand, John D. Wolff of Boston took a cargo of sugar from Havana to St Petersburg, according to STA, but the bulk of the *Anna's* cargo, which was for Brothers Cramer, was left in Copenhagen according to Lewis.²⁴¹

Vessels that declared both Copenhagen and St Petersburg as their port of destination passed frequently through Elsinore, at least before the 1840s. Such cases of a double destination numbered 47 in the 1820s and 34 even in the 1830s.²⁴² STA sometimes does and sometimes does not specify what cargo was destined to the different ports. Where it does so the data also match with the

²³⁷ STA 1796 (406/1494).

²³⁸ When STA records two ports of destination for a vessel sailing eastward and the cargo is not specified, the more distant port on the Baltic Sea is chosen for calculations; otherwise, the port of destination is entered according to the main cargo. Changes in ports of destination have not been made in calculations based on STA, although for example "the Baltic Sea" could be specified as St Petersburg or Stockholm on the basis of complementary sources. Some clear negligence has been corrected. For example, in 1798 Captain Ignatius Webber's ports of departure have not been entered for his voyage from the Baltic to Boston. However, it is clear on the basis of correspondence between the captain and the owners of the vessel that Webber took the ship *Reliance* to Elsinore from St Petersburg; STA 1798 (1734); Parsons to Webber, 9 June 1798, HUBL, EGPP. Similarly, in 1830 the ship *Champion* of Boston sailed to the Baltic with a cargo of almost a million lbs of sugar, and her port of destination was not recorded in STA. According to the consul in Copenhagen, it was St Petersburg; STA 1830 (1757); CR 1830, NA T-195/3. Also where slips of the pen have mixed up the port of departure and destination they have been corrected; e.g. STA 1794 (871).

²³⁹ Rasch 1965, 39-41.

²⁴⁰ Endicott to Peabody and Gideon Tucker, 3 June 1804, and 28 June 1804, EL/EP, vol.1; STA 1804 (371); CR 1804, NA T-201/1.

²⁴¹ STA 1816 (376, 356); HSP, WDLP, Lewis Letters 1808-28. The destination port on the Baltic Sea remains unclear, for example, with the vessel of Captain William Nichols of Newburyport. STA reports that Nichols took the cargo of 519,700 lbs of rice to St Petersburg, but Lewis does not record the vessel. According to STA, Nichols took on his return cargo of iron and hemp in Riga, but as he spent more than three months on the Baltic Sea it is difficult to judge where the rice was actually unloaded; STA (359/1370).

²⁴² Two ports of destination were also sometimes recorded for vessels sailing to Copenhagen and Stockholm. All of these, as well as those reporting only Stockholm as the destination, brought back iron from Stockholm; e.g. STA 1830 (598/1392, 930/1861).

data of the consul in St Petersburg, at least after the mid-1830s.²⁴³ Generally speaking, the consular reports provide more detailed information about the contents of the cargo than STA, as well as about shipping movements. It is common for the consular lists to record about twenty different articles for each vessel, while STA mentions only the ten or so most significant ones.²⁴⁴

Especially earlier in the period, the port of destination of American vessels sailing eastwards was often declared in Elsinore only as “the Baltic Sea”. In practice it was most often St Petersburg, which can be concluded from the fact that the return cargo was taken on in St Petersburg.²⁴⁵ Of course, other possibilities also existed. In July 1806 Captain William Jeffries of Kennebunk took the ship *Alfred* in ballast “to the Baltic”. Returning to Elsinore, his cargo consisted of lumber for Belfast taken on in Riga.²⁴⁶

Clear changes in the port of destination were most common at the turn of the century, but they usually applied to vessels sailing to the Baltic in ballast.²⁴⁷

²⁴³ In some rare cases, the information in STA and that of the consuls is at variance. For example, the bark *King Philip's* cargo of 188,000 lbs of rice from the vessel's home port, Boston, was carried to St Petersburg in the spring of 1834, although according to STA, it was supposed to be left in Copenhagen. By contrast, the consignment of 2900 lbs of indigo intended for St Petersburg was left in Copenhagen; STA 1834 (168); CR 1834, NA M-81/3. Similarly, the brig *Autumn* of Plymouth, was registered as sailing to Copenhagen in the spring of 1836. However, according to the consul, Captain Moses Brown took the bulk of the cargo to St Petersburg; STA 1836 (365/1092); CR 1836, NA M-81/3. Itemization of the cargo became more specific from the 1830s. For example, the cargo of the brig *Kazan* (206 tons), commanded by Captain John Leckie of Boston, is entered in great detail in 1840 despite her several ports of departure and destination; STA 1840 (2689/3452); CR 1840, NA T-201/2, and M-81/4.

²⁴⁴ E.g. STA 1845 (898); CR 1845, NA M-81/4 (ship *Manchester* of Bath).

²⁴⁵ Inaccurate reports about ports of destination are often dated early in the spring, when reaching the eastern end of the Gulf of Finland was uncertain. For example, Captain Joshua Crafton of Boston passed Elsinore with the brig *Argus* on 28 February 1803, reporting that he was carrying 1200 boxes of fruit from São Miguel to “the Baltic Sea”. When she returned to Elsinore at the beginning of July she was carrying a cargo of iron and cordage taken on in St Petersburg and intended for Boston; STA 1803 (14/1418); CR 1803, NA T-201/1; also STA 1796 (287/1212, 674/1781). Noncommittal information about the port of destination was not necessarily due to not knowing at the time. “The Baltic Sea” was declared as the destination port of Brown & Ives's ship *General Hamilton* in the summer of 1816, although the Captain Martin Page was sailing to Stockholm by command of the owner of the vessel; STA 1816 (462/853); Hedges 1968, vol. II, 146.

²⁴⁶ STA 1806 (280/499); CR 1806, NA T-201/1. Vessels sailing to “the Baltic” quite often carried their cargo directly also to German ports. For example, in 1832 Captain Church Weston of Boston reported that he was taking the brig *Colombo* and a cargo of colonial produce from Boston to the Baltic Sea. According to STA, the vessel ended up in Stettin where she took on her return cargo. However, according to the consul in Copenhagen, the vessel's port of destination on the Baltic was Copenhagen, and she took on her return cargo in Pillau; STA 1832 (169/1100); CR 1832, NA T-195/3.

²⁴⁷ For example, Captain Stephen Lewis of Boston sailed from Dublin to St Petersburg in ballast in 1797, but on his return to Elsinore he was carrying to Dublin a cargo of lumber taken on in Riga; STA 1797 (659/1425). The brig *Eliza Davidson* of New York, sailing in ballast, sailed from Stettin to Gothenburg according to the consul in Copenhagen, but according to STA, from Swinemünde to the North Sea; STA 1832 (2353); CR 1832, NA T-195/3. In most cases, the contents of the cargo and the units of measurement employed confirm the reported port of departure, for example that a cargo of hemp and iron was taken on in St Petersburg or Riga. For example, the cargo of the bark *Pico* of Boston was reported in 1847 in units used in Königsberg and

However, full cargoes sometimes ended up somewhere other than had been reported in Elsinore, and also set out from elsewhere on their return journey.²⁴⁸ For example, in 1842 the consul reported the brig *Czarina* as sailing to both Copenhagen and St Petersburg, but according to STA the vessel was on its way to St Petersburg only. However, the consul in St Petersburg does not record the vessel. The consul in Elsinore recorded the vessel as departing from Riga on her return voyage to the North Sea, but according to STA, only the hemp on board was from Riga, and the rest was from Copenhagen.²⁴⁹

In spite of the above-mentioned cases, American vessels usually returned to Elsinore from the port they had declared they were sailing eastwards. Excluding the years of war (1808-14 and 1854-55), approximately 370 more vessels arrived at the Sound from Russia than originally sailed to Russia. Likewise, about 350 fewer vessels returned from Copenhagen to the Sound than sailed to Copenhagen from there. About a hundred more vessels arrived at Elsinore from Stockholm than originally sailed there. The “balance” in favour of St Petersburg and negative to Copenhagen was mainly created in the early part of the period. In the period 1791-1807 altogether 285 more vessels arrived at Elsinore from St Petersburg than originally sailed there, and Copenhagen meanwhile “lost” 220 vessels. Almost all of them had sailed to Russia to take on a return cargo. This structure of shipping continued until the mid-1820s, and

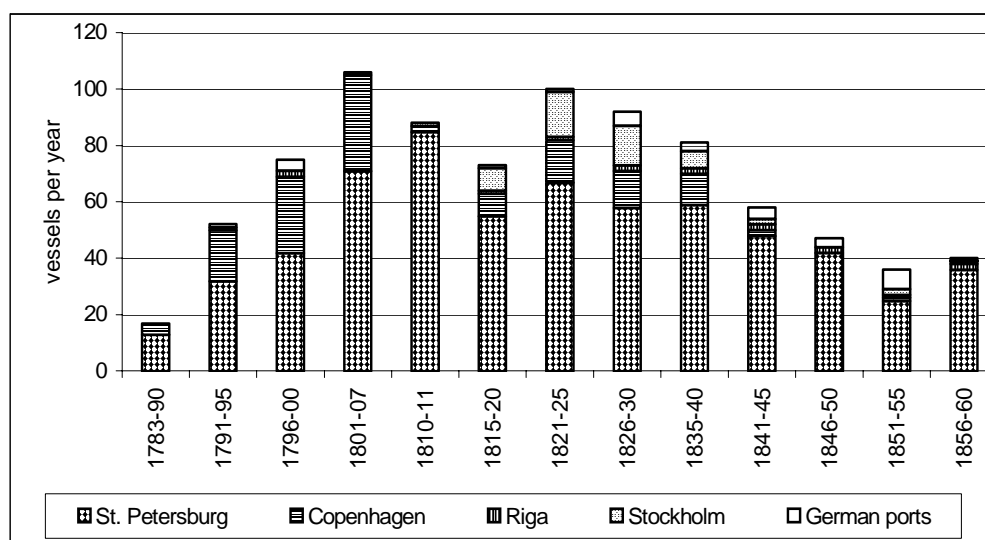
Stettin, although STA claims that the vessel arrived from St Petersburg. In cases of this type, the departure port for export is considered as reported by the consul in Elsinore; STA 1847 (1385); CR 1845, NA T-201/2. Re-export of Russian products from Copenhagen has been registered in varying units, either Russian or Danish, but the products have been included in Copenhagen’s exports.

²⁴⁸ STA and the consul in Elsinore record a totally different route for the ship *Timoteon* (of Boston) in 1842. The former has the vessel sailing with a cargo of iron from Copenhagen to Boston, and the latter from Stockholm to New York; STA 1842 (14); NA T-201/2. The consul in Elsinore, who recorded the voyage across the Baltic after it had come to an end, was sometimes more accurate than STA. According to the consul, for example, Captain Thomas Oakes of John Holland’s ship *Pocahontas* of Boston, brought iron from Copenhagen, although STA recorded that the vessel visited St Petersburg. However, it is rather improbable that she reached St Petersburg, since she only spent 19 days on the Baltic. Similarly, the brig *Catharine Ray* of Providence was bound for St Petersburg according to STA, but back in the Sound her port of departure was Copenhagen. According to the consul in Elsinore, the brig was only carrying Russian products from Copenhagen on her voyage of less than a month; STA 1801 (1781/2051, 2222/2470); CR 1801, NA T-201/1.

²⁴⁹ STA 1842 (113/1415); CR 1842, NA M-81/4, and T-201/2. In 1839 also the bark *Express* of Boston was registered in STA as sailing to St Petersburg, but the vessel did not end up there. She probably sailed to Königsberg as, according to STA, she was carrying a cargo of wood and feathers from there; STA 1839 (3099/3748); CR 1839, NA M-81/4, and T-201/2. In 1840 the brig *Czarina* took half of her cargo of 525,000 lbs of sugar to St Petersburg, although according to STA the entire cargo was to be left in Copenhagen; STA 1840 (650/1281); CR 1840, NA M-81/4. According to STA, the Boston ship *Forum* did not visit Riga in 1840, but according to consular records in St Petersburg and Riga, she left a cargo of 988,000 lbs of sugar to Riga, there took on a cargo of rye for St Petersburg and finally returned to Boston. According to the consular records, this is the only case when an American vessel carried a cargo taken on in the Baltic to another Baltic port; STA 1840 (650/1281); CR 1840, NA M-81/4. It was common to transfer from one German port to another with, for example, the first cargo being carried to Pillau and the return cargo being taken on in Stettin; e.g. STA 1839 (173/995); CR 1839, NA T-201/2 (the brig *Chase* of New York).

the attraction of St Petersburg and Russian export products can be seen to have shaped the pattern of American shipping on the Baltic Sea to a quite considerable extent up to that time.²⁵⁰

Port changes between Copenhagen and St Petersburg came to an end in the 1830s. However, it was still more common for vessels to sail from St Petersburg to take on either iron in Stockholm or lumber in Wiborg.²⁵¹ For example, in the summer of 1851 the bark *Massachusetts* (229 tons) from Newburyport, commanded by Captain Thomas Pritchard, first carried 1.2 million lbs of sugar from Matanzas at £3 per ton for Stieglitz & Co. In St Petersburg the vessel was chartered to take 500 tons of iron from Stockholm to Boorman, Johnston & Co. in New York at \$6 per ton. Waiting for freight and the change of loading port delayed the vessel and she had to cross the Atlantic in the winter, which was never liked. She finally arrived in New York only in January 1852.²⁵²



Source: Appendix, table 26.

FIGURE 10 The Baltic ports of departure of American vessels passing through the Sound westward, 1783-1860.

From the 1830s, more vessels sailed to Russia through the Sound than returned directly from there to the Sound. According to STA only 879 vessels arrived from St Petersburg at Elsinore in the years 1833-50, but according to the consul in St Petersburg 944 vessels left St Petersburg in the same period. Where did the 65 vessels vanish to between St Petersburg and the Sound? They left St

²⁵⁰ Still in 1828 the consul in Copenhagen reported that 28 American vessels sailed eastwards and eight westwards. According to STA, the respective figures were 18 and 7; Rainals to Clay, 21 February 1829, NA T-195/3; see Appendix, table 26.

²⁵¹ Changing over from German ports to Swedish ports was rare, but for example in the spring of 1832 Captain J. L. Gardner of Portsmouth reported carrying rice taken on in Charleston to Stettin and then on its return to Elsinore the vessel was fully laden with iron from Stockholm; STA 1832 (513/1478); CR 1832, NA T-195/3-4 (ship *Seine* of Portland).

²⁵² Pritchard to Henry Johnston, 13 June 1851, 3 September 1851, 15 September 1851, 10 January 1852, and 19 January 1852, PM, Thomas Pritchard, Letterbook; STA 1847 (715/2142); CR 1847, NA M-81/4-5, and T-201/2.

Petersburg in ballast or short-loaded for other ports on the Baltic, and arrived at the Sound only after that. The shipping lists of the St Petersburg consuls mention 30 vessels that transferred to Stockholm to bring iron in the years under study. 29 vessels sailed to Wiborg, eight to Riga and four to Hamina.²⁵³ For example, Captain Eleazer Scudder of the bark *Bird* of Boston (214 tons) declared he was sailing to the Baltic in ballast, but brought back a cargo of iron for New York from Stockholm.²⁵⁴ However, not every vessel that departed from St Petersburg appears on the Elsinore lists even by these roundabout ways, though there are only about ten such cases in the 1830s and 1840s.²⁵⁵

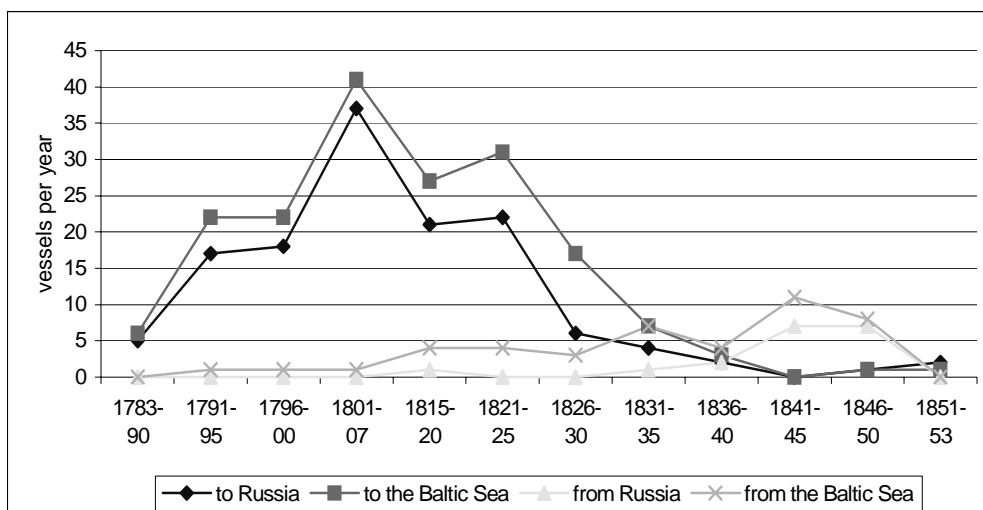
Vessels sailing in ballast played a substantial part in American sailings to the Baltic, since in the years 1783-1807 and 1815-53 they numbered a quarter of the vessels that sailed eastwards from the Sound (about 1030) and about 240 of those sailing westwards.²⁵⁶

²⁵³ The figure is over 65 because such vessels also arrived at St Petersburg, even though the declared destination in STA was somewhere other than St Petersburg.

²⁵⁴ STA 1834 (948/1630); CR 1834, NA T-201/2.

²⁵⁵ Shipwrecks and the practice of declaring an American vessel to be English in the early years of the period are possible reasons for disappearances. The disappearance of large vessels also had some influence on import and export figures. In 1802 Gibbs & Channing's ship *George Washington* (350 tons) sailed under the command of Samuel Lawton from Amsterdam to St Petersburg in ballast, but neither the consul in Elsinore nor STA recorded her return. It is strange that the ship *George & Mary* (300 tons), belonging to the same trading house, arrived a little later in Elsinore from St Petersburg under the command of Captain Jeremiah Lawton. Neither STA nor the consul records that she sailed to the Baltic. The third vessel of Gibbs & Channing on the Baltic Sea in 1802 was the ship *Friendship* (177 tons). She arrived at Elsinore from Amsterdam together with the fourth vessel of the same firm, the ship *George Washington*, and on return voyage from St Petersburg they paid the Sound dues as usual; STA 1802 (1996, 2345, 1997/2858); CR 1802, NA T-201/1. Changes of ownership were rare, except in the war years, although for example in the summer of 1796 Brown & Ives's ship *Harriet* was sold to Copenhagen; Whipple Andrews to Brown & Ives, 18 August 1796, BUJCBL, BIP, V-H27; STA 1796 (688). During the Continental System, Minister Adams reported the British to have bought American vessels "with all their papers"; Adams to the Secretary of State, 1/13 November 1810, NA M-35/2/31. In 1847 the brig *Sun* of New York was sold in Karlskrona after she had carried cotton from New Orleans to St Petersburg and was on her way back to Antwerp; CR 1847, NA M-81/5, and T-201/2. A few vessels disappeared without trace. For example, the bark *Hudson* of Bath commanded by Captain W. Curtis vanished on the Baltic after she had declared at Elsinore on 2 June 1821 a cargo of a million lbs of sugar from Matanzas intended for St Petersburg; STA 1841 (1029); CR 1841, NA T-201/2.

²⁵⁶ 770 eastbound vessels sailed in ballast to St Petersburg and 170 to Stockholm. 90 westbound vessels in ballast departed from St Petersburg and 120 from Copenhagen. The St Petersburg figures include also vessels sailing in ballast to other Russian ports and to "Russia" (6), and those departing from Riga (13).



Sources: STA 1783-1807, 1815-50; CR 1851-53, NA T-201/2-3.

FIGURE 11 American vessels in ballast passing through the Sound, 1783-1853.

At least until the years of the Continental System and for a while during that period almost 90 percent of American vessels sailing to St Petersburg through the Sound were in ballast.²⁵⁷ Sailing in ballast continued after 1815. By 1832 430 vessels in ballast had passed the Sound, or in other words almost a third of American vessels still sailed eastwards without a cargo.²⁵⁸ This was not, however, peculiar to American merchant shipping. For example, in 1822 1072 vessels arrived at Kronstadt, 483 of them in ballast. In the next year the figures were 1129 and 531. However, in 1837 only 384 of 1240 merchant vessels arriving there were in ballast, while only 23 left Kronstadt empty.²⁵⁹

In the 1830s the Americans ceased sailing eastwards in ballast and the pattern was reversed. In July 1830, for example, the ship *Roscius* owned by John Brown of Boston carried 838,000 lbs of sugar from Havana to Riga, and when the vessel returned to the Sound at the beginning of August, the captain

²⁵⁷ For example, in 1802 47 of the 48 vessels sailing to St Petersburg sailed more or less empty. The only exception recorded in the customs accounts was a cargo of rice and rum belonging to Bunker & Co., carried from Charleston. According to the consul in Elsinore, she even sailed to Stettin instead of St Petersburg; STA 1802 (2455); CR 1802, NA T-201/1 (brig *Two Sisters*). The brig did not return, at least registered as American, through the Sound.

²⁵⁸ About a quarter of vessels sailing to St Petersburg were in ballast, and so were three-quarters of those sailing to Stockholm. The differences between years are rather significant: in 1818, 46 of 83 vessels sailed to Russia without a cargo, but only one of 110 vessels in 1829-30 was in ballast. More than a half (170) of vessels sailed to St Petersburg in ballast in 1815-53 had departed from ports on the North Sea and the rest mainly from Britain and France. A large number of British vessels that sailed eastward through the Sound were in ballast, too. In 1831, 3463 vessels sailed from Britain to Elsinore, 2413 of them in ballast; Francis McGregor's report, 5 July 1832, PRO, FO 22/110/3829.

²⁵⁹ Bayley's report, 2/12 March 1824, PRO, FO 65/140; Bayley to Canning, 10/22 March 1824, PRO, FO 65/144; George Dallas to John Forsyth, 14 January 1838, NA M-35/13/13.

declared her to be returning to Havana in ballast.²⁶⁰ One reason for this change was that the American mercantile marine to some degree lost its position in trade with ports west of the Sound, and so fewer looked for a return cargo from Russia than before.²⁶¹ Although changes in the numbers of vessels and the sailing routes reflect changes in the structure of trade only roughly, in this case they do indicate that in the long term the prospects for importing traditional Russian products into the United States were obviously decreasing. Numerous vessels still sailed to St Petersburg in the aftermath of the sugar boom, but more and more often they had to return from the Gulf of Finland either in ballast or short-loaded.²⁶² In 1843 12 vessels passed through the Sound in ballast and 14 with a cargo of lumber. According to Minister Todd, this was due to the low prices of Russian products in the U.S.: carrying freight across the Atlantic was not profitable.²⁶³ Sailing in ballast could be avoided by carrying freight from the Baltic to ports in western Europe, but there was little opportunity for that before the 1850s, except for carrying lumber.²⁶⁴

Sailing westward through the Sound in ballast was most common in the peak years of the sugar trade, but it was almost over by the end of the 1840s. As exports from Cuba boomed again in 1848, so sailing in ballast increased. A clear picture of the homebound traffic of that year emerges from the fact that only one in three out of 70 American vessels carried a return cargo to North America, while a third of the vessels carried freight to western Europe and a third passed through the Sound quite empty.²⁶⁵ 25 of the captains of the 90 vessels sailing westward through the Sound in ballast in the period 1815-53 from St Petersburg

²⁶⁰ STA 1830 (1173/2106); CR 1830, NA T-195/3.

²⁶¹ 81 percent of the tonnage sailed from American ports to Elbe, Weser and Trave was American (17,300 tons) in 1820/21, but in 1835/36-1838/39 only 15 percent (6900 tons); Adamson 1969, 90, note 65. According to the U.S. foreign trade statistics, the tonnage cleared for "Hanse towns" was in 1821-25 an average of 23,700 tons, the American share being 68 percent. In 1836-40 the corresponding figures were 47,600 tons and 19 percent; Commerce and Navigation 1821-25, 1836-40. In 1847, 17 American vessels arrived at Hamburg, and 35 in the following year. Their proportion was only a few percentage of the tonnage arriving at the port; HMM 1850, vol.23, 183-184. 91 percent of tonnage from North America to Antwerp was American in 1820, but in 1835 only 50 percent. Later, the American share rose steeply and was about 90 percent in the 1850s; see Veraghter 1988b, 62.

²⁶² For example, the bark *Waban* of Plymouth, carried 2600 chetverts of linseed to New York through the Sound in 1844, and the ship *Cherokee* of Boston 1100 chetverts of the same product, plus 100 pieces sailcloth. The great 661 ton ship, *Delaware* of Bath, carried a cargo of over million lbs of cotton to St Petersburg in the summer of 1849, but returned carrying only 20 poods of hemp yarn; STA 1844 (1118, 1119); STA 1849 (454); CR 1844,1848, NA T-201/2, and M-81/4-5.

²⁶³ Todd to Legaré, 6/18 June 1843, NA M-35/14/31. In 1843, 10 captains leaving without cargo declared that they were sailing to the United States and one to Rio de Janeiro. The cargoes of lumber were taken on in St Petersburg (10), Wiborg (2), Hamina (1) and Narva (1). Five of the cargoes taken on in St Petersburg were carried to Bordeaux, three to Le Havre, one to Brest and one to Rio; STA 1843.

²⁶⁴ For example in 1846 lumber was carried "for foreign account" to France as well as four shiploads of rye from St Petersburg to Bremen, which was exceptional; e.g. STA 1846 (794, 1404, 1405, 1877, 1871, 2192); CR 1846, NA M-81/4, and T-201/2.

²⁶⁵ 13 of 23 vessels carrying lumber were on way to Bordeaux, and five to Brazil. Totally empty vessels numbered 21; STA 1846.

declared that they were sailing directly to North America.²⁶⁶ American sailing in ballast to and from the Baltic Sea was effectively over by the beginning of the 1850s. The repeal of the English Navigation Acts had some influence on the situation, as vessels returning from St Petersburg sailed more and more often to British ports carrying such cargoes as tallow, deal and laths.²⁶⁷

To conclude, American sailing to the Baltic quite distinctly became increasingly concentrated on St Petersburg. Thus the consul in Elsinore recorded that only one of the 66 vessels sailing eastward from the Sound in 1851 sailed anywhere else but to Russia. By the middle of the century St Petersburg was a consumer market with a population of about half a million inhabitants, and according to a guide drawn up by Charles Clark in 1841 for merchants trading with Russia, it was a "splended modern Metropolish and flourishing Emporium of Russian Empire".²⁶⁸ It was more a centre of trade and administration than an industrial city. Already in the 18th century half of Russia's foreign trade and two-thirds of its trade by sea passed through the city.²⁶⁹ In the 1840s almost half of the country's foreign trade still passed through St Petersburg, while a tenth each was carried via Odessa and Riga. St Petersburg was the main port of export for American trade. More than 90 percent of Russian tallow and bristles was exported from there before the Crimean War, 70 percent of its cordage, 65 percent of its hemp and 80 percent of its iron.²⁷⁰

Over the whole period under discussion American shipping was based on the attraction of St Petersburg in one way or another. Initially Russian export products - hemp, iron and manufactures - oriented the trade, and after that Cuban raw sugar. In the last phase the raw cotton imported by Russia entered the scene. The "American" share of the foreign trade of St Petersburg was reckoned at about one tenth.²⁷¹ The British dominated the commerce and shipping of St Petersburg. For example, in 1826-30 an average of 1290 vessels left Kronstadt, 710 of them British. The corresponding figures for 1851-53 were 1660 and 760. In terms of the number of arriving and departing vessels, the

²⁶⁶ For example in 1842, five captains reported sailing from St Petersburg to Boston without a cargo; STA 1842 (1842, 1973, 1974, 2115, 2591, 2637). However, most of the vessels without a cargo were reported sailing only to the North Sea in general, or to British ports.

²⁶⁷ In 1861 most of the 32 vessels departed from St Petersburg had already sailed to Britain, and only six directly to the United States; Cassius Clay to Seward, 24 September 1861, NA M-35/19/7.

²⁶⁸ Clark 1841, 51.

²⁶⁹ See Bater 1976, 50-51. – In 1794 there were 217 industrial establishments in St Petersburg, 34 of them being clothing establishments; Bater 1976, 47; see Appendix , table 13.

²⁷⁰ Hutton to Marcy, 17/29 November 1856, NA M-81/5.

²⁷¹ According to British calculations, the value of St Petersburg's foreign trade in 1845 was 74.8 million silver roubles, 47.7 percent of the total value of Russian foreign trade. Odessa's share was 15 percent, that of Riga 9.6 percent and that of Archangel 3.0 percent. "America" contributed to 15.7 percent of imports to St Petersburg and 7.1 percent of exports (11.0 percent of total trade). The figures are on the same scale as St Petersburg's trade with "Hanse towns", and only the British share was bigger; PRO, FO, 65/337; see Appendix, table 11.

Americans accounted for altogether about four percent.²⁷² At the end of the 1820s approximately as many American vessels still visited St Petersburg as Dutch, Danish, Lübecker, and Prussian. Information gathered by the consuls shows, however, that the American vessels were considerably larger than the others. Thus, North American tonnage figures for St Petersburg exceeded everyone else's except the British.²⁷³

According to calculations made in 1824 by the British Consul, Daniel Bayley, Russian products were carried from St Petersburg, Riga and Archangel to an average yearly total value of 130 million roubles at the beginning of the 1820s, of which the English took 92 million roubles' worth. Bayley's report is rare in that it is almost the only report which discussed the Americans as possible commercial rivals. Bayley calculated that the United States carried products from the three ports to the value of eight million roubles. He did not consider the figure in any way threatening to the British.²⁷⁴

The ports of the Russian Baltic province and the Grand Duchy of Finland were of minor importance in American trade in comparison with St Petersburg. In the middle of the century, Americans mainly carried sugar to Riga, a city of 60,000 inhabitants, and carried back from there the same products as from St Petersburg: flax and hemp, which was considered the best in the Baltic area.²⁷⁵ William Blackwell claims that Riga was only partially dependent on the countryside of Northwest Russia, having at least as close connections to Britain and America as to its own "hinterland".²⁷⁶

²⁷² Figures are calculated from printed lists attached to Ministers' and consular reports by Charles R. Lenartzen, John Booker & Son, Friedrich Winberg, C. Rode, Row & Wilkins and H. Conradi; NA M-81/3-6, M-35/12; EI, Price Currents, St Petersburg; PM, BSP, vol. 3; see Kirchner 1975, 94-95.

²⁷³ 63 percent of tonnage (an average of 161,000 tons) arriving in St Petersburg in 1821-22 was British and 13 percent American. The American tonnage was clearly the second biggest group. The average size of American vessels was, by British calculations, 250 tons, and that of British vessels 180 tons, while of others it was 100 tons; Bayley's reports 7/19 February 1822, and 2/14 March 1823, PRO, FO 65/137,140. In 1827 the lastage of foreign vessels arriving in St Petersburg totalled 112, 579 lasts, of which the Americans contributed 8554 lasts. Dutch, Danish, Lübeck and Prussian vessels that arrived at St Petersburg numbered altogether 225, which is four times more than the number of the Americans, but their total lastage was only 11,309 lasts; Bailey's reports, 7/19 February 1822, and 2/14 March 1823, PRO, FO 65/137,140. In 1829, two-thirds of the tonnage arrived at St Petersburg (267,000 tons) was British. American tonnage (17,900) came in second place, although it was only one-tenth of the English figure; PRO, FO 65/188/3699.

²⁷⁴ Bayley to George Canning, 10/22 March 1824, PRO, FO 65/144.

²⁷⁵ Britain imported 26 million roubles' worth of Riga's total exports worth 42 million roubles in 1827-28, while the "Americans" took 171,300 roubles' worth. In 1836 the figures were 32.3, 47.4 and 573,000 roubles. The last figure represented hemp and hemp seed; Consul Cummings's report, 31 December 1827, and Consul Thomas Tupper's report, 12/24 January 1823; PRO, FO 65/174,188. In 1842-43 Riga's exports were worth 15.9 million silver roubles on average, of which the British share was 9.3 million silver roubles; PRO, FO, 65/303; see Kirchner 1975, 114 and note 45. The first cargo of raw sugar from Cuba carried by the Americans arrived in Riga in 1822, and the first cargo of cotton from New Orleans in 1852.

²⁷⁶ Blackwell 1970, 69.

The Americans sailed to Riga most actively in the 1790s and at the turn of the 1840s.²⁷⁷ According to STA and British consular reports, three of the 731 vessels visiting Riga in 1822 were American. They carried hemp and manufactures to the value of 323,000 roubles. This was one percent of total exports.²⁷⁸ According to STA five vessels visited the port in 1842-43, but according to the consul, at least ten. Riga could be an intermediate port and so more vessels visited it than is revealed by STA.²⁷⁹ It was usual that vessels returning from Riga to the Sound either sailed in ballast to the North Sea or carried hemp, lumber and flaxseed to southern Europe.²⁸⁰ In the 1850s they also often carried flax, linseed and oats to England.²⁸¹

The Americans discovered Reval only in the years of the Crimean War although, for example, salt was exported there from time to time from the

²⁷⁷ According to STA, after 1783 the first American vessel sailed to Riga only in 1792, when Benjamin Seward of Boston (or Gloucester) carried rice to Stettin, and after that brought back hemp and iron from Riga to Boston; STA 1792 (203 / 686). In 1796-97 many American vessels departed from Riga (19), but the same applies also to Danzig (8), Memel (9) and Pillau (3). Lumber and grain were carried from Danzig, grain from Pillau and lumber from Memel to the southern European ports of Cadiz, Lisbon, Barcelona, Le Havre, and Bordeaux.

²⁷⁸ RRO, FO 65/149.

²⁷⁹ STA 1842-43; CR 1842-43, NA M-481/1; According to STA, only the ship *Talma* of Boston and the bark *Bohemia* of Kennybunk sailed from Havana to Riga in 1835. However, according to the consul, Alexander Schwartz, the bark *Tasso* of Newburyport also sailed there, though according to STA, she should have sailed to St Petersburg. However, suitable return cargoes could not be found in Riga, so the first vessel brought iron from Stockholm and the other two returned in ballast to the North Sea. The British consul, Robert Hay, also reported the visit of three American vessels; STA 1835 (1072/2150, 510/1972, 1785/2140); Alexander Schwartz to Forsyth, 25 January 1836, NA M-485/1; Hay to Palmerston, 3/15 February 1836, PRO, FO 65/228. In 1836 only one cargo of sugar was carried to Riga according to STA, but according to Schwartz and Hay, there were two; STA 1836 (1300/2048, 1355/2367); Schwartz to Forsyth, 31 January 1837, NA M-481/1; Hay to Palmerston, 15/27 February 1837, PRO FO 65/236. According to the consul in Riga, five American vessels entered the port in 1842, but STA records only three. The brig *Czarina* and the ship *Cabinet* of Boston were, according to STA, carrying a cargo of 872,000 lbs of sugar from Havana to St Petersburg. According to STA, this actually happened, since the ship returned in ballast from St Petersburg. However, the ship cannot be found in the reports of the consul in St Petersburg, but she was recorded as visiting Riga in the shipping lists of the consuls in both Elsinore and Riga. The ship *Hamburg* of Bath and the bark *Nautilus* of Portland carried sugar from Havana to Riga and took on a return cargo of hemp for Boston. Also the bark *Turbo* of Kingston sailed from Havana to Riga, but returned to Boston empty; STA 1842 (1452/2193, 665/1585, 664/1976, 1546/2115); CR 1842, NA M-81/4, T-201/2, and M-485/1.

²⁸⁰ For example, in June 1830 the ship *Ladoga* (287 tons), owned by Alfred Richardson of Boston and commanded by Captain Cassius Darling, carried 671,200 lbs of sugar and 28,800 lbs of coffee to Riga. When the ship returned to Elsinore at the end of the July, her cargo included 2600 barrels of flaxseed for Le Havre; STA 1830 (838/1958); CR 1830, NA T-195/3. Captain John Deming of New York sailed a rather exceptional route between Madeira and Riga in the 1820s and 1830s. E.g. in 1830 he took wine to Riga on March & Benson's schooner *Howard* (168 tons), and returned to Madeira carrying flaxseed and grain; STA 1830 (1507/2252); CR 1830, NA T-195/3.

²⁸¹ In 1850 the bark *Konawa* of Boston carried flax and staves from Riga to Drogheda, Ireland, and the barks *Baring Brothers* of Bath and *Edwin Augustus* of Portland linseed and oats to London; STA 1850 (2946/4111, 3141/4869, 3291/4936); CR 1850, NA T-201/2-3.

beginning of the 1790s.²⁸² Much was expected from the port as it stayed open longer than Kronstadt and the railway was expected to speed up the development of the city. Already in the winter of 1856 merchants from St Petersburg tried to get Voldemar Mayer appointed consul in Reval, but only two years later Charles A. Leas, one of the American surgeons of the Crimean War, was appointed to the post²⁸³

According to Elsinore records, not a single American vessel sailed to Wiborg in Finland before the year 1853. However, already by that year 36 vessels sailing westward through the Sound had departed from there.²⁸⁴ These vessels were often lumber freighters that ended up in Wiborg via St Petersburg, and they mostly sailed to France. About twenty of the 43 vessels departing from Wiborg in the period under study carried lumber to Bordeaux, and perhaps five to Marseilles and Malaga.²⁸⁵ Some vessels also visited Hamina and Kristiinankaupunki. For the Americans the former was a loading port for lumber and the latter a port of destination for cotton.²⁸⁶ The importance of the Finnish ports increased markedly after the Crimean War. For example, in 1856 the ship *M. de Embil* of Bath carried cotton from New Orleans to

²⁸² For example, William Hutchings of Gloucester carried 50 lasts of salt from Cadiz to Reval in the summer of 1792. During his three week stay in the Baltic Hutchings took on a full cargo of iron and hemp from Copenhagen for Gloucester; STA 1792 (745 / 1010); CR 1792, NA T-201/1 –John D. Lewis listed in 1809-11 altogether 13 American vessels that arrived at St Petersburg in ballast from Reval; HSP, LNP, Letters 1808-28.

²⁸³ Seymour to Marcy, 15/27 March 1856 (enclosure: Mayer to Seymour, 10/22 March 1856), NA M-35/16/69; Saul 1991,261. According to STA and consular reports, 11 American vessels sailed to Reval through the Sound and four returned from there during the period under study. The figures for Narva were one and five.

²⁸⁴ Probably the first American to take on his return cargo in Wiborg was Joseph Knapp of Salem in the summer of 1800; he was also among the first Americans to visit the Baltic Sea twice in one navigation season; STA 1800 (369/1182, 1663/2065). Navigation laws favouring domestic vessels and originating from the time of Swedish rule remained in force in Finland until the 1840s. The trade agreements Russia concluded in the 1840s gradually nullified these privileges; see Kaukiainen 1993, 56-66.

²⁸⁵ Most vessels arriving at Wiborg carried some cargo from St Petersburg. For example the ship *John Fehrman* of Plymouth loaded on 6300 poods of bar iron and 30 poods of cordage in St Petersburg in 1844, and after that 1293 dozen deals to be carried to Marseilles; STA 1844 (1290); CR 1844, NA 81/4, and T-201/2. It was very rare for vessels to arrive at Wiborg from anywhere else but St Petersburg. One of these exceptional vessels was the bark *Stag* of Boston which in 1845 first sailed to Stettin carrying logwood taken on in New York, and 76,800 gallons of whale oil shipped from Mystic, CT. After that, the vessel transported lumber from Wiborg to Marseilles; STA 1845 (800/1806); CR 1845, NA T-201/2, and T-59/2.

²⁸⁶ Six vessels visited Kristiinankaupunki, and eight departed from Hamina. The first vessel to visit Hamina was the brig *Susan* of New York (250 tons) in 1840, which took all that was salvaged from the cargo of the bark *Frederik* wrecked the previous summer; STA 1840 (277/1811); CR 1839-40, NA T-201/2, and M-81/4. The bark *Elizabeth Hall* of Baltimore was one of seven vessels that arrived at Hamina in ballast in 1843, after carrying a cargo of 716,000 lbs of sugar from Matanzas to St Petersburg. In Hamina 781 dozen deals for Marseilles were loaded aboard the vessel; STA 1843 (1516/2540); CR 1843, NA M-81/4, and T-201/2. John D. Lewis reported two American vessels, the *Susan* (Capt. Ezra James Dutch) and the *Jenny* (Capt. David Myers) visiting Helsinki in 1809-10 on the way to St Petersburg. Lewis mentions one American vessel arriving at St Petersburg from Turku in 1811, and one from Oulu in 1812; HSP, Lewis Letters 1808-28.

Kristiinankaupunki, and the bark *James Briandt* of Beverly (700 tons) salt from Cadiz to Wiborg. Both of them took on lumber for Bordeaux.²⁸⁷

Copenhagen was important in American sailing to Russia, not least because already in the 1790s most vessels sailing to St Petersburg left their cargo from North America there. In the early years, several Russian products were also carried from Copenhagen to the United States. Moreover "Chinese and East Indian products"²⁸⁸ were available for purchase there when necessary. For the Americans the city was an entrepôt giving access to the Baltic markets. The activities of Ryberg & Co. contributed greatly to shaping that role. It dominated, almost monopolized, the market for American products and arranged credit to cover customs and other costs, financed business and sold Russian products for the Americans. In the 1790s and the early years of the 19th century, Ryberg & Co. bought almost all the sugar, rum, coffee, rice, tobacco and cotton the Americans carried to Copenhagen. For example, in 1795 the firm bought all the American imports that entered Copenhagen. It sold the goods to smaller firms that took them on to other ports on the Baltic. However, Russian products could not be purchased in Denmark in such great quantities as the Americans would have wanted. Therefore more and more vessels sailed on to St Petersburg, though often with a letter of credit from Ryberg's.²⁸⁹

The final stages of the European wars broke Copenhagen's position as an intermediary in Russian trade, although already in 1814 the city's merchants made plans to get back American trade.²⁹⁰ However, by 1817 Ryberg & Co.

²⁸⁷ Commercial Relations 1856-57, 92; CR 1856, NA T-389/1, and NA M-81/6. In 1860 the bark *Lyman* of Boston and the bark *Harriet Hazeltine* of Boston carried cotton to Kristiinankaupunki and the bark *Anna* of New York sugar from Havana to Helsinki. The first two took lumber to the Mediterranean and the other one continued from Helsinki to St Petersburg in ballast. In the following year seven of 32 vessels that departed from St Petersburg sailed in ballast to Wiborg. Also the first American freighters of sawn lumber arrived at Oulu: the *Ella* of Bath, the bark *Transit* of Brunswick and the *Prairie Bird* of New York. The captains of the vessels claimed to be the first Americans in Oulu. The language caused slight problems, since the Americans could not understand the Swedish, Finnish, Russian or German spoken in Oulu. They asked Minister Clay to appoint the merchant P. W. Wüger, who knew English, as local consul in the expectation of growth in the lumber traffic; Clay to the Secretary of State, 17 August 1861 and Clay to Seward, 24 September 1861, NA M-35/19/6,7; Reynold Frenckell to the Department of State, 31 December 1860, and 30 December 1861, NA T-483/1; CR 1860, NA M- 81/6.

²⁸⁸ E.g. STA 1788 (1260).

²⁸⁹ For example, in 1798 24 of the 38 American vessels that arrived at Copenhagen sailed to other ports for a return cargo, and only 14 took one on in Copenhagen. Ryberg himself had tried to send goods from Copenhagen to Philadelphia in 1783, but this had proved unprofitable. After 1788 he started to buy goods from the Americans in greater quantities. In that year he reported having spent 100,000 rixdollars on them and made 28,000 rixdollars from re-export; see Rasch 1964, 143-145,151-152; Rasch 1965, 57-60; Crosby 1965, 133; Nathanson 1836, 560, 569; Ryberg to Christopher Champlin, 25 March 1788, MHS, CRI, vol. 1788, 361-362.

²⁹⁰ C. J. Black's Widow (Blacks enke & Co.) to John Andrews, 24 September 1814, and 17 January 1815, EI, JHAP, Business Letters. The death of Niels Ryberg in 1804 signified the beginning of the end for the trading house in his name although the consul John Rainals reported the firm's complete bankruptcy only in 1820; Rainals to John Q. Adams, 1 September 1820, NA T-195/3; see instructions to Benjamin Shreve, 24 May 1809, PM, BSP, vol. 5.

were complaining that too few American products had been carried to Copenhagen to meet demand.²⁹¹ This did not discourage U.S. consul, John Murray Forbes, who planned a large-scale undertaking to re-export colonial products to the Baltic, as Ryberg did, and to bring Russian hemp and iron to Copenhagen for the U.S. market. Forbes sent “letters of offer” to American merchants and, at the same time, took measures to become consul and minister to Denmark.²⁹² In the winter of 1815, he contacted amongst others Brothers Cramer and John D. Lewis in St Petersburg and announced his intention to found “a large entrepôt and barter trade between the U.S. & the ports of the Baltic”. Forbes believed an enterprise of this sort would be especially advantageous for those Americans who reached the Baltic so late in the autumn that they could not manage to reach St Petersburg. Forbes believed in his prospects for success partly because he assumed that he would get the most up-to-date information from John D. Lewis on market conditions in St Petersburg, and that with this information he could direct the Americans to the right ports in northern Europe.²⁹³ A few years later Forbes renewed his entrepôt plan since, by his own account, he had got enough support from American merchants. Forbes also had plans to found an industrial enterprises and start a steamship service. Although he got custom from some Americans, his projects failed, for Denmark was a “poverty ridden country” and he could not raise enough finance there for his schemes.²⁹⁴

In the light of the STA figures, it really appeared that the Americans had started to bypass Copenhagen on their way to St Petersburg after 1815, but the city won back some of its lost position in the 1820s.²⁹⁵ Copenhagen became a major purchaser of Charleston rice, but vessels also sailed there from Boston with a general cargo more often than immediately after the war. Possibly encouraged by this, the Rainals, who were active in Elsinore and Copenhagen and had transacted a lot of business with the Americans, tried to organize the entrepôt for American and Russian merchandise that Forbes had dreamt of. However, this attempt fared no better.²⁹⁶

²⁹¹ Ryberg & Co. to Samuel Endicott and John D. Andrews, 9 October 1817, EI, JDAP, vol. 1/6.

²⁹² E.g. Forbes to Thomas Mullett & Co., 21 February 1810, HUBL, FFP, A-2; Erving to Forbes, 31 May 1811, Forbes to Monroe, 31 May 1811, and 8 September 1811, NA T-195/2. Forbes (1771-1831) had been active as a merchant and consul in Hamburg for about ten years, but after German trade became blocked he moved to Copenhagen in 1810. He tried to defend the rights of American vessels seized by the Danish with rather obscure methods and poor results.

²⁹³ Forbes to Samuel Williams, 25 February 1815, to Brothers Cramer, 13 March 1815, to John D. Lewis, 16 March 1815, to H.E. Schröder, 16 March 1815, and to Davison & Simson, 10 June 1815, HUBL, FFP, A-3.

²⁹⁴ E.g. Forbes' circulars, 15 July 1817, and 2 September 1817; Forbes to Adams & Swift, 12 October 1817, and to William Chapman, 25 November 1817, HUBL, FFP, A-3. After the failure of his enterprises in Copenhagen, Forbes ended up as consul in Buenos Aires.

²⁹⁵ 121 of the 190 vessels that departed from the U.S. in 1815-1820 sailed to Baltic Russia, and 69 to elsewhere on the Baltic, mainly to Copenhagen. Between 1821 and 1830 of altogether 339 vessels from U.S. only 154 sailed to St Petersburg; Appendix, table 25.

²⁹⁶ Rainals et al. to John H. Andrews, 22 March 1828, EI, JHAP, vol. 2/9. This may be the same enterprise, “The Baltic Company”, that the Minister to Copenhagen, Henry

Copenhagen did not manage to become a broker of raw sugar, which played such a major part in American merchant shipping.²⁹⁷ The commercial significance of Copenhagen in both the Baltic region and in Denmark declined for many reasons, including excessive port charges, the Sound dues, the country's general customs policy and the competition between Hamburg and Lübeck.²⁹⁸ Not even the commercial treaty concluded between Denmark and the United States in 1826 brought back the American captains. It was not long before Minister Henry Wheaton commented that the consequences of the treaty were a disappointment for the Danes. The Americans brought their homeward cargo from St Petersburg or from Stockholm since comparable goods were not available at competitive prices at the gateway to the Baltic.²⁹⁹ The situation became worse for Denmark at the beginning of the 1830s, when its position compared with that of St Petersburg started to decline more rapidly and more obviously. On average only one American vessel arrived in Copenhagen each year in the 1840s and 1850s.

American sailing to Stockholm started in earnest after 1815, but initially it was almost entirely unrelated to U.S. trade with Russia, since almost all the vessels that went to Stockholm sailed there from western Europe in ballast and returned directly to the United States with cargoes of iron. The link with St Petersburg started in the 1830s, when iron from Stockholm started to become a significant option as a return cargo for an increasing number of the Americans who carried sugar to St Petersburg. It had already earlier had that role for those sailing to Copenhagen. The scale of these activities can be seen from the fact that 275 vessels sailed originally to Stockholm through the Sound while 386 returned from there.³⁰⁰

Altogether 162 American vessels sailed to German ports, but 175 returned from there. According to calculations by the consul in Stettin and his agents in Königsberg, Danzig and Memel, 72 American vessels visited those ports between 1831 and 1850. According to STA, 56 vessels sailed to German ports on the Baltic, but 70 sailed from there to Elsinore.³⁰¹ Some vessels sailed from German ports to Stockholm to carry iron from there.³⁰²

Wheaton, reported going bankrupt in 1828 with "a loss of more than 50 percent to the stockholders"; Wheaton to Clay, 31 December 1828, NA M-45/3/5.

²⁹⁷ P. P. Sveitstrup and Rich. Willelev (1945, 143) claim that the Baltic sugar markets were taken over from Copenhagen by the Americans. They consider this the result of the rupture of American links with Copenhagen during Napoleon's Continental System.

²⁹⁸ Nathanson 1836, 627; Homans 1858, 423; Hill 1926, 221; Epping to Cass, 25 November 1858, NA T-201/4. As late as 1858 Homans dictionary (p. 423) alleges that the high port charges were an obstacle for the expansion of trade in Copenhagen.

²⁹⁹ Wheaton to Clay, 31 December 1828, NA M-41/3/5.

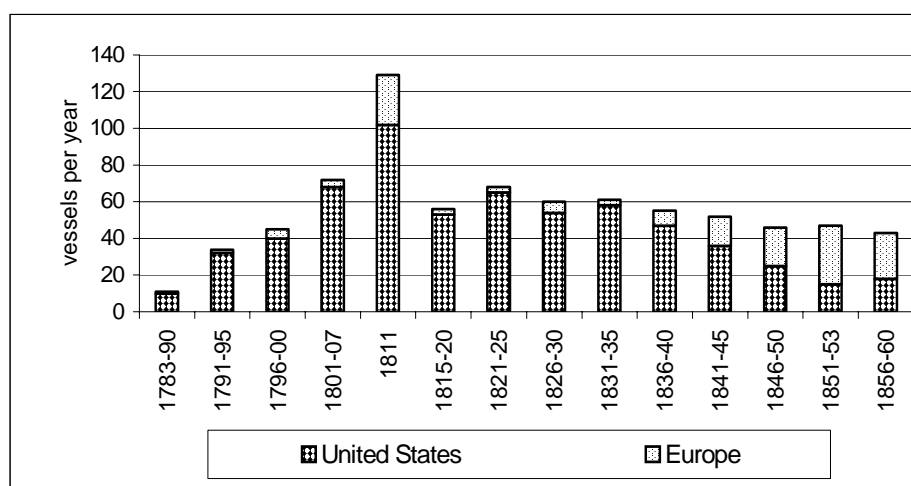
³⁰⁰ Appendix, table 26.

³⁰¹ The main reason for the difference is that several captains who declared Copenhagen to be their port of destination carried on further into the Baltic. According to the consul in Stettin, the brig *Colombo* (156 tons) owned by Cunninghams of Boston in 1832 sailed the route Boston-Königsberg-Boston. According to the consul in Elsinore, her route was Boston-Copenhagen-Pillau-Boston. STA records the brig sailing from Boston "to the Baltic Sea" and returning from Pillau to Boston. All three sets of

6.7 The destinations in the west: Boston, New York, and Bordeaux

Four-fifths of the American vessels that sailed west through the Sound in 1783-1860 sailed to the United States, irrespective of whether this number only includes those that departed from the ports of the Baltic Sea or from Russia. More than 2900 of the 4800 vessels belonging to the latter group headed for North America. The rest (about 450) transferred to West European ports or, in general, to "the North Sea", or to Havana or South America. American vessels sailed from Baltic Russia altogether to 85 ports west of Elsinore.³⁰³

Generally speaking, the information Russian foreign trade statistics and STA provide on the number of vessels sailing from Russia to the United States correspond quite well at least in the 1830s and the 1840s. By contrast, differences are great between Russian and U.S. statistics. They result from, for example, the use of different statistical years and the way the vessels sailing in ballast and stopped at intermediate ports are taken into account.³⁰⁴



Source: Appendix, table 27.

FIGURE 12 Destination of American vessels passing through the Sound westward from Russia, 1783-1860.

recorders also have a different route for the schooner *Columbus* (121 tons) of the same owners; STA 1832 (169/1009 and 1603/2179); CR 1832, NA T-195/3 and T-59/1.

³⁰² For example the ship *Seine* of Portsmouth (280 tons) carried almost 600,000 lbs of Charleston rice to Stettin, and after that carried iron from Stockholm to New York; STA 1832 (513/1478); CR 1832, NA T-195/3, and T-59/1.

³⁰³ The figure does not include such ports of destination as, for example, "North America", "Rhode Island", "North Sea", "England" or "Spain".

³⁰⁴ According to Russian foreign trade statistics (Kirchner 1975, 196), altogether 691 vessels departed from Russia for American ports in 1834-60, but the U.S. foreign trade statistics have as many as 774 American vessels arriving from Russia in the same period. According to STA, altogether 1126 vessels sailed from Baltic Russia to the United States in 1824-50, but according to the Russian statistics, only 1060 vessels left for the United States.

An American port of destination reported in St Petersburg or in the Sound did not, of course, exclude the possibility that the vessel might call at some western European port or head for, for example, Lisbon or Havana.³⁰⁵ In most cases it is impossible to verify whether the American vessels sailed to the port in the U.S. they reported or not.³⁰⁶ The consular reports and STA generally agree about the destination ports of vessels sailing from Russia to North America, at least after 1815.³⁰⁷ The differences are mainly due to sailing in ballast, traffic with western Europe and the fact that STA reports only one port of destination while the consular records include several.³⁰⁸ "Sailed for Boston" or "sailed for Elsinore" was often entered in the shipping lists of St Petersburg for the vessels in ballast. Although this might be true, many of these vessels first brought iron from Stockholm and only then continued to the destination reported in St Petersburg.³⁰⁹

³⁰⁵ For example in 1840 STA recorded London as the destination of the brig *Julius* (of Plymouth), but the consular reports have Boston. The corresponding entries for the bark *Camilla* (of Wiscasset) were Newcastle and New York; STA 1840 (2636, 2634); CR 1840, NA M-81/4, and T-201/2. Such vessels as William Gray's ship *Rising State* prove problematic for the breakdown of Russian exports. In Elsinore on 18 August 1803 she was declared to be carrying Russian hemp and iron to Salem but when the vessel arrived at Salem on 1 February 1804, she was declared to be carrying Swedish iron from Gothenburg. The next year in Elsinore, Bergen was registered as the destination of the ship *Harper* of the same owner, although the vessel was full of Swedish iron and Russian sailcloth. According to the customs at Salem, the vessel had departed from Copenhagen; STA 1803 (1988); STA 1804 (764); CR 1803-4, NA T-201/1; Hitchins, *Digest of Duties*, PM. The destination of the ship *Sterling* (360 tons), under the command of Captain Henry Neef of Boston, was also dubious. She sailed in ballast from London in order to transport a full cargo of rye and wheat from Danzig to Baltimore in the autumn of 1836 (according to the consul, to Boston). The next year the vessel sailed the usual route Boston-Havana-St Petersburg-Boston; STA 1836 (2615/3090); STA 1837 (2885/3215); CR 1836-37, NA T-201/1, and M-81/3.

³⁰⁶ For example, in the summer of 1816 the Captain Tobias Davis of Boston carried a cargo of tallow from St Petersburg to Boston, but according to John D. Lewis's shipping lists, the product was carried to Philadelphia; STA 1816 (839); HSP, LNP, Letters, 1808-28.

³⁰⁷ According to the consular reports of St Petersburg, 592 vessels departed from Kronstadt for Boston in 1828-50, and according to STA, 614 vessels sailed from St Petersburg and Riga to Boston. The numbers also almost match for New York: 279 and 281 vessels; STA 1828-50; CR 1828-50, NA M-81/2-5, T-201/1-3, T-195/3-4, and M-485/1. According to Salem's customs house, altogether 62 vessels arrived in the city from St Petersburg. It is a pure coincidence that the number reported in STA is exactly the same since the vessels are not the same. The same applied to the 17 vessels that arrived at Providence in 1820-45; STA 1820-45; Hitchins, *Digest of Duties*, PM; Kirchner 1975, 235-36. The numbers of vessels and information about ports of destination in the consular reports of Elsinore and STA were, in practice, the same with respect to vessels that arrived from Russia and Finland. This conformity extends even to the 21 ballast vessels that departed from Russia in 1842-43, 19 of which were claimed to have sailed empty to the United States.

³⁰⁸ For example the destination of the brig *Palos* of Newburyport in 1838 was, according to STA, Boston, but according to the consul in Elsinore, it was New York. According to the consul in St Petersburg, the vessel was to sail to both Boston and Newburyport; STA 1838 (2447); CR 1838, NA M-81/3, T-195/4, and T-201/1.

³⁰⁹ For example in 1838 the brig *Blucher* of Boston and the ship *Crafton* of Boston were such vessels; STA 1838 (2204, 2690); CR 1838, NA M-81/3, T-201/1, and T-195/4.

At the end of the 18th century and at the beginning of the 19th century, it was not unusual for “North America” or “America” to be recorded in STA as the port of destination. Usually this was defined more precisely in the lists of the consul in Elsinore, which usually named places in Massachusetts or Rhode Island, most often Boston, Salem or Providence.³¹⁰ After 1815 vagueness as to the ports of destination became very rare for vessels sailing from St Petersburg and Copenhagen if they were fully laden. By contrast, voyages to “North America” without further specification continued with cargoes of iron taken on in Stockholm and generally with vessels returning from the Baltic in ballast.³¹¹ The contradictory information about ports of destination is not a problem for the history of American imports from Russia, taking the United States as a whole, since most uncertainties only concern such questions as whether the vessel sailed to, for example, Boston or Salem.³¹² As Table 16 indicates, according to STA, altogether 23 vessels sailed from the Baltic to Salem in 1803, but according to the city’s own bills of entry, only 12 vessels arrived. Almost all of the vessels that were unaccounted for belonged to William Gray and probably went to Boston.³¹³

³¹⁰ For example in October 1792, William Gray’s brig *William & Henry* was, according to STA, sailing from Copenhagen to North America with a smallish iron consignment, but the consul specified Salem her destination port. However, custom records from Salem report Gothenburg her port of departure. It can be concluded on the basis of the amount of the customs duty that she also carried Swedish iron as supplementary cargo; STA 1792 (1597); CR 1792, NA T-201/1; Hitchins, *Digest of Duties*, PM. – Vague reports of destination ports in the United States are mostly connected with vessels that departed from Copenhagen. Nine of the eleven vessels departed from there in 1796 reported “North America” their port of destination, and in 1798, 15 of 19 vessels did the same.

³¹¹ In 1842 the consul in St Petersburg recorded four vessels departing “to the Sound”, but the destination of the fully laden brig *Lycoming* of Boston (202 tons) was specified as Boston. The destinations of three vessels in ballast, the ship *Zotoff* of Kennybunk (371 tons), the bark *Daniel Webster* of Portland (264 tons), and the bark *Vernon* of Boston (238 tons) were specified as Cadiz, the North Sea and Charleston, respectively. Also four Boston barks departing from St Petersburg in ballast, according to STA, the consul in Elsinore and the consul in St Petersburg, sailed directly to Boston (*Ganges*, 226 tons; *Brothers*, 259 tons; *Saxon*, 345 tons; *Sultan*, 354 tons); STA 1842 (1085, 1895, 2232, 2638, 1973, 1974, 2591, 2637); CR 1842, NA M-81/4, and T-201/2. Quite a number of American vessels sailed west from the Sound in 1842 not fully laden. According to the consul in Elsinore and STA two vessels from Riga and Stettin and one from Copenhagen also passed through the Sound in ballast for North America.

³¹² Probably several vessels unloaded part of their cargo in both ports. For example William Gray’s ship *Aurora*, which was reported in Elsinore as sailing to North America, sailed first to Salem, but carried on immediately to Boston. In 1804-07, altogether 26 vessels recorded in STA as sailing to Salem did not arrive there; STA 1803 (2216); CR 1803, NA T-201/1; Hitchins, *Digest of Duties*, PM.

³¹³ In 1804-07 altogether 26 vessels that were, according to STA, sailing to Salem did not arrive there. At least 13 of them belonged to William Gray. On the other hand, vessels that were registered as sailing to destinations other than Salem did arrive there. In 1801 William Gray’s ships *Williams* and *Wells* were, according to STA, sailing to Boston, but the customs at Salem confirmed the information the consul in Elsinore had as to their real port of destination - Salem. Israël Thorndike’s ship *Two Brothers*, which according to STA was sailing to North America, also ended up in Salem. The brig *Admittance*, owned by Ezra Weston of Duxbury, was reported in Elsinore in summer 1804 to be sailing to her home port, but also arrived in Salem. In this case, the change of course was due to the captain of Joseph Peabody’s ship

TABLE 16 Destination of American vessels passing through the Sound westward in 1803.

	According to		
	Sound Toll Accounts	Consular Returns (Elsinore)	Consular Returns (St Petersburg)
<i>From St Petersburg to</i>			
Salem	21	16	17
Boston	13	16	18
New York	13	13	14
Providence	7	7	7
Philadelphia	5	5	6
Newburyport	4	5	5
Portland	4	4	4
Marblehead	4	4	4
Gloucester	3	3	1
Baltimore	2	2	2
Alexandria	1	1	1
Duxbury	1	1	1
Norfolk	1	1	1
Plymouth	1	1	1
Portsmouth	1	1	-
New Bedford	1	-	1
Newport	-	1	-
Rhode Island	1	-	1
North America	1	1	-
<u>Total to U.S.</u>	84	82	84
<i>From Copenhagen to</i>			
Salem	2	8	
Gloucester	2	2	
Boston	2	1	
Portsmouth	1	1	
Marblehead	5	1	
North America	1	-	
Lisbon	1	1	
<i>From Danzig to</i>	1	1	
Faroe Islands			
<u>Total from the Baltic</u>	98	97	

Sources: STA 1803, ØTA, DRA; CR 1803, NA T-201/1, and M-81/1.

At the turn of the century American vessels that ended up in St Petersburg very rarely sailed there directly from the United States. By comparison, import traffic from Russia was much simpler: almost all (96 percent) of vessels sailing from St Petersburg through the Sound in 1793-1807 were recorded as sailing to the United States. Although not all of them ended up there, it is significant that the Americans did not take much advantage of the steep rise in freight rates which affected shipping between St Petersburg and western Europe. The evidence of the shipping records shows that imports were strongly

Mount Vernon, Samuel Endicott, buying more hemp in St Petersburg than he could accommodate in his own vessel because the price was so low. Weston's vessel therefore carried part of it to Salem. After visiting Salem the ship *Admittance* continued to Duxbury; STA 1801 (2111, 2119, 2459); STA 1804 (1012); CR 1793-1805, NA T-201/1; Hitchins, *Digest of Duties*, PM; Endicott to Peabody and Gideon Tucker, 3 June 1804, PM, EP, vol. 1.

concentrated on Massachusetts and Rhode Island. At that time Boston was already a leading port of import, although in some years more vessels returned from Russia to Salem. After 1803 New York became equally important.³¹⁴ However, not all goods carried to the United States were marketed there since some of them were carried on to the West Indies or the Far East. It reveals a lot about the exceptional situation created by the war that some merchants even tried to re-export Baltic products to Europe after they had become “American” by being shipped across the Atlantic.³¹⁵

After 1815 importation started to become distinctly concentrated on Boston and New York, which during the last two decades under consideration were practically the only American ports that vessels returned to from Russia. Two-thirds of vessels departing from Russia and sailing directly through the Sound across the Atlantic in 1783-1860 sailed to Massachusetts.³¹⁶ Boston’s proportion was almost a half.³¹⁷ According to STA, before the 1820s it was usual for vessels returning from Russia to sail to smaller ports in New England, such as Salem, Newburyport, Marblehead, Portsmouth, Providence and Newport. Trading practices and local patriotism contributed to vessels’ returning to their home ports for as long as it was economically viable. However, sailing from Russia to minor ports in New England gradually came to an end. According to STA, the last vessel sailed from St Petersburg to Portsmouth in 1833, to Salem in 1843, and to Newburyport in 1847.³¹⁸ Vessels returning from Russian Baltic ports had 28 different ports of destination in the United States.

³¹⁴ Appendix, table 27. Boston and Salem were the most common ports of destination for vessels from all ports outside Russia. According to STA, 230 vessels sailed from Stockholm, Copenhagen and German ports to Boston and 40 to Salem (to Massachusetts altogether 360) in the years indicated in Figure 12.

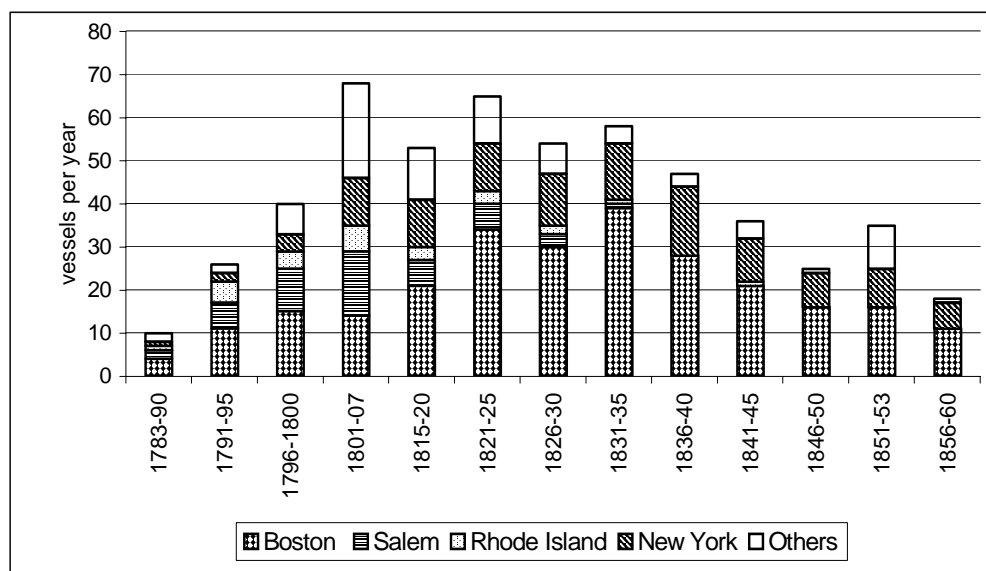
³¹⁵ E.g. Brown, Benson & Ives tried to export Russian shipbuilding products from Providence to France on the ship *Hope* in 1795; Hedges 1968, vol. II, 51-52.

³¹⁶ Vessels returning to ports in Maine have been included in the figures for Massachusetts before the year 1820. The first vessel that returned to her home town of Bath from St Petersburg was the ship *Fair American* (186 tons) in 1806, and Daniel Walker’s ship *America* (230 tons) returned to Kennebunk in the same year; STA 1806 (240, 513); CR 1806, NA T-201/1.

³¹⁷ However, in relation to Boston’s total mercantile shipping the number of vessels involved in Russian sailing was insignificant. For example in 1841-45 an average of 1950 vessels a year entered Boston, excluding coastal sailing. Only 21 of them arrived from St Petersburg; see Morison 1921, 225; HMM 1848, vol.19, 214; Appendix, table 27.

³¹⁸ The last vessel that returned to Salem, her home port, from St Petersburg was the ship *Eclipse* (326 tons), which passed Elsinore in August 1849 and was back in her home port by September. The ship’s captain was Henry Johnson, who had visited the Baltic with the brig *Mexican* (228 tons) in 1836-37. The vessels were probably owned by Josiah Peabody. Sailing from St Petersburg to Gloucester and New Haven ceased in 1822, to Beverly and Marblehead in 1828, to Plymouth in 1829 and to New Bedford in 1831. The last vessel to sail to Newburyport was the brig *Chenamus* (201 tons), registered there, which passed Elsinore in September 1847. The last vessel to Newport according to STA was the ship *Kutusoff* (415 tons) that returned to her home port in the autumn of 1835. The consul in St Petersburg recorded, however, that she had sailed to Boston, while the consul in Elsinore put down New York. The last vessel to return home to Bristol was the ship *Aquetnet* (329 tons) that passed Elsinore in the middle of November 1837. STA has the bark *Baltic* (295 tons) as the last vessel sailed to Providence: she returned to her home port in October 1845; STA 1835 (1878/2443); STA 1836 (378/1432); STA 1837 (756/874, 2774/3232); STA 1843

The role of the minor cities of New England in Baltic sailing did not end when Russian products were no longer carried directly there. Vessels from these minor ports sailed to Boston and New York. Already in 1832 altogether 11 vessels with a New England home port, which did not import products from Russia, at least through the Sound, returned to Boston from St Petersburg. In the year in question, nine vessels owned by New York merchants returned to New York, and so did eleven vessels registered in New England.³¹⁹



Source: Appendix , table 27

FIGURE 13 The U.S. ports of destination of American vessels passing through the Sound from Russia, 1783-1860.

According to STA, about a fifth of all vessels from Russia going to North America sailed to New York. Its position in trade with St Petersburg was much less significant than could be supposed on the basis of its total figures for foreign trade and shipping.³²⁰ This is in spite of the fact that products carried from St

(1496/2242); STA 1845 (630/1213); STA 1847 (712/1957); CR 1835-47, NA M-81/3-5, and T-201/1-2; Hitchins, *Digest of Duties*, PM; see Phillips 1941, 689; Osgood & Batchelder 1879, 187-191; Marvin 1916, 174.

³¹⁹ However, even in 1832 three vessels from New Bedford, one from Providence, one from Bristol and three from Salem returned to their respective home ports.

³²⁰ See Appendix, table 27. In 1790-92, 20 percent of tonnage that arrived in the U.S. sailed to Massachusetts, and 15 percent to New York; Shepherd 1988, 42-43. According to NWR (vol. 12, July 19 1817, p. 324), 1172 vessels arrived in New York from foreign ports while 656 sailed to Boston. Vessels from the British Isles went four times as often to New York as to Boston (352:83). The same applied to vessels from France (82:17). By contrast, 52 vessels arrived at Boston from Baltic and Hanse towns, while only 46 sailed to New York. In terms of number of ships, Boston was ahead also in trade with the East Indies and China, while for southern Europe, the Mediterranean and Africa the numbers were almost equal.

Petersburg were often taken to New York because its market was known to be bigger than that of Boston, and its connections to southern ports better.³²¹

For example Nathan Trotter & Co. of Philadelphia disapproved of their St Petersburg supplier of iron for sending the firm's orders not to New York but to Boston "that port not being entranced in our city".³²² Morison estimates that by the end of the 1830s a third of New York's total trade was carried by Massachusetts vessels and financed by Massachusetts capital.³²³ The role of Massachusetts was certainly no less significant in trade to Russia: according to Kirchner, 49 of the 64 American vessels that arrived at St Petersburg in 1840 sailed there for merchants of that state.³²⁴

The role of the east coast cities south of New York remained small in importation from St Petersburg. An average of three vessels a year sailed to Philadelphia in the 1790s and at the beginning of the 19th century, but not a single one after 1845. After Stephen Girard's death, Philadelphia's position declined to a similar extent also with respect to other long-distance trade.³²⁵ Vessels rarely returned from Russia to the cotton ports, although the tonnage arriving there increased six fold from the beginning of the 1820s to the end of the 1850s.

Cargoes carried from St Petersburg to American ports differed from other cargoes carried through the Sound in that they really were general cargoes. Often 10-15 different types of merchandise were recorded in STA, and the consuls further specified another 5 to 10 that were considered as sundry items by the Danes and duty on them was levied as a percentage of the value. The contents of the cargo that Sam Train's ship *Sterling* (360 tons), commanded by Captain Henry Neef, carried from St Petersburg to Boston in 1832 can be considered fairly typical.³²⁶

³²¹ Already in 1794 the ship *Grand Turk* was sent to New York since she was crossing the Atlantic late in winter and the Russian products already available in New England were expected to meet demand for the year. However, in Elsinore the vessel was recorded as sailing to Salem; STA 1794 (1467); Fairbanks 1945, vol. I, 527; Peabody 1926, 146-147.

³²² Trotter & Co. to J. Wright & Co., 30 September 1839, HUBL, NTC, T-5.

³²³ New York's strengthening position in overall imports was mainly due to the fact that vessels that carried cotton to western Europe generally returned to New York. Since coastal sailing was closed to all but Americans, New York became the entrepôt for the South; see North 1968, 126-127.

³²⁴ Kirchner 1975, 128.

³²⁵ Albion 1961, 376; Appendix, table 27.

³²⁶ According to the consul in Copenhagen, the owners of the cargo were, for example, Sam Train & Co., Henry Chapham & Co., Edmund Baylies, and A. & C. Cunningham; STA 1832 (2232); CR 1832, NA T-195/3.

 According to

<i>Products</i>	Sound Toll Accounts		Consular Returns (Copenhagen)	
Bar iron	2 268	sklb	-	-
Sheet iron	99 9/10	sklb	-	-
Iron	-	-	23 679	poods
Hemp	1203 1/10	sklb	12 031	poods
Hemp yarn	30 1/2	sklb	301	poods
Copper	9 9/10	sklb	199	poods
Tallow candles	4 1/4	sklb	41	poods
Feathers	73 4/5	sklb	738	poods
Cordage	37 7/10	sklb	377	poods
Ropes	-	-	92	poods
Isinglass	240	lbs	-	-
Sailcloth	198	stycke	108	pieces
Ravenduck	260	stycke	200	pieces
Flems	1 170	stycke	850	pieces
Diaper	1 629	pieces	10 735	arsheens
Sheeting	-	-	120	pieces
Jugter	21	dozens	-	-
Others	199	rigsdaler	-	-

Before the 1830s it was exceptional for American vessels to sail from Russia to western European ports. When the cotton triangle started to become established alongside the sugar triangle and when the demand for Russian products in the United States declined, the routes taken sailing homeward changed significantly. Every year a great number of vessels left St Petersburg without a suitable return cargo. One solution was to carry an "intermediate cargo" to western Europe. This option was not always convenient, and that suitable cargoes were not always available can be concluded from the fact that, for example, in 1843, five vessels that carried sugar to St Petersburg returned empty to southern ports and one returned in ballast to Havana.³²⁷ In the next year only half of the vessels that departed from St Petersburg sailed directly to the United States, and many of them were obviously not fully laden. The same thing still occurred in 1846 despite the fact that the sugar crisis halved the number of vessels sailing.

Lumber, carried from St Petersburg to France or to the Iberian Peninsula, became increasingly common as a return cargo. At the height of the sugar boom, from 1841 to 1844, altogether 47 cargoes of lumber were carried to French ports, and the trade remained active until the beginning of the 1850s. Bordeaux and Le

³²⁷ The ships *Sartelle*, *Louisa* and *Arno* of Boston returned to Mobile, and the ship *Aymar* of New York and the ship *Howard* of Kennebunk to New Orleans. The consul in St Petersburg reported all of them sailing "to the Sound". The ship *Talma* of Boston returned to Havana without cargo. In addition, the bark *Nautilus* and the ship *Burmah* (both of Portland) were registered in Elsinore as returning in ballast to their home port; STA 1843 (1930/2537, 2872/3411, 2871/3413, 1884/2733, 2922/3702, 1315/2105, 1285/2356); CR 1843, NA M-81/4, and T-201/2.

Havre were the favourite ports of destination.³²⁸ There were also other options in western Europe; for example, in 1841 four vessels carried hempseed and linseed to Amsterdam, and two vessels tallow to Le Havre.³²⁹ Cargoes were very rarely taken from Russia to Dutch or German North Sea ports. The year 1846 was an exception: seven vessels sailed to German and Dutch ports.³³⁰ There were 17 ports of destination on the French, Spanish and Portuguese coast, and six on the North Sea.³³¹ The Americans sailed 14 times to Madeira, and eight times to São Miguel.³³² Traffic from St Petersburg to the Mediterranean was almost exclusively lumber freight. American vessels sailed east of Gibraltar only 19 times, to six different ports. In the 1840s and the 1850s they sailed there only from Wiborg and Hamina. All voyages to Marseilles began at Finnish ports.³³³

The British ports were little favoured by those who returned from St Petersburg before the repeal of the British Navigation Acts.³³⁴ After that Liverpool and London became almost as important destinations as Boston and New York, and in 1858 as many vessels sailed from Russia to London as to the

³²⁸ In 1783-1860 altogether about 130 American vessels sailed through the Sound to France from the Russian ports, and more than 80 to Spain and Portugal, usually Lisbon (30).

³²⁹ E.g. the ship *Virginia* of Newburyport and the bark *Venice* of Boston; STA 1841 (3157, 3203); CR 1841, NA M-81/4. Captain Robert Emery of Boston had the most unusual cargo; he reported carrying "a group of Cossacks with their horses" from Reval to the North Sea in 1799; STA 1799 (1114).

³³⁰ For example the bark *Walter* of Bangor carried 26,900 arrobas sugar from Havana to St Petersburg, and 2600 chetverts rye from St Petersburg to Bremen as her return cargo; STA 1846 (2192); CR 1846, NA M-81/4, and T-201/4. In 1831 the British Consul, Francis C. McGregor, reported that the Americans were competing to carry grain from the Baltic to the ports of the North Sea. McGregor to John Backhouse, 20 January 1832, PRO, FO 22/110. STA does not confirm this.

³³¹ The first American captain returning from St Petersburg to the Atlantic coast was Jean de Coureill of Philadelphia, who had sailed the route Cadiz-St Petersburg-Cadiz in 1784. The first captains to arrive at the North Sea ports from St Petersburg were Aaron Jeffrey and Daniel Dragdon, from Norfolk and Portland, respectively, who sailed in ballast from London to St Petersburg to take on iron, lumber and tallow for Amsterdam; STA 1784 (946/1851); STA 1791 (368/757, 369/786).

³³² The route from St Petersburg to São Miguel was sailed for the first time in 1789 and for the last time in 1807, when Antipas Hathaway of New Bedford carried 110 boxes of lemons to St Petersburg on the schooner *Cornelia* (74 tons), and took on a return cargo of iron and flax. Traffic to Madeira continued considerably longer. As late as 1852 George Hobbs of Eastport, ME, carried 372 pipes of wine from Madeira on the brig *India*, and traded it in St Petersburg for 2317 pieces of deal; STA 1789 (899); CR 1807, 1851, NA T-201/1 and M-81/6.

³³³ The first to sail to the Mediterranean from St Petersburg was John Gawett of Philadelphia, who in the autumn of 1794 carried a cargo of iron and hemp to Genua. The last vessel was the bark *Wagram* of Boston (241 tons), which took lumber from Wiborg to Malaga in 1851; STA 1794 (1294); CR 1851, NA T-201/3, M-81/3.

³³⁴ The year 1801 was perhaps the most significant exception. In that year hemp prices were higher than usual, which had an influence, and according to Blandow & Co., five vessels were chartered by British merchants; Blandow & Co. to Brown, Benson & Ives, 1/13 November 1801, USR 1980, 354-355. The only American vessel to sail from St Petersburg to London was Horace Gray's ship *Magnolia*, which first took 1.1 million lbs sugar from Havana to St Petersburg and there took on a small amount of ravenduck and cordage from Thomson, Bonar & Co. The financiers Bates & Baring were able to use the proceeds of their sugar dealing to add iron, manufactures and lead to their cargo. After that the vessel was sent to Java; HUBL, HGP, vol. 17.

United States altogether (11). In practice, the change meant that American vessels that carried cotton to Russia then began to sail to Britain on their return voyage, though often not fully laden.³³⁵ The Americans did not manage to get a hold on the grain trade between Russia and Britain, although the customs regulations no longer prohibited involvement in it.³³⁶

Probably the first captain to take a vessel from the Baltic to Havana with Russian produce was Moses Endicott of Salem in 1798, but he had few successors in the next half century.³³⁷ In 1832 Edward C. Bates wrote that it was planned in St Petersburg that one Russian and a few Boston vessels should engage in regular traffic between St Petersburg and Havana with the aim of taking over the cordage market in Cuba.³³⁸ However, this attempt probably did not come about. Nor did a projected direct "sugar line" between Havana and St Petersburg, intended as a joint Russian and Cuban venture, fare much better.

The Americans started to carry lumber from St Petersburg to Rio de Janeiro in 1843³³⁹ and, for example, at the end of the 1840s the ship *Ariosto* of Boston carried deals there in three successive years. Obviously great quantities of Russian products ended up in Brazil via the United States. For example in 1841, 3327 coils of "Russian cordage" were registered as being carried to Rio, and in the next year 3472 coils. The Boston merchant John D. Bates was one of

³³⁵ For example, in the summer of 1835 the Bath ship *Sarah G. Hyde* (890 tons) first carried 2665 bales (1.3 million lbs) of cotton from New Orleans to St Petersburg and then returned to Liverpool with 15,800 poods of hemp and 2500 deals; CR 1853, NA M-81/5.

³³⁶ See Kirchner 1975, 109. 49 American vessels sailed from Russia to Liverpool in the entire period discussed, and 40 to London.

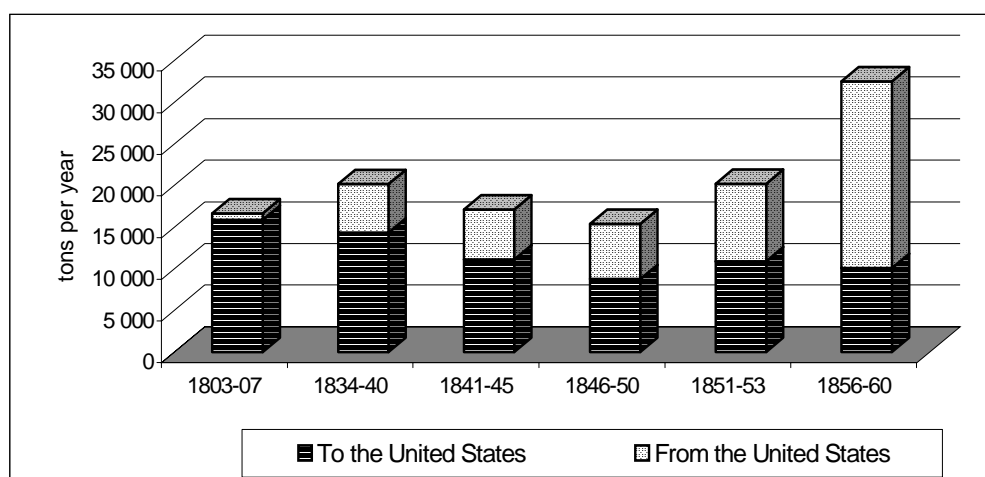
³³⁷ STA 1798 (976). According to STA, only 17 vessels sailed from Russia to Cuba in the period discussed, and two from Copenhagen. In 1816-18 five vessels sailed to Havana, but after that there were hardly any direct voyages. At the beginning of June 1830 P.D. Parker's ship *Cowper* (329 tons) carried a cargo of sugar from Cuba to St Petersburg and returned to Havana carrying a significant quantity of manufactures registered as belonging to the Havana firm of Mariatequi, Knight & Co., which had also consigned the cargo of sugar. Cordage, tallow, manufactures and deals were most often carried to Havana. The last vessel to sail to Havana was the brig *Africa* of Boston (182 tons), in summer 1840. In 1843-44 another two vessels sailed from St Petersburg to Havana, but they were declared to be sailing in ballast to Cuba. Apart from Havana, the Americans sailed only once directly to the West Indies: Tobias Davis of Boston to Martinique in 1815; STA 1816 (993) ; STA 1817 (2141); STA 1815 (152); STA 1830 (841/1555); STA 1840 (3096/3866); CR 1830, 1840-44, NA T-195/3, T-201/2, and M-81/4.

³³⁸ The American vessels Bates meant were the Boston ship *Lucy Ann* owned by J. Harris and another Boston ship, the *Champion*, owned by Devens & Ingesoll. Both vessels reported in Elsinore that they were sailing to Boston, and only the latter carried more cordage than was usual; Edward C. Bates to John D. Bates, 6 August 1832, PM, JDB, vol.12; STA 1832 (2458, 2403); CR 1832, NA M-81/3.

³³⁹ Two Boston vessels had already sailed from St Petersburg to Rio in 1827, but they carried cordage. In 1843-44 the bark *Merlin* of Boston sailed first with a cargo of sugar from Havana to St Petersburg, and after that from St Petersburg fully laden with deals to Rio; STA 1827; STA 1843 (1517/2539); STA 1844 (253/1117); CR 1843-44, NA M-81/4. In 1848, altogether five vessels carried lumber from Russia to Brazil. (In 1783-1860, the route from Russia through the Sound to Rio was sailed 15 times under the American flag, and the route to Pernambuco once.)

those involved in this trade. He also supplied Russian products to Buenos Aires.³⁴⁰

The tonnage figures in consular reports show as clearly as the shipping figures of the STA that the vessels that departed from Russia at the beginning of the 19th century sailed directly to the United States, and that not even a sixth of the “Russiamen” sailed to Boston. The situation changed in the 1830s when the tonnage that departed from St Petersburg for the United States was divided between Boston and New York. In 1834-60 about 60 percent sailed to the former and almost 40 percent to the latter. According to both ship and tonnage figures, vessels returning to elsewhere in America were the exceptions. A substantial proportion of American tonnage did not return directly from Russia to North America, but about 40 percent headed for European ports, which also signified an essential change.



Source: Appendix, table 28.

FIGURE 14 American tonnage entered and cleared in St Petersburg, 1803-60.

6.8 American and foreign tonnage in trade between America and Russia

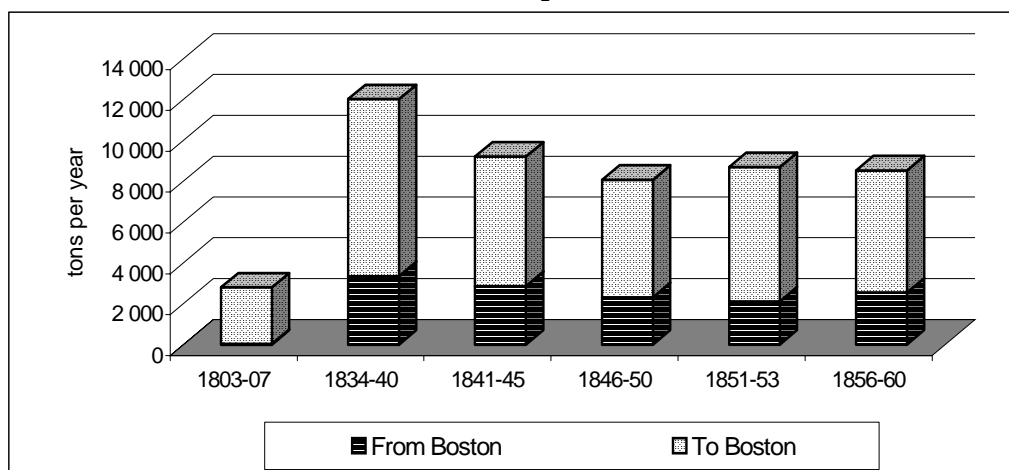
The tonnage figures of the consuls, the number of vessels recorded in STA and the American foreign trade statistics all clearly indicate in their different ways that except in the very last years of the period considerably more American vessels returned to North America from Russia than sailed there directly. Before the Embargo year of 1808, the relation between the tonnage that departed for Russia from the U.S. and that returned was 1:20. The ratio was almost the same when calculated according to the number of vessels.³⁴¹

³⁴⁰ E.g. Zimmermann & Frazier to John D. Bates, 13 June 1845, PM, JDB, vol.17.

³⁴¹ The tonnage calculation includes the years 1803-07, when only one vessel departed for Russia from Boston, for example, but 67 returned. The corresponding figures for the whole of Massachusetts were 4 and 222. The ratio for the total number of vessels that passed through the Sound over a longer period, i.e. 1783-1807, is also about 1:20; see

The ratio of the tonnage departing from the United States for Russia and returning from there in the 1830s and 1840s was 1:3. Counting the number of vessels, two returned from Russia for every vessel that departed for there between 1815 and the Civil War. However, the ratio for both vessel numbers and tonnage amounts recorded in Boston, the centre of Russian trade, was 1:3 in favour of imports.³⁴²

The picture of commerce and navigation changed radically in the five years before the Civil War. For example, in 1859, the tonnage that departed from the United States for Baltic Russia totalled almost 40,000 tons, according to the U.S. foreign trade statistics, over ten times the average for the 1820s. New Orleans became by a clear margin the most important port of export, but even in its heyday the tonnage departing from there did not exceed the tonnage that sailed from the West Indies to St Petersburg during the sugar boom. The cotton trade and the lack of return cargoes resulted in the tonnage departing for St Petersburg being more than double that arriving. In Massachusetts, on the other hand, the ratio remained favourable to imports, as before.³⁴³



Source: Appendix, table 28.

FIGURE 15 American tonnage in St Petersburg entered from and cleared for Boston, 1803-60.

A fifth of U.S. trade tonnage in the 1820s and 1830s has been estimated to have carried freight beyond the country's domestic ports.³⁴⁴ The Baltic Sea was one area of operation. According to the consuls' shipping lists, almost 40 percent of American tonnage sailing east through the Sound in 1834-60 was from Cuba, and in 1841-45 as much as 60 percent. Available figures also show that from the 1830s on approximately the same amount of tonnage that arrived in St

Appendix, table 28. Already in the 1790s more than 90 percent of import tonnage that arrived from Russia to the United States were American; Appendix, tables 28 and 29.

³⁴² According to Commerce and Navigation, the ratio was 1:2.5 in 1821-1853; see Appendix, table 28.

³⁴³ An average of 22,400 tons of American tonnage departing from the U.S. arrived in St Petersburg annually between 1856 and 1860; New Orleans contributed 11,800 tons and Cuba only 1700 tons; CR 1856-60, NA M-81/5-6; Appendix, tables 28 and 29.

³⁴⁴ Taylor 1951, 8, 197.

Petersburg from Cuba sailed to a port outside the United States after departing from St Petersburg. When traffic between European ports and St Petersburg is also taken into account, it emerges that perhaps about 45 percent of the American tonnage involved in Russian trade operated outside the direct trade connections between the United States and Russia.

American vessels sailing through the Sound carried the bulk of trade between the United States and Russia, though not all of it. Almost every year some non-American vessels also sailed between Russian ports and North America. Moreover, part of the trade was carried via Archangel, Odessa or the Pacific. These routes outside the Baltic were part responsible for the fact that, while according to the consul in St Petersburg an average of 6600 tons of American tonnage entered the port in 1834-53, according to U.S. foreign trade statistics, 7100 tons departed for Russia in those years. Conversely, the tonnage that departed from St Petersburg for the U.S. amounted to 11,600 tons, while 12,400 tons arrived in North America. The differences are sometimes great from year to year.³⁴⁵

According to the U.S. foreign trade statistics, the non-American vessels involved in U.S. trade with Russia were mainly British and Russian, though in some years there were also Swedish and German. There were obviously few of them. For example, in 1818, according to the British consul in Elsinore, not a single English vessel sailed directly either from the Baltic Sea to the United States or the same route in the opposite direction.³⁴⁶ The vessels of different countries were in much the same position with respect to both direct and indirect trade at Russian ports. By contrast, at U.S. ports most non-American vessels were at a disadvantage in relation to domestic vessels, since they were prohibited from coastal sailing. Thus, one side of the cotton triangle was reserved exclusively for the Americans. Moreover, reciprocity in indirect trade only came into force with Britain, for example, in 1850. This does not seem to have increased the amount of British tonnage involved in American trade with Russia, whereas the repeal of the British Navigation Acts had a far greater influence, attracting American vessels with a cargo taken on in St Petersburg to London, Liverpool and Hull.

The consuls in St Petersburg do not pay much attention to non-American vessels taking part in trade between America and Russia, although printed shipping lists frequently mention such vessels. For example Fr. Winberg's list,

³⁴⁵ Appendix, tables 28 and 29. The four Russian seacoasts (the Baltic, the Black Sea, the White Sea, and the Pacific) are specified in the U.S. foreign trade statistics only from 1855 on. This is one reason for Commerce & Navigation's figures for Russian trade being sometimes greater than those provided by the consul in St Petersburg and the Sound Toll Accounts.

³⁴⁶ Charles Fernwick's report, 13 April 1819, PRO, BT 6/66. According to Commerce and Navigation, 586 American and 148 foreign vessels sailed to Russia in 1834-60. The corresponding figures for vessels engaged in importation were 894 and 126. These figures are considerably greater than the information provided by STA and the consul in St Petersburg indicate; for example, in 1841-50 the consul reported 282 vessels departing for the U.S., but the U.S. foreign trade statistics recorded 327 vessels returning from Russia; Commerce and Navigation 1834-60; CR 1841-50, NA M-81/4-5; see Appendix, table 29.

which mainly covers German trade in St Petersburg, mentions six German vessels that departed from St Petersburg for New York and two for Boston in 1836.³⁴⁷ The number is exceptionally high, since usually only two or three foreign vessels departed from St Petersburg for North America, and in many years there were none at all.³⁴⁸ According to STA, 12 non-American vessels sailed from St Petersburg to the United States in 1785-95, half of them to Philadelphia. In the same years only two such vessels sailed from the United States to Russia.³⁴⁹

The amount of tonnage registered in Russia that was involved in trade between the United States and Russia is insignificant and the information available about it contradictory. The total arriving in North America exceeded 1000 tons only seven times between 1820 and 1850, and between 1857 and 1860 the average was 2050 tons. The Russian tonnage that departed from the United States for Russia averaged 3680 tons.³⁵⁰

TABLE 17 Russian vessels and their tonnage entering the United States, 1821-60.

Years	Vessels	Tons	Years	Vessels	Tons
1821-25	..	430	1841-45	5	1 790
1826-30	..	1 470	1846-50	19	7 460
1831-35	..	950	1851-55	17	6 730
1836-38	8	2 620	1856-60	13	6 460

Source: Commerce and Navigation, 1821-60.

According to the U.S. foreign trade statistics, the country's total tonnage involved in Russian trade was approximately 20,000 tons during the three decades from the 1820s on. Before about 1840 the tonnage arriving was four times greater than the tonnage departing. This reflects the gap between imports and exports, with imports over five times as high as exports. American export tonnage doubled from the 1820s to the 1840s while the proportion of foreign tonnage increased to about a fifth of the total amount. However, from the 1840s onwards the export tonnage increased at about the same rate as import tonnage

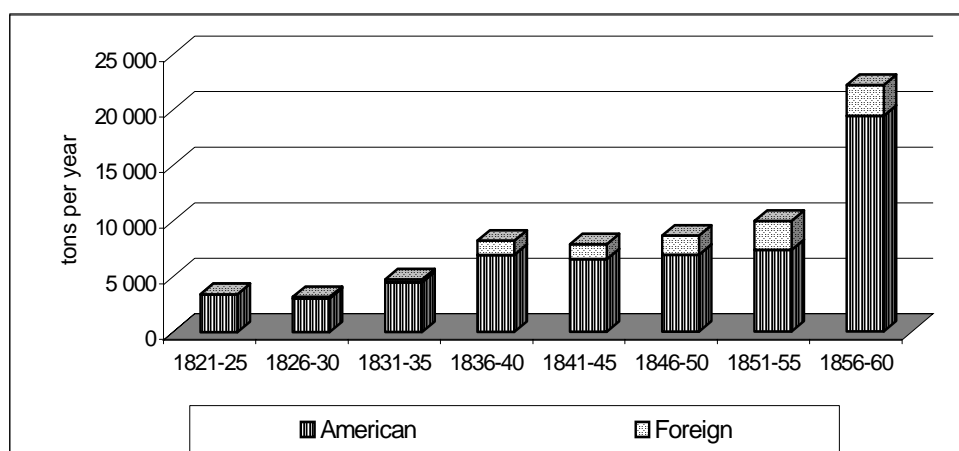
³⁴⁷ "Verzeichnis aller von Sanct-Petersburg im Jahre 1836 ausgeführten waaren" (Fr. Winberg), NA M-81/3. Those vessels carried 98 tons iron and 150 tons hemp to Boston according to the list. For New York, the corresponding figures would have been 1520 tons and 830 tons, amounting to one fifth of the hemp and one tenth of the iron carried by the Americans.

³⁴⁸ After the Crimean War the number of foreign vessels started to increase and, for example, in 1857 five non-American vessels arrived in St Petersburg from the United States, while four departed for North America; CR 1857, NA M-81/5, and M-35/17.

³⁴⁹ STA 1785-95 (List prepared by Hans Christian Johansen). In these years 27 non-American vessels with departure or destination port in the United States sailed through the Sound.

³⁵⁰ Fredrickson 1956, 114, note 13; Kirchner 1975, 84. For example, in 1850 as many as 64 Russian vessels entered the United States (26,280 tons), and 92 Russian vessels departed from the United States in 1850-51. This tonnage did not take much part in trade between the United States and Russia, since only three of the above-mentioned 92 vessels reported sailing for Russian territories when leaving North America; Commerce and Navigation, 1821-60; Kirchner 1975, 86. Some tonnage put down as Russian was in fact Prussian.

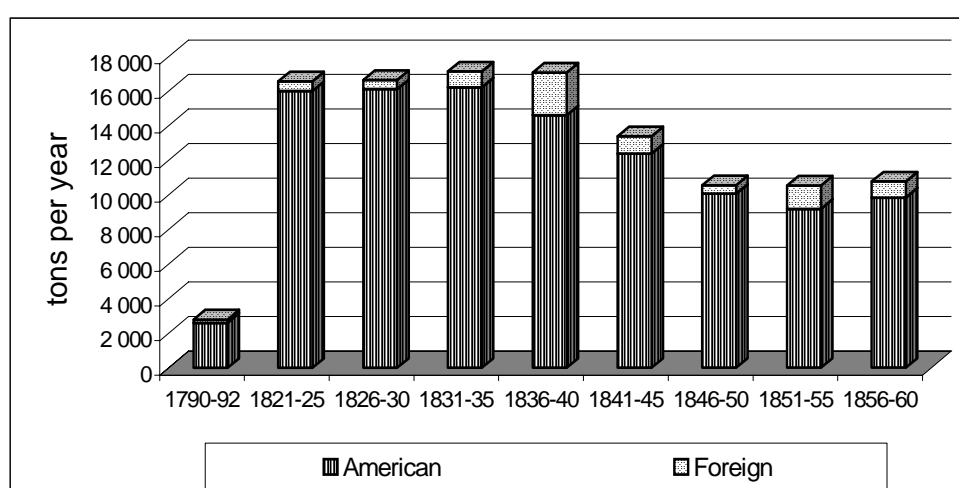
decreased, which marks a rather significant change in the structure of trade between America and Russia.



Source: Appendix, table 29.

FIGURE 16 American and foreign tonnage cleared in American trade with Russia, 1821-60.

The predominance of American tonnage is more evident in importation from Russia than in exportation, which can be attributed to the trade in Cuban sugar. The vessels that carried raw sugar to St Petersburg were always in need of return cargo, and therefore carried freight cheaply to the United States. The years 1847-49 are representative of the situation: according to the foreign trade statistics not a single non-American vessel arrived in the United States from Russia in those years. Meanwhile, from the beginning of the 1840s there were several years when more than half of the American vessels that departed from St Petersburg sailed to somewhere outside the United States.



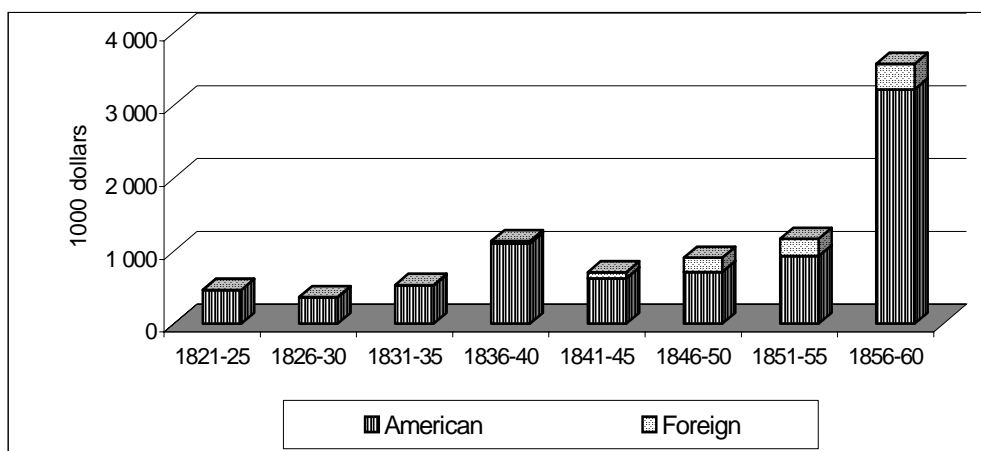
Source: Appendix, table 29.

FIGURE 17 American and foreign tonnage entering the U.S. in the trade with Russia, 1790-92, and 1821-60.

American shipping overwhelmingly dominated American trade with Russia in the 1830s. The tonnage of foreign vessels, whether arriving or departing, was below five percent of the total, and the situation shows if possible still more clearly in the value of trade: 97-99 percent of U.S. exports to Russia were carried on American vessels, and the proportion was not much smaller with imports. The figures are considerably higher than was usual for U.S. foreign trade in general.³⁵¹

It was quite natural that the proportions of American and foreign tonnage should correspond fairly closely to their proportions of the value of the trade. The only big exception was at the end of the 1830s, when according to the foreign trade statistics 15 percent of the tonnage was foreign, but only three percent of the value of the trade was carried on foreign vessels. The foreign share in exports was at its highest at the end of the 1840s and the beginning of the 1850s – one fifth. The proportion often remained below one percent with respect to importation and the total value of trade.

The Americans made considerable use of the north-eastern gateway to Russian trade, Archangel, only during the Napoleonic and Crimean Wars when access to the Baltic Sea was blocked. In normal years the route was in rather insignificant use. The local British consul estimated in 1840 that Archangel trade had been fairly stable for 50 years, and attributed this to the remoteness of its location.³⁵²



Source: Appendix, table 43.

FIGURE 18 U.S. exports to Russia carried on American and foreign tonnage, 1821-60.

Altogether 17 American vessels arrived at Archangel in the period 1821-35 while a total of 37 American or Russian vessels departed from there for the

³⁵¹ American tonnage dominated U.S. trade to Sweden until the 1820s, but in the 1840s it carried only a quarter of the trade between the countries. In the next decade the proportion increased again to 60 percent. The commercial treaty of on reciprocity of direct trade concluded between Sweden and the United States in 1818 was obviously advantageous to the Americans, but apparently an extension of reciprocity to cover indirect trade as well was not; Commerce and Navigation 1821-60; Fredrickson 1956, 114-118, 122.

³⁵² John Whitehead to Palmerston, 30 December 1840, PRO, FO, 65/263.

United States during the same years.³⁵³ According to the U.S. consul in Archangel, Edmund Brandt, on average only one American vessel arrived there in the 1840s. The number increased to 17 in the years 1854-58, but dropped back to one in 1859.³⁵⁴ American trade with Archangel was exceptional in that it seems to have been mainly in the hands of Brandt & Co., which was considered to be a Russian firm. In 1838 it sent 117 vessels "to all parts of the world", yet only one vessel to the United States.³⁵⁵

As for the Black Sea, American vessels had been there at least as early as during the Napoleonic Wars, even though the British consul in Odessa claimed that the first two such vessels appeared there in 1830.³⁵⁶ Edward Rhind was appointed Consul General in Odessa and the Black Sea ports in August 1829. He was one of three American commissioners sent to Constantinople to negotiate a commercial treaty which was concluded in 1830. The same year Rhind announced that he had appointed John Ralli vice consul in Odessa and Henry Shirl vice consul in Taganrog.³⁵⁷ The commercial potential of the Black Sea featured strongly in the discussion of relations between the United States and Russia. Southern Russia had been considered a land of opportunities for the Americans since Levett Harris's days.³⁵⁸ During trade negotiations in 1832 it was estimated that as many as 200 American vessels could start carrying Russian products west from the Black Sea.³⁵⁹ Also Hunt's Merchants' Magazine devoted space in its columns to Odessa. In 1845-46, six to eight American vessels were reported to have taken on grain there for the western European market. When the restrictions on British trade were lifted the Americans were expected to start shipping grain on a large scale, but in fact this did not come about. An average of one American vessel per year visited Odessa from the mid-1830s to the mid-1840s.

³⁵³ Kirchner 1975, 117; Consul John Booker's report, 23 April 1837; PRO, FO 181/140/3580; CR 1832-35, NA M-481/1. Exports to U.S. from Archangel reached their peak in 1821, when they were worth 1,364,000 roubles, that is, almost a third of the total exports of the city. Only the British share was bigger. In 1821-25 the average value of exports to the United States was, however, only 336,800 roubles and in 1831-35 it was down to 1350 roubles.

³⁵⁴ In 1854 seven American vessels entered Archangel, four of them in ballast. In Archangel their imports were valued at \$68,300 and their exports at \$139,300. The corresponding values in 1856 were \$26,200 and \$482,500; CR 1845-59, NA M-481/1; Kirchner 1975, 117-118.

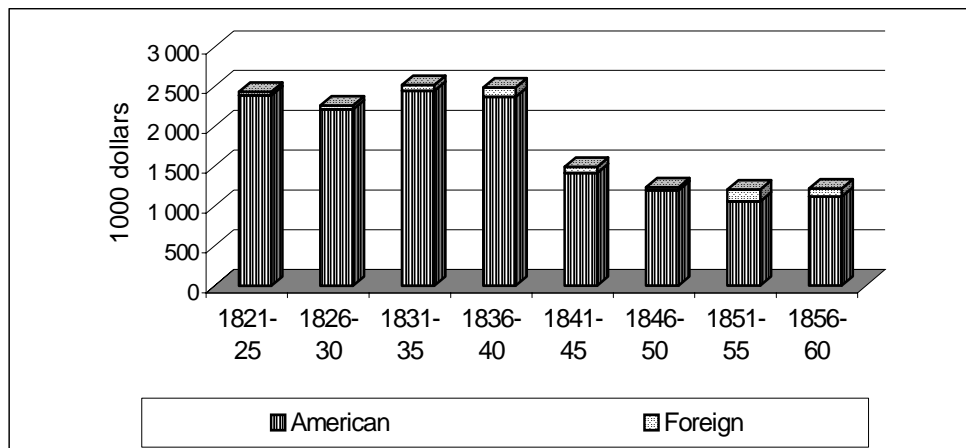
³⁵⁵ Kirchner 1975, 116. For example, in 1833 three Russian vessels departed from the city for the United States carrying products to the total value of 283,000 paper roubles; Edmund Brandt to McLane, 15/27 November 1833, NA M-481/1.

³⁵⁶ Consul Yames to Palmerston, 1 March 1831, PRO, FO, 65/194; cf. Kirchner 1975, 119 and Saul 1991, 37. Minister Adams mentioned in 1810 the first vessel to sail directly from Baltimore to Odessa. His information was based on a statement by the Russian Foreign Minister, Rumiantsev, as well as Russian newspapers; Adams to the Secretary of State 15/27 December 1810, NA M-35/2/35.

³⁵⁷ Oeste 1966, 89-90.

³⁵⁸ Alexander Hill Everett Diary 1809-1811, MHS, ENP; Wilkins to Forsyth, 22 August 1835, NA M-35/13/9.

³⁵⁹ Buchanan to Livingston, 29 June 1832, NA M-35/12/4.



Source: Appendix, table 65.

FIGURE 19 U.S. imports from Russia carried on American and foreign tonnage, 1821-60.

7 FINANCING TRADE BETWEEN AMERICA AND RUSSIA

7.1 The Dominance of London

The foreign trade of the United States did not become financially independent at the same time as the country became politically independent. However, the old triangular trade acquired new forms: free trade meant that the apexes of the triangle penetrated to new areas, such as the East Indies, continental Europe and the Baltic Sea. British domination of imports to the U.S. still guaranteed that trade was financed in one way or another by the British centres of world trade. British short-term capital was available for exporters and, even more so, importers to such an extent that before the 1830s foreign commercial credit sometimes reached \$100 million. The merchant bankers of London provided credit for American imports just as in colonial times, and this credit had a profound influence on the American market, for example, allowing importers to grant long terms of payment to their customers.¹ Consignments on credit were the key to success, and it was with respect to credit provision that American trade differed perhaps most significantly from European trade.²

London was the centre where, according to William Ropes, “almost all Russian business originates”³. Another merchant trading with St Petersburg, Alexander J. Smith, remarked that in London “money is abundant and interest

¹ See Platt 1984, 143-144; Douglass 1971, 94-95; Buck 1925, 113, 134; Chapman 1977, 30-31; Nettles 1962, 231; North 1960, *passim*.

² According to Eric Bollman of Hannover, who had settled down in Philadelphia in 1797, those who were not involved in Anglo-American trade also had to adapt to its practices so that, for example, a merchant on the continent had to wait for payment from the other side of the Atlantic for 6-8 months, irrespective of how good an American agent he had; Redlich 1943, 87-88; see Albion 1961, 283-284.

³ William Ropes to Hardy Ropes, 7 March 1837, and William Ropes to Hardy Ropes, 17 September 1839; HUBL, RFP.

low".⁴ London's position was secure already prior to the European wars, and they strengthened it still further. As Britain was by far the most important trading partner of both the United States and Russia, and as most of the trading houses in St Petersburg engaged in foreign trade were essentially British, it is no wonder that the sources of finance in London played a central role in trade between America and Russia. The trading partners of the Americans in St Petersburg often recommended drafts on London for the simple reason that it was the fastest and easiest way to finance exports from St Petersburg. Moreover the fact that the major part of the insurance business for mercantile shipping was concentrated in London made it still more central.⁵ According to Stanley D. Chapman, a large number of British acceptance houses, which took on financial risks, were set up between 1800 and 1860. Even the crises of 1825-26 and 1836-37 did not significantly reduce their number. They encouraged and financed commission agents and small general merchants all over the world, and in the United States in particular. Credits were granted to "the firms of any race or nationality who could show most promise of profits".⁶ The U.S. indeed had its own banking system, which was becoming more and more specialized, providing a certain amount of long-term capital and short-term credit to merchants from the turn of the century onwards, but the need for finance in foreign trade was far greater than domestic resources could meet.⁷

Trade links with St Petersburg, mostly working the sugar triangle, can be compared to the Americans' "highly capitalized and complex" trade with the Far East.⁸ Both of them required complex arrangements for purchase, sales and financing. For example, vessels might sail first from Boston to the Southern ports or the West Indies, and trade goods carried from Russia for a cargo that would sell in Spain or France. The merchandise purchased or exchanged in Southern Europe would then be carried to Copenhagen or directly to St Petersburg. Finally, cargo taken on in Russia was carried across the Atlantic to New England or New York. This trade required considerable capital, and so it is no wonder that firms belonging to major commercial houses in New England, such as Derby's or William Gray's, were the ones to open up trade with St Petersburg. Several other merchants trading with St Petersburg considered it best to operate with their own capital. Christopher Champlin of Newport stated in 1787 that as he depended on "principally my own bottom" to finance his

⁴ Smith to John D. Bates, 16/28 August 1827, PM, JDB, vol.1. – Nettels (1962, 36): "London was a vast emporium with great warehouses that suggested an enormous department store where buyers could conveniently make up varied cargoes of all sorts of goods."

⁵ See McCulloch 1854, 987; Crosby 1965, 55-56; Mathias 1983, 284; Wallerstein 1989, vol. III, 122; Chapman 1977, 11.

⁶ Chapman 1979, 232.

⁷ See Chandler 1978, 78.

⁸ See Porter 1937, vol. I, 45, 83; Henry Lee to Charles Williams, 6 March 1817, Porter 1937, vol. I, 1235-1237.

buying and selling, "of course the stock in circulation is not large compared with those acting upon the credit of others".⁹

Except in the case of trade with Britain the Americans did not contract long term debts abroad during the European wars, but preferred to pay cash for their purchases, despite the fact that English financiers' sympathetic attitude towards American merchants trading with St Petersburg meant that this was not always necessary. America's neutrality and the close long-term trade relations between Britain and both Russia and North America probably explain this generosity. Even if it is not entirely true that the incomes of the ship owners and merchants "increased phenomenally between 1793-1808"¹⁰, the chances of making a profit also attracted to St Petersburg entrepreneurs operating on limited capital. Judah Paddock, who sailed there for the New York merchant Isaac Hicks in the summer of 1803, claimed that vessels taking on cargo for the United States in St Petersburg were

*"Small & Small capitals many that dont except £3000 one only \$300. These Small folks are mostly from the Eastern Ports of the Continent that expect to make India voyages & now find they will not get a New penny for an Old one and promise not to try again..."*¹¹

Many New England merchants attempted to establish themselves in foreign trade on the strength of only their own modest capital. In 1830 Benjamin Shreve had barely \$5000 of his own capital at his disposal in Havana, but he negotiated advantageous freight contracts to St Petersburg and from there to New York. An increase in the price of sugar contributed to the success of his venture. Shreve invested his resources in Russian sheeting, and this also proved successful, since he reckoned that his "net result" from the voyage was \$9,582. At the end of the voyage Shreve sold his vessel, insured for \$10,000, to the Hudson Whaling Company for \$9000.¹²

According to Alexander J. Smith, who was for 30 years in charge of American trade at Brothers Cramer's, Russian capital for commercial enterprises was in short supply, and the discount rates were in the order of eight percent, which he reckoned to be almost double those quoted in other European capitals.¹³ Of course, the value of money was relative. For example, in 1840 William Ropes estimated that the interest of five or six percent payable on British capital was too high for his enterprise.¹⁴ Another basic characteristic of trade between America and Russia is that the Russians were not involved in financing it, not at least by William H. Ropes' account. This might have caused

⁹ Christopher Champlin to William Green, 20 September 1787, MHS, WCRIC.

¹⁰ Nettels 1962, 233.

¹¹ Paddock to Hicks, 6 June 1803, and Paddock to Rathebone & Duncan, 21 July 1803, NYHS, IHP 1803 (Paddock). Finance was readily available in London and Liverpool for the ventures of Paddock and Hicks. The value of the ship *Thames's* cargo, commanded by Paddock, was put at about £12,000 when departing from St Petersburg.

¹² PM, BSP, vol. 20 (Brig Washington); STA 1830 (1955/2685).

¹³ PM, BSP, vol. 20, (Brig Washington); Kirchner 1975, 79.

¹⁴ William Ropes to Hardy Ropes, 19 February 1840, HUBL, RFP.

difficulties, but on the other hand Ropes Jr. considered the situation so advantageous to himself that he had no reason to encourage the Russians to ship merchandise to the North American market on their own account.¹⁵

There was all the more need for capital in trade with Russia because of the way Russians sold their products to the English. Internally in Russia export products such as flax, hemp, iron and tallow were already sold during the winter prior to the navigation season. These products were, of course, also available during the season, but they were often much dearer then. It was therefore considered profitable to make advance purchases directly from the manufacturers in the winter time, when they were often in need of cash.¹⁶

Americans rarely put in winter orders, as they did not want to tie up their resources and pay advances they considered high. To all appearances, the attempts of, for example, Christopher and George Champlin to obtain goods in "like manner as the London Merchants do" in St Petersburg failed because of the high British interest.¹⁷ Some merchants who settled in Russia and traded regularly there gradually started to make purchases of this kind, but apparently they only became standard practice in the 1830s.¹⁸

J. Jepson Oddy recognized at the beginning of the 19th century that Russian trade practices were especially disadvantageous for the Americans, who did not purchase goods in advance and did not make agreements about shipments for the following navigation season. The Americans arrived early in the spring, and as they were always in a hurry to return they were even overcharged for old stock. Their arrival was also advantageous to the sellers because they paid in cash.¹⁹ Captain Judah Paddock stated that this was for the simple reason that the Russians did not like to sell anything on credit.²⁰ Brothers Cramer said the same to their Boston agent, John D. Bates, in the summer of 1827. The Russians demanded immediate payment for purchases, and advance payments for any orders that were placed. It was "totally out of the question" that the sellers could be expected to have the patience to wait for payment even until the vessel reached Boston or New York.²¹

On the other hand, the merchants often demanded at least three months, or sometimes even a year to pay for the import goods they took for sale. British money was needed in this kind of situation. The shortage of capital in Russia was considered a reason for these terms of trade, which were quite strange to the Americans. Russian goods had to be paid for in advance, while extended terms of payment had to be allowed for the colonial products and cotton that were left for

¹⁵ William H. Ropes to William Ropes, 29 August/ 10 September 1842, HUBL, RFP.

¹⁶ E.g. Brothers Blandow to E.H. Derby, 7 November 1794, EI, DFP, vol. 5; McCulloch 1854, 987.

¹⁷ Christopher and George Champlin to Anthony F. Thiringk, 22 April 1788, CRI 1915, 367-368.

¹⁸ John D. Lewis' circular, 11 December 1836, EI, Price Currents, St Petersburg.

¹⁹ Oddy 1805, vol. I, 199.

²⁰ Paddock to Hicks, 20 July 1803, NYHS, IHP 1803 (Paddock). "Cash" most often referred to letters of credit or bills of exchange.

²¹ Brothers Cramer to Bates, 20 June 1827, PM, JDB, vol. 1.

sale. Elias Hasket Derby did not like to sell on credit in St Petersburg, as "it will be likely to make bad debts".²² Gale, Hill, Gazelet & Co., who sold Derby's goods, announced in 1786 that sales based on cash payments were not recommendable in Russia and that importation without long-term credit was not possible. Merchants in St Petersburg had earlier urged Derby to give up any attempt to purchase Russian goods in exchange for colonial produce. The best way to pay in St Petersburg was in cash or with bills on London. Derby adopted the practice of remitting the funds gained from a cargo unloaded in western Europe to Lane, Sons & Frazer in London, and having his captains do business at the ports of the Baltic using letters of credit obtained from them.²³ By and large it became usual in St Petersburg around the middle of the century to pay cash for coffee and sugar, for example, but according to McCulloch, the Russians expected a discount of 10-15 percent on this kind of purchase.²⁴

It is probable that several American merchants suffered from lack of working capital, as William Ropes did when he extended his business in the middle of the 1830s. He did not have the resources to cover consignments he had on order and so he resorted to Barings. Although he was allowed credit, he stated that he was "determined to avoid all large import business in future, as it is uncertain and mere the work of capitalists".²⁵ Ropes was concerned with shipments of raw sugar from Cuba, which constitute a clear exception to the general methods of financing. Considerable funds from St Petersburg were obviously involved in operations in Havana, but the money was channelled through London. In any case it was unusual for Russian products to be shipped to the American markets for the account of merchants in St Petersburg.²⁶

Although the central role of captains and supercargoes as entrepreneurs continued for quite a long time, purchasing decisions as to Russian products were gradually handed over to the trading houses in St Petersburg once trade links were established on a more stable basis. Thus, as early as around 1820 William Rufus Gray left it to his partners in St Petersburg, Thomas Wright & Co. and John Venning, to assess whether it was more beneficial to invest the proceeds of, for example, olive oil from Messina in Russian products or to remit it to Joshua Bates or Thomas Dickason & Co. in London.²⁷

The lack of working capital together with the way the Russians handled foreign trade probably affected the organization of trade over the whole period discussed. As late as 1856 G.M. Hutton, acting consul in St Petersburg, claimed

²² Derby to Nehemiah Buffington, 15 June 1784, EI, DFP, vol. 5 (printed in USR 1980, 213-215).

²³ Derby to Buffington, 2 February 1785, Derby to Benjamin Hodges, 12 December 1785, and Gale, Hill, Gazelet & Co. to Derby, 6 March 1786, EI, DFP, vols. 27, 19, 11; McKey 1961, 207-212, 216.

²⁴ See McCulloch 1854, 987; Kirchner 1975, 213.

²⁵ William Ropes to Hardy Ropes, 22 October/ 3 November 1836; HUBL, RFP.

²⁶ E.g. William Ropes to Hardy Ropes, 30 September/12 October 1833, and William Ropes to David Henshaw, in July 1835, HUBL, RFP.

²⁷ See W.R.Gray to Thomas Wright & Co., 8 September 1818, and 28 December 1819, W.R. Gray to Venning, 5 January 1820, 28 February 1820, and 22 April 1822, EI, William Rufus Gray, Letterbook.

that the six month's credit the Russian manufacturers demanded on products supplied to them gave a crucial competitive edge to wealthy British, German and Dutch merchants. It was precisely because of their capital that the English managed to keep up their strong position as brokers in trade between America and Russia.²⁸

Walter Kirchner considers lack of finance and banking facilities a central factor that held back the growth of trade relations between America and Russia. Financial institutions were much more developed in Britain, Holland and Germany than in the United States or Russia. It is an indication of the rarity of direct payment and cash transactions that the leading American trade journals did not even quote the rouble, and neither was the dollar quoted in St Petersburg. The rates between the currencies were calculated on the basis of the sterling quotation.²⁹ Merchants made their assessments of profitability on the basis of sterling until the 1820s. This continued to be the case in the sugar trade until the middle of the century, but by then working on rough estimates as to the exchange rates between the dollar and the rouble had become the general rule.

There were specialized banks such as Fletcher, Alexander & Co., interested in trade between America and China but none were involved in trade between America and Russia, although the merchant banking house of Samuel Williams, U.S. consul in London from 1798 to 1802, almost fitted this role. Even in 1819 John Murray, the consul in Copenhagen, considered Samuel Williams "a man of paramount credit and influence in the mercantile world"³⁰, but in the autumn of 1825 he went bankrupt, causing considerable difficulties to several New England merchants. Williams's business was taken over by Timothy Wiggins, who tried to win back at least his predecessor's American customers through the good offices of the highly respected firm of Jones Lloyd & Co. However, it seems that those in trade with Russia who used to have dealings with Williams transferred their business and became customers of Barings.³¹

Baring Brothers was a banking business that was considered with good reason to be in a key position in trade relations between America and Russia. It can be concluded from the correspondence of merchants and their fragmentary account books that Barings was in one way or another involved in the business of almost all the merchants who had long-term commitment to trading with St Petersburg. Already in the 1790s Elias Hasket Derby and many of his

²⁸ Hutton to Marcy, 17/29 November 1856, NA M-81/5.

²⁹ Kirchner 1975, 77, 213. Exchange rates were quoted at the turn of the century in St Petersburg by giving the number of English pence payable for a Russian paper rouble (Rasch 1965, 61). Income from financial transactions also remained negligible. The first Russian commercial bank only opened in 1818, and it was not involved in foreign trade to any great extent.

³⁰ Forbes to Chandler Price, 8 October 1819, HUBL, FFP, A-3; see Samuel Sanford, Letterbook, HUBL; Henry Lee to Charles Williams, 6 March 1817, Porter 1937, vol. II, 1235-1237; USR 1980, 1139; Chapman 1977, 34; Hidy 1978, 140.

³¹ Wiggins to John H. Andrews, 7 December 1825, EL, JHAP, vol.2/3. For example John and Robert Hooper of Marblehead became customers of Wiggins and later of Bates & Baring and Baring Brothers after Williams's business collapsed; John and Robert Hooper to Timothy Wiggins, 20 March 1826, and 11 April 1826; John and Robert Hooper to J. Bates & J. Baring, 20 July 1827, PM, JRHP, Letterbook no. 1.

contemporaries used the services of John and Francis Baring & Co. Many St Petersburg merchants were also customers of Barings, who usually allowed them credit at five percent interest. In other words, their terms were markedly more advantageous than anything otherwise available in St Petersburg. Barings carried out at least its larger operations in Russia in the 19th century in collaboration with Stieglitz & Co. From the 1830s on it was increasingly clear that their main interest was changing from financing trade to involvement in banking and railway business, but with cotton they later took a renewed interest in trade.³²

As well as Stieglitz, Barings often collaborated also with the Amsterdam banking house Hope & Co., which during the Napoleonic Wars speculated in Russian hemp and flax and had numerous American customers.³³ In the 1830s Barings had an operating capital of almost £500,000, and they had very few competitors at their level in North Atlantic trade. Barings was also one of the first firms that operated on letters of credit in American markets. Its practice was to conclude agency agreements with a number of firms, but as credit grantors they were strict in their insistence that their customers were not allowed to do business with other merchant bankers. Joshua Bates was collaborating with Barings in American trade, and he was instrumental in having Thomas Ward made the sole agent of the London firm in the United States in 1828. Ward's recommendations were carefully listened to, especially with regard to the granting of credit. For example, Samuel C. Gray and Francis A. Grey had their credit limits set by Barings' agent in Boston when they shipped Havana sugar for Stieglitz.³⁴ Barings' hold on the American credit markets was probably at its tightest in Boston, although one of their closest partners with merely commercial operations was Goodhue & Co. of New York.³⁵

In Anglo-American trade it was common for the Americans to use several different merchant bankers. Thus, for example, the Boston merchant Nathan Appleton's financing operations were mostly carried out by Lodges & Tooth of Liverpool, but at the same time he also used Samuel Williams, and Hottiguer & Co. of Paris. The same was true of trade between America and Russia. For example, the financing arrangements of Israël Thorndike were mostly carried out by Thomas Dickason & Co. in London, but the major financier of his operations in St Petersburg was Ryberg & Co.³⁶

Other banking associates and clearing houses used by American merchants included the following British firms: John Kirwan & Son, Bainbridges & Brown, Pieschell & Brogden, Thomas Wilson & Co. and Wildes & Co. The latter two, together with Wiggins & Co., formed a group known as the "Three W's", who at one time owed about \$35 million for financing American trade with Russia.

³² E.g. Brothers Blandow to Derby, 6/17 October 1794, EI, DFP, vol. 3; Kirchner 1975, 214; see Blackwell 1970, 243, 257-259; Williams 1969, 207; Jones 1987, 63-64.

³³ Kindleberger 1993, 83; Kaser 1978, 456; Buist 1974, *passim*.

³⁴ Samuel A. Fabens to Baring Brothers, 30 May 1842, EI, FP, Letterbook.

³⁵ Kirchner 1975, 213; Perkins 1975, 118-119; Chapman 1979, 226, note 40; Jones 1987, 99; Brothers Cramer to Nathan Bridge & Co., 11 June 1829, PM, JDB, vol. 1.

³⁶ See Forbes 1953, 38-39; Gregory 1975, 18-19.

Together with Barings, Brown & Co. and Shipley & Co., these firms were among the greatest finance houses in England, and according to Barings, they were also the biggest British commercial firms in American trade. When the "Three W's" collapsed in 1836-37, the bankruptcies further strengthened the importance of the Stieglitz-Baring axis in financing North American trade with Russia.³⁷

7.2 Consignments and advances

International trade was financed by merchant bankers who advanced credit to others. This was carried out in several different ways: by making advances to producers, either goods entrusted to a merchant on commission for sale abroad or by issuing letters of credit under which merchants could draw bills of exchange or buying and selling bills of exchange outright. In Russia promissory notes were used mainly in banking operations rather than for commercial purposes. Russian merchants opposed the practice of discounting notes.³⁸

The majority of both Russian and American merchants served more or less as commission agents. Commission business was less risky than operations entirely on a firm's own account, and it could be carried out with relatively little capital. However, it was not a way to get rich quickly, and getting started could be a slow process as an agent had to have a good reputation before he would be entrusted with business.³⁹ Commission agents usually charged two or three percent for their services, with an additional commission added to this for *del credere* sales, that is, guaranteeing payment for goods sold on credit. For example Goodhue & Co. of New York, which sold Russian merchandise, charged an extra half percent per month for sales of this sort.⁴⁰

Since at least after the year 1815 most trade was carried out on the commission principle, the selection of different methods and means of payment was also carried out on that basis. The exchange of goods was, of course, sometimes based on simple barter, and this was not unusual in trade with St Petersburg at the turn of century. With barter, sometimes considered a rather crude method, Russian and American merchants shipped to one another on open account, and the parties aimed to send each other products of comparable value. Accounts were not necessarily balanced each calendar year, but rather with the help of products sent in the next navigating season.⁴¹ However, the

³⁷ See Platt 1984, 144; Chapman 1979, 220.

³⁸ See Kindleberger 1993, 82-83; Rieber 1982, 27.

³⁹ See Davison 1964, 55; Tooker 1955, 105; Baxter 1945, 301-302; Perkins 1975, 5; Lowitt 1954, Martin 1939, 116-118.

⁴⁰ Hidy 1978, 32-34; see Barrett 1863, 28-29. On the amount of commissions, e.g. Gregory 1975, 27; Porter 1937, vol. 1, 46-47. – On *del credere* practice, e.g. Homans 1858, 521-522.

⁴¹ If a balance could not be maintained it was in principle possible to compensate for the deficit, with gold and silver shipments, for example. However, this was unusual in Russian trade; see Perkins 1975, 5. Morison (1921, 295) considers commission trade a reason for the fact that the Russians benefited more from trade between America

most common practice in trade with Russia was that the surpluses of, for example, a trading house in St Petersburg were remitted in one way or another to a London mercantile banking house at the American partner's request.

Exchanging dollars and roubles through sterling may have profited those speculating on fluctuations in exchange rates, but as a general rule the business of transacting payment could consume both time and money. Consequently, even a major trading house like Goodhue & Co. sometimes preferred to trade on open account and take Russian products in payment for its exports.⁴² Despite the fact that more and more U.S. foreign trade transactions depended on letters of credit, perhaps 70 percent of all antebellum imports entered the country under the open account system or some other sorts of barter arrangements.⁴³

Direct barter was sometimes also used in the Havana sugar trade. Samuel Sanford of Boston started exporting sugar to St Petersburg by sending a small consignment of 20 boxes of Havana sugar on the brig *Jane* to John D. Lewis, requesting him to exchange it for brown sheeting. This was followed up the year after with a slightly bigger consignment of sugar, which the supercargo, James A. Allen, was instructed to exchange for sheeting provided it fetched a reasonable price. Sanford did not normally want to leave the marketing of his goods to the St Petersburgers in his first dealings with Russia, but if the sugar or indigo he shipped had to be left there to be sold later, he requested that the proceeds be remitted to Samuel Williams. This kind of arrangement was, however, exceptional for Sanford. At least in the early stages of his dealings with Russia, he usually financed his Russian purchases by exporting sugar to Hamburg or Liverpool, and coffee to Smyrna. He was also entirely at home with the use of letters of credit and bills of exchange.⁴⁴

Something approaching direct barter was involved when in November 1795 Eben and Gorman Parsons of Boston instructed Captain Thomas Hopkins to sail the brig *Sarah* to St Petersburg via Lisbon, and purchase iron with the proceeds from the cargo carried to Lisbon and from there to St Petersburg. Hemp and duck were also to be carried as freight if any cargo space was left unfilled.⁴⁵ Captains sailing for the Parsons also received similar instructions later on. If suitable cargo for St Petersburg was not available in Southern

and Russia than the Americans did. Moreover, local customs "together with fees and tips as varied as cumshaws of Canton" were beneficial for the Russians.

⁴² E.g. William Ropes to Hardy Ropes, 5 May 1838, HUBL, RFP.

⁴³ Perkins 1975, 115-116.

⁴⁴ Sanford to John D. Lewis, 14 April 1820, Sanford to Allen, 25 December 1820, Sanford to David Low, Jr., 9 May 1821, Sanford to Samuel Williams, 6 December 1823, and 19 October 1825, Sanford to Barenberg & Gossler, 6 December 1823, and Sanford to James Harris, 6 December 1823, HUBL, Samuel Sanford, Letterbook.

⁴⁵ The instructions given to Captain Hopkins only signified on paper, since he took his vessel to London and continued from there to St Petersburg in ballast except for a small consignment of rice. His cargo on the return voyage to Boston also differed from his instructions: 119 tons iron and 624 tons cordage; Parsons' instructions to Thomas Hopkins, 3 November 1795; HUBL, EGPP; STA 1796 (837/1895).

Europe the Parsons used letters of credit obtained from Ryberg & Co. or Harrison, Amsley & Co. of London.⁴⁶

The practice of exchanging a cargo of sugar, purchased on their own account in Havana and shipped to John D. Lewis, for iron, hemp and manufactures was still followed by Endicotts of Salem in the 1820s.⁴⁷ Henry & Alexander Ladd of Portsmouth, mainly a customer of the London firm Thomas Wilson & Co., did much the same. In the winter of 1818 Wilson gave Meyer & Brüxner in St Petersburg authority to buy a cargo against the load brought by the brig *Hannah*. As the value of the cargo taken to St Petersburg did not meet the cost of a full return cargo, Wilson & Co. advanced credit to cover the shortfall and at the same time contracted Ladd as a customer of their St Petersburg partner.⁴⁸

According to Edwin J. Perkins, trading on commission declined from the 1830s onwards in Anglo-American trade, when importing became specialized and goods were more and more often carried on the American merchants' own account. By contrast, the system based on commission retained its importance in trade between America and Russia. This is another example of the slower development of trading practices and organizations in New England than, for example, in New York.⁴⁹

However, commission trade did not flow without recriminations between the parties involved. When Nathan Bridge & Co. served as Brothers Cramers' agent in Boston, a St Petersburg firm sent strongly-worded notes in 1827, and even more so in the summer of 1829, complaining that the remittances of consignments they sent to Boston did not reach Baring Brothers in London quickly enough. Moreover, the American firm was accused of having used funds intended for purchasing Cuban sugar for other purposes of its own. Bridge & Co. contested the accusations: it had not violated instructions and its dealings in general would bear comparison with those of any American firm. It was not their fault that the merchandise Cramers had sent sold badly, and so accounts could not be settled with Barings. If this had been done before the sale of the goods, the firm would have had to resort to borrowing capital, with interest at 12-15 percent in Boston, and Bridge & Co.'s finances could not cope with that.⁵⁰

The problem of negotiating and authorizing advances was always present with commission trade. Advance payment was the ideal way to get hold of consignments, but this demanded working capital.⁵¹ John D. Lewis arranged

⁴⁶ E.g. Parsons' instructions to Ignatius Webber, June 9, 1798; HUBL, EGPP.

⁴⁷ Instructions to William Duncan, 16 April 1823, and the papers of brig Jeremiah, PM, EP, vol. 1.

⁴⁸ HUBL, WFP, vol. 5, especially: Henry & Alexander Ladd to Ruben S. Randall, 10 March 1818.

⁴⁹ Perkins 1975, 87; see Morison 1921, 24-25.

⁵⁰ E.g. Brothers Cramer to John D. Bates, 20 June 1827, 15/27 July 1827, Brothers Cramer to Nathan Bridge & Co., 11 June 1829, and Nathan Bridge & Co. to Brothers Cramer, 13 August 1829, PM, JDB, vol. 1.

⁵¹ "Authorizing" an advance and "negotiating" an advance were, strictly speaking, clearly different functions in the financial process and sometimes crucial in the securities business, but in practice these two functions came together when "making

advances in many cases and on generous terms, but he also had his limits. In the autumn of 1821 Lewis lost his patience with trading partners in Boston who demanded that he should buy Russian products in advance for shipping the following summer. This was common practice in St Petersburg, but Lewis considered incredible the notion that he could not charge interest on the funds used for the purchases.⁵²

In St Petersburg William Ropes tried to stick to the principle of not shipping for anyone who did not pay in advance three-quarters of the value of the shipment. He was obviously right in claiming that this custom speeded up operations on the American side⁵³, but it was increasingly difficult to stick to the practice once the American demand for Russian products started to decline. Most firms in St Petersburg used advances only to get profitable raw sugar consignments. In these cases, two thirds of the cost of the sugar consignment shipped by the trading partner was paid in advance.⁵⁴ The figure varied from one case to another, and the practice was by no means always followed. William Ropes was delighted that John Brown & Co. demanded an advance of only \$6000 for a consignment of cotton valued at \$18,000. Ropes hoped to get the rest on six to eight months' credit, as was usual in Russia.⁵⁵ In Anglo-American trade, the cotton producers and dealers were used to advances that covered two thirds to three-quarters of the costs on the local market. Russian buyers did not, however, indulge the Americans and the British who shipped them cotton with such high advances. Sales on credit in Russia also demanded capital, and this was probably a central factor in assuring the British a stronger position in Russia as re-exporters of raw cotton than the Americans who operated on more limited capital.

Although the Americans were, perhaps to their own disadvantage, reluctant to make advances in St Petersburg, this was nevertheless a way of getting consignments of Russian products. The proceeds from sales could be used in advance payment for return consignments when planning shipments of, say, Cuban sugar. John D. Bates of Boston had some sort of arrangement like this in mind when he considered it a condition for extension of his business that he could manage advances to St Petersburg through London. As he lacked his

advances" was in question. The vague term *advance* was also used to refer to the payments the St Petersburgers serving as the Americans' agents made to producers of, for example, iron and hemp. The St Petersburgers approved of this practice favoured by the English, probably not least for the reason that when for example Hornby, Bayley & Co. purchased products for Peabody, Riggs & Co. in Baltimore in that manner, they charged interest of 6 percent when they used their own resources, and the St Petersburg firm did not draw up the bill until the date of shipment. Winter purchases made on the Americans' own account probably became usual only in the 1830s; see Perkins 1975, 83-113; Hidy 1978, 51-52.

⁵² William D. Lewis to John D. Lewis, 4 May 1821, 10 November 1821, HSP, LNP, Letters 1810-41.

⁵³ William Ropes to Hardy Ropes, May 31, 1839, HUBL, RFP.

⁵⁴ E.g. Brothers Cramer to Nathan Bridge & Co., 24 September/6 October 1826, PM, JDB, vol. 1.

⁵⁵ William Ropes to Hardy Ropes, 18 June 1838, HUBL, RFP.

own resources, he considered turning to the London firms of Wiggins, Thomas Wilson & Co. and Thomson, Bonar & Co., as well as to Barings⁵⁶

7.3 “Amalgative voyages”

Samuel Eliot Morison takes the ownership of the cargo American vessels carried to the Baltic Sea to have been as follows: a third belonged to the ship-owner, a third to the sugar dealer in Cuba and a third to the Russian consignee.⁵⁷ This may often have been true, but the British capital that was essential especially to the Cuban sugar trade does not feature in the estimate. More English money than American or Russian was at times behind the dealing in sugar of the Bates and the Gray family of Boston, and also Stephen Girard of Philadelphia.⁵⁸ Minister William Wilkins cannot have been aware of the different credit arrangements when he estimated in 1835 that two thirds of the sugar trade was financed by the Americans and the rest by the Russians.⁵⁹

John Randolph Clay, Secretary of Legation, repeated Wilkins’ calculation about ten years later. He claimed that the “amalgative voyages” the Americans arranged from Cuba to St Petersburg were carried out by buying sugar cargoes on joint account, the Russian party contributing one third and the Americans two thirds. According to him, it was difficult to estimate the contribution of Russian financing since the resources were managed from London. For example Abraham van Sassen had credit with Barings, and the bank took care of payments and shipping instructions sent to the United States and Cuba. According to Clay, the British and the Russians were anyway sleeping partners in the sugar trade, since in practice, the amalgative voyages were entirely organized by the Americans.⁶⁰ Abraham von Sassen, acting consul, estimated in the peak year of the sugar business, 1844, that as much as seven eighths to nine tenths of sugar shipments were financed by Cuban, London or St Petersburg firms, and that the American contribution to financing was thus really small.⁶¹

Examined in detail, the different methods of financing dealings with Cuba would probably be as numerous as the cargoes of sugar sent to St Petersburg. For example, the major financing might be divided exactly in half, which was how Samuel Hicks of New York and Brothers Cramer organized their joint

⁵⁶ John D. Bates to Nathan Bridge, 16 April 1830, PM, JDB, vol. 1.

⁵⁷ Morison 1921, 295.

⁵⁸ E.g. Samuel A. Fabens to Baring Brothers & Co., 30 April 1842, EI, FP, Letterbook; Douglass 1971, 38.

⁵⁹ Wilkins to Prince Lieven, 20 August 1835 (enclosure: Wilkins to Forsyth, 1 September 1835), NA M-35/13/10; Gibson to Calhoun, 1/13 August 1844, NA M-81/4.

⁶⁰ Clay to Buchanan, 5/17 March 1846 (enclosures: Clay to Nesselrode, 2/14 March 1846, and Abraham van Sassen to Clay, 26 February 1846), NA M-35/15/4. William D. Lewis estimated that in 1821 half of the sugar going from Havana to St Petersburg was on American account and the other half on foreign, mainly British, account; William D. Lewis to John D. Lewis, 31 July 1821, HSP, LNP, Letters 1810-41.

⁶¹ Gibson to Calhoun, 1/13 August 1844, NA M-81/4.

ventures.⁶² Alternatively, the financing of a cargo of sugar might sometimes be split into several portions, as the Salem merchants used to do. The same financing arrangements applied when a return cargo was purchased in St Petersburg.⁶³

The 1826 agreement between Brothers Cramer of St Petersburg and John D. Bates, a partner of the Boston firm Nathan Bridge Co., can be taken as an example of the financing and organization of Cuban sugar carrying. By this agreement the Cramers appointed Bridge & Co. their sole agent for the territories north of New York and contracted to furnish Bridge with funds against sugar consignments up to the value of £4000 a year. This amount was intended as a two thirds advance against sugar Bridge had sent on his own account. The money received from them was to be used to ship sugar from Cuba to Cramers. Cramers also undertook to furnish Bridge & Co. with at least \$35,000 a year in order to operate their own account. This was to be arranged by sending consignments of Russian goods to Bridge & Co. The proceeds were to be invested in Cuban sugar which was to be shipped to Cramers. Cramers agreed to forgo banking commission on the account of Nathan Bridge. Moreover, the American agent was to be paid an annual allowance of \$1000, mainly to cover travelling expenses. It was further stipulated that Bridge & Co. would receive a third of the profits on all business that was directed from the United States or Cuba to Cramers. For their part, Bridge & Co. promised to sell merchandise sent by Cramers without commission and return a third of the commission on sales not covered by the agreement that the St Petersburg firm set up for them.⁶⁴

Brother Cramers and Nathan Bridge & Co. prepared their business plans for the year 1827 with the announcement from Cramers that they were opening an account of £20,000 with the London firm Samson, Batard & Co. for the use of the Boston firm. However, it seems unlikely that they in fact did so, since Bates & Baring announced in December that the Boston firm could draw up to £10,000 on Cramers' account with them at 60 days notice. Later Bates & Baring doubled the amount on Cramers' instructions. In the summer of 1826 Bridge & Co. had raised about \$50,000 from the sale of consignments from Cramers, and on their instructions the money had been taken to Cuba in the form of doubloons, and used to buy sugar on their account. The money Hicks & Son had gained from the sale of Cramers' consignments was also added to the sum, since the firm had let Cramers know that it would not take part in operations in Cuba in the summer of 1827.⁶⁵

⁶² William D. Lewis to John D. Lewis, 1 March, and 9 May 1821, HSP, LNP, Letters 1810-1841.

⁶³ E.g. Benjamin Pickman et al. to Peter Lander, 2 March 1816, EI, BPP, vol. 2.

⁶⁴ "Articles of an Agreement entered into between Brothers Cramer & Nathan Bridge Co., 7/19 September 1826", PM, JDB, vol. 1.

⁶⁵ Brothers Cramer to Nathan Bridge & Co., 7/19 September 1826, and 21 September/ 3 October 1826, 24 September/ 6 October 1826, 8 October 1826, and 14/26 December 1826; Bates & Baring to Nathan Bridge & Co., 6 December 1826, and 20 December 1826, PM, JDB, vol. 1.

The practical arrangements required for getting Cuban sugar across the Atlantic to Russia were not contemplated in the financial negotiations between Nathan Bridge Co. and Brothers Cramer. They took shape in agreements made between Nathan Bridge Co. and Horace Gray of Boston. Nathan Bridge & Co. chartered Gray's ship *James Maury* for the voyage Boston-Havana-St Petersburg. A deal was concluded in January 1827 with the captain of the ship, Elliott Woodberry, who served as Gray's agent. The terms of the agreement on the charter of the vessel were apparently similar to those of other agreements concluded between the parties in previous years. By the agreement, Bridge & Co. were in one way or another to contribute at least 1000 boxes of sugar to the vessel's cargo, and the St Petersburg firm would pay for its transportation. Horace Gray was to ship sugar to the same value at his own expense, and this was also to be consigned to Brothers Cramer. If any cargo space should still be available, Woodberry could fill it with suitable freight or buy goods at his own discretion on Gray's account, making his own decisions about their sale in St Petersburg. Horace Gray financed his own share in Havana by carrying there 120 bales, that is, 1200 pieces of "Russias" along with 60,700 piastareens and 2050 doubloons. In addition, Captain Woodberry was given authority to draw bills at 60 days notice payable in Boston for up to \$20,000. According to Gray's instructions Woodberry was to use the money raised in St Petersburg for advances against consignments if possible. This was a less risky option than buying goods on Gray's own account. Nathan Bridge & Co.'s share of the proceeds was also used to buy goods in St Petersburg. However, Brothers Cramer commented that their American partner could have done more to facilitate the operation of a joint account.⁶⁶

One point of the sugar triangle was Cuba, and it can be assumed that the Havana houses were also interested in taking part in the sugar business otherwise than merely as brokers. The agreement between Brothers Cramer and Nathan Bridge & Co. was modified in the summer of 1829: with the conclusion of a treaty between Bridge & Co. and the Havana firm of Drake, Mitchell & Co. (Drake & Mitchell). Charles Drake, who represented his firm at the negotiations in Boston, promised the Bostonians a quarter of the commissions on business directed to his firm. The Havana firm promised advances of two thirds for such consignments. Drake, Mitchell & Co. agreed to finance one eighth of all sugar purchases Bridge & Co. arranged through them. However, all this was on condition that Bridge & Co. should also arrange buyers for these shipments in St Petersburg.⁶⁷

⁶⁶ Horace Gray to Woodberry, 1 and 3 January 1827, and Horace Gray to Brothers Cramer, 7 January 1827, HUBL, HGP, vol. 17; "Agreement 9 January 1827 between Nathan Bridge Co. and Elliott Woodberry, and Brothers Cramer", Nathan Bridge & Co. to John D. Bates, 20 June 1827, PM, JDB, vol. 1.

⁶⁷ Charles Drake to Nathan Bridge & Co., 13 June 1829, PM, JDB, vol.1. By the agreement, the advances on cargoes sent from Boston to Havana would have a ceiling of \$5000 per vessel. If Bridge & Co., as it usually did, chartered a vessel whose owner would answer for half of the value of the sugar cargo, Drake & Mitchell undertook to raise their contribution to three eighths of the other half belonging to Bridge & Co.

John D. Bates, an agent and partner of Bridge & Co., concluded a similar agreement with Mariatequi & Knight (Knight & Co.) in July 1830, after collaboration with Drake & Mitchell came to an end for some reason. Moreover monetary transactions in London were transferred from Barings to Wiggins, who used to require that dollar dealings should be converted into doubloons before operations in Havana were carried out. This was associated with the attempt to organize the shipment of Russian products directly to Havana without involving American brokers. Cramers was paid for the shipments in raw sugar. Knight & Co. strove, in general, to ship sugar to Europe as directly as possible and in 1832 the firm sent the Spanish *Pepito* to St Petersburg, and in the following year in collaboration with Bates the ship *Rossini*. Hope of success depended on the fact that Spanish customs regulations favoured domestic vessels and in that way Russian goods could have been sold in Havana cheaper than when carried by Americans.⁶⁸ However, the attempt was probably not successful, since the firm returned to the old triangular trade in the following years. Correspondence between Boston firms suggests that the Havana firms were hardly involved at all in shipping to St Petersburg.⁶⁹

Russian involvement in sugar purchasing was often associated with reinvestment of the proceeds of their consignments to the United States. Dimitry Brusgin, better known as a seller of sailcloth, was one who followed this practice, ordering sugar to the value of his consignments from the London firm of Timothy Wiggins & Co., Brothers Cramer and Thomas Wright & Co. Both the Cramers and Brusgin were prepared to exchange the current account surpluses for doubloons in Boston to be shipped by an agent to Cuba. This practice was certainly followed when doing business with Nathan Bridge & Co. and Josiah Bradlee & Co.⁷⁰

The purchase of Russian products was also financed in other ways than by shipping sugar. Henry, Horace and Francis Gray of Boston, who operated jointly and separately, seem to have financed their trade to St Petersburg at the beginning of the 1820s by investing the earnings from cargo and freight carried from Batavia and Sumatra to Amsterdam or Antwerp in Russian products by means of letters of credit. Any surplus was deposited for later use in Amsterdam, or else was remitted to London.⁷¹

⁶⁸ John D. Bates to Nathan Bridge, 13 February, 20 February and 19 August 1830; Edward C. Bates to John D. Bates, 25 April, 28 May, 31 May, 29 August, 12/24 September, and 24 September (O.S) 1832, 5 June, 11 June, 7 July, and 12/25 September 1833, PM, JDB, vol. 1, 12, 16.

⁶⁹ The trading house of Ramirez in Havana is mentioned as chartering the brig *Emerald* of New Bedford in 1838 to send 911,000 lbs sugar to St Petersburg. The vessel carried flax seed and rye from St Petersburg to Amsterdam; Charles F. Jones to Baring Brothers & Co., 6 May 1838, PM, JDB, vol. 4; STA 1838 (1858/2907); CR 1838, NA M-81/3.

⁷⁰ E.g. Brothes Cramer to Nathan Bridge & Co., 7/19 September 1826, Josiah Bradlee & Co. to John D. Bates, 6 February 1827; Bates to Brothers Cramer, 28 March 1827, and Bates to Nathan Bridge, 6 April 1830, PM, JDB, vol. 1.

⁷¹ E.g. Henry Gray to Tobias Davis, 25 April 1821, HUBL, HGP, vol. 16.

Joint stock ventures often involved arrangements on a commission basis, especially direct trade between the United States and Russia. There were many alternative arrangements, involving, for example, provisions, advances, and del credere protection. In their joint activities, Peabody, Riggs & Co. and William Ropes used joint accounts, probably beginning in 1836 when the ship *Waban* carried a cargo worth \$100,000 from St Petersburg to Baltimore. Peabody's share in it was two thirds and Ropes' one third. In this case William Ropes purchased the goods and chartered the vessel in St Petersburg, Samuel Riggs took care of sales in the United States and Peabody negotiated financing from Barings for himself and especially for Ropes. Peabody's services were rewarded by Ropes cutting a half percent off his purchase commission on Russian products. By contrast, sales of Ropes' products in the United States were subject to the full rate of five percent.⁷² William Ropes also arranged cotton shipments to St Petersburg on the joint account principle. He considered this kind of arrangement the basis for the success of British enterprises like Hubbard's in Russia.⁷³

7.4 Letters of credit

Letters of credit, which were originally used as letters of introduction and were considered a temporary arrangement, gradually became a standard device for financing American foreign trade at the beginning of the 19th century. About 30 percent of imports were financed in this way in the mid-1850s. "Granting" letters of credit became a specialized banking business concentrated upon a few major merchant banking houses. The financial markets in Anglo-American trade were oligopolistic and dominated by Brown Brothers & Co., Baring Brothers & Co. and Peabody & Co. In Boston, where the Barings' position was exceptionally strong, letters of credit were extensively used as a means of payment.⁷⁴

Letters of credit were most often used in bilateral trade relations, where there was limited scope for barter. In U.S. foreign trade this was especially the case with China and South America, but also the Baltic region. The structure of trade between America and Russia at the turn of the century made letters of credit a practical means of payment, since most American vessels sailed in ballast to St Petersburg, and Russian goods had to be paid for by exports to western Europe or Copenhagen. In the spring of 1794, when Elias Hasket Derby sent the

⁷² Hidy 1978, 107; STA 1836 (594/1188); CR 1836, NA M-81/3; William Ropes to Hardy Ropes, 24 June 1836, HUBL, RFP.

⁷³ William Ropes to Hardy Ropes, 29 September/11 October 1834, 8/20 December 1834, 29 April/11 May 1835, 29 May/11 June 1835, 4 July 1838, 3 September 1841, and 2 December 1841, HUBL, RFP.

⁷⁴ Perkins 1975, 11,115, 117-121; see Perkins 1974, 48-64; Perkins 1971, 421-445; Schneider & Schwarzer 1986, 143-170. The Browns, who concentrated on Anglo-American trade, participated in almost half of the letter of credit markets. Browns and Barings together financed about half of Boston's imports.

ship *Grand Turk* from Salem to St Petersburg via Hamburg carrying tobacco and sugar valued at £11,000 he arranged a letter of credit from John & Francis Baring of London to be used by the vessel's captain, Joseph Moseley. Derby said that he had found it best to "take a credit for the whole stock".⁷⁵ The cargo was sold in Hamburg to Caspar Voght, but Moseley got a letter of credit on Barings for only £8000. Voght undertook to remit the remaining £3000 to St Petersburg by the time Moseley arrived there in ballast. However, the remittance was delayed, and Brothers Blandow, with whom Moseley dealt, commented to Derby that the captain's letter of credit had been exceeded. Nevertheless, the reputation of Barings and Voght provided reassurance and drafts on Barings from Voght were finally received to the value of altogether £10,381.⁷⁶

Stephen Girard of Philadelphia, who concentrated his exports on Hamburg, used to transfer the proceeds from his cargoes to London or send his captains to Russia with a letter of credit from, for example, Berenberg, Gossler & Co. If that did not suffice in St Petersburg, it was easy for Girard to arrange additional financing from Barings.⁷⁷ Letters of credit were not only obtained from Barings, however, and for example Captain Ruben Jones, who sailed for Thomas and Eben Hale of Newburyport, in the autumn of 1811 used drafts for St Petersburg at two months' notice on Samuel Williams to a total of £1900, being part of what was allowed by his letters of credit from Williams.⁷⁸ Isaac Hicks's captain John Morris had an open letter of credit on James Esdaile & Co. in London.⁷⁹ At least the American importers who did not export to Russia typically continued to use letters of credit. The same applied to those purchasing iron from Stockholm.⁸⁰ At the beginning of the 1820s the U.S. Minister in Stockholm, Christopher Hughes, estimated that 80 percent of the Swedish iron the Americans bought was paid for with bills of exchange.⁸¹

In the early years of the 19th century in spite of the British connections, letters of credit were often obtained from Ryberg & Co. For example, Champlins of Newport did so after a rather cautious and exploratory beginning when

⁷⁵ Derby to Moseley, 4 January, and 6 June 1794, EI, DFP, vol. 3.

⁷⁶ Moseley to Derby, 10 August 1794, Brothers Blandow to Derby, 6/17 October 1794, EI, DFP, vol. 3; Peabody 1926, 142-144; STA 1794 (1268/1467). Two years later, Derby's captain John Green took the brig *Henry* to London and from there in ballast to Brothers Blandow. Green got a letter of credit for £5500 from the London firm of Lane, Sons & Fraser to be drawn on them by the captain at the usual term of three months; Brothers Blandow to Derby, 27 June 1796, EI, DFP, vol. 4; Peabody 1912, 54.

⁷⁷ Bulkeley, Russell & Co. to Girard, 23 January 1797, and 19 May 1797; Berenberg, Gossler & Co. to Girard, 24 January 1827; APS, GP, Mf-series 2, reel 16, no. 33, 36, 198.

⁷⁸ Williams to Thomas and Eben Hale, 13 September 1811, PM, HP, vol. 4.

⁷⁹ Morris to Hicks, 28 May and 2 June 1806, NYHS, IHP (ships West Point & Robert Boston, 1805-06).

⁸⁰ For example, in the spring of 1816 Brown & Ives's ship *General Hamilton* left a cargo of rice, tobacco and cotton in Amsterdam for Crommelin & Sons, and received a letter of credit that was used to buy a cargo of 367 tons of iron from Stockholm; Hedges 1968, vol. II, 146; STA 1816 (462/853).

⁸¹ Hughes to Adams, 14 April 1823, NA M-45/5.

transacting business with Smith & Co. in St Petersburg,⁸² and so did Brown, Benson & Ives, whose cargoes for Copenhagen (rice, rum and tobacco) often did not cover the cost of a full return cargo from St Petersburg. The firm sought additional financing from Thomas Dickason in London at least from 1792 on. At the end of the decade the firm's vessels often left their cargo in Amsterdam or Rotterdam, and the captains or supercargoes of vessels sailing to St Petersburg in ballast took letters of credit for Russia on Dickason, Daniel Crommelin & Sons in Amsterdam or on Roquette, Beldamaker & Co. in Rotterdam.⁸³

Letters of credit often seemed an alternative when it was not advantageous, despite what had been planned, to carry colonial produce to St Petersburg. Benjamin Pickman's supercargo Peter Lander, Jr., was instructed in the winter of 1816 to take a cargo of sugar to St Petersburg and trade it for iron. His instructions were that if the sugar could be profitably sold south of the Baltic, Lander should do so, and take with him to St Petersburg a letter of credit from the buyer. Any possible surplus was to be transferred to Samuel Williams in London. The financing arrangements involved a precaution which was obviously exceptional in trade with St Petersburg, since Lander also carried with him "Spanish gold" to the value of more than \$10,000.⁸⁴

Although new arrangements were required each time credit was granted by means of a letter of credit, nonetheless it had the advantage of being quick and reliable, since it was usually major London companies with good reputations that granted credit for trade to St Petersburg and so the letters of credit were accepted straight away. Generally speaking, the Russian merchants themselves were cautious about letters of credit, and they preferred dealing in cash, but all the same in practice the holders of credits from the London firms often negotiated similar discounts as with cash sales. In London bills drawn under a letter of credit could be discounted as soon as the draft was formally accepted.⁸⁵

When an American merchant wanted to import goods from St Petersburg at the end of the 18th century he often opened an account in London. Orders were then made from London and the American importer also paid his bills there. According to William D. Lewis, it became more common at the beginning of the 1820s to turn to other American merchants known for their connections with Russia.⁸⁶ In either case imports were often paid for with bills of exchange,

⁸² E.g. Edward James Smith & Co. to Christopher and George Champlin, 11 July 1788, 5 September 1788, and Christopher Champlin to Benjamin Bailey, 16 March 1792, CRI 1915, 379-380, 390-391, 453-454; Christopher Champlin to Edward James Smith & Co., 19 May 1797, USR 1980, 310-311.

⁸³ Hedges 1968, vol. II, 40-41, 108-109.

⁸⁴ Benjamin Pickman et al. to Peter Lander, 2 March 1816, EI, BPP, vol.2. In the early stages of this period, specie was sometimes used to supplement letters of credit. Captain Benjamin Peirce of the schooner *Enterprise*, chartered by Champlins, took 9000 Spanish dollars for the purchase of Russian products in Copenhagen or Gothenburg when he departed for the Baltic Sea in the summer of 1785. The prospective letter of credit to be obtained against the cargo of rice and tobacco was not expected to cover the cost; Benjamin Peirce to Samuel Fowler & Son, 8 June 1785, MHS, WCRIC, vol. 1785.

⁸⁵ See Owen 1983, 13-14; Perkins 1975, 11, 26; Gregory 1975, 46, 15; Tooker 1955, 148.

⁸⁶ William D. Lewis to John D. Lewis, 20 November 1821, HSP, LNP, Letters 1810-41.

which were especially popular in Anglo-American trade and had several advantages for both the seller and purchaser. For example, Nathan Trotter & Co., who bought Russian iron, and imported a great deal from Britain but did not export there, could easily pay for their purchases with bills of exchange.⁸⁷ Bills of exchange based on sterling dominated international trade. In trade with Russia the Americans often operated on credit accounts arranged by the "American houses" in London, and as London was the centre of world trade an importer of any kind of product could manage his payments using bills drawn on his London banker.

Most bills used as a means of payment had a fixed term and had to be paid in cash at some point in the future. Practices varied and in St Petersburg for example it was usual for remittances to be made by means of bills payable at three months' notice. Foreign bills did not, however, always have a maturity date. In Cuban and especially South American trade the date was sometimes extended for several months if only because it took a lot of time to transfer the means of payment from one place to another. Nathan Bridge of Boston advised his trading partner in Cuba to operate on the basis of drafts payable only after four months, so that a draft made in Havana in April, say, fell due in Boston only in August.⁸⁸

Changes in the exchange rates between sterling and the dollar and between sterling and the rouble were of vital importance when using bills of exchange. The greatest changes in the value of the rouble occurred in 1787-88. At such a time William Cramp in St Petersburg advised his American partners to base their calculations on the assumption that the rouble would lose 25 percent of its value in relation to sterling. This situation probably arose after the market was flooded with notes worth 15 million roubles because of army purchases.⁸⁹ Samuel Williams found that the rouble's decline in 1798 presented opportunities that his fellow countrymen did not quite know how to exploit. He advised them to take advantage by drawing upon St Petersburg. According to Williams, the trading partner in St Petersburg merely had to accept these drafts and reimburse itself by drawing from Williams.⁹⁰

Since the value of the rouble was quoted at 31.5 pence by American reckoning in 1805, at only 21 pence in October 1809 and only 14 pence in September 1810, the situation naturally created several opportunities for

⁸⁷ Tooker 1955, 98-99; see McCusker & Lenard 1978, 20-21; Perkins 1975, 7-8,27; Foreman-Peck 1983, 68-69; Davison 1964, 41, 95; Smith & Cole 1969, 24-25; Gregory 1975, 26. Roseveare (1998, 264) considers a bill of exchange " ... by far the most vital yet neglected commodity in international trade history..."

⁸⁸ Bridge to Bates, December 1829, PM, JDB, vol.1; see Clark 1841,6; Perkins 1975,5; Davison 1964, 40-41. 60 days was the term most often used. It meant that the payee had to physically present a bill to its drawee before the actual maturity date could be set. When the bill of exchange was presented, the drawees had to fix the maturity date at 60 days from then.

⁸⁹ Cramp & Bulkeley to E.H. Derby, 7 January 1788, and Hill, Gazalet & Co. to E.H. Derby, 31 October 1788, EI; DFP, vol. 11; see also Anthony Thiringk to Christopher Champlin, 30 November 1787, and Thiringk to Benjamin Peirce, 21 March 1788, CRI 1915, 346-347, 360-361; Rasch 1965, 61-62.

⁹⁰ Williams to Richard Wheatland, 13 July 1798, EI, GFP, vol. 1.

speculation. According to Consul Levett Harris, the Russians had little chance to take advantage of the situation, since they had very few links with the trade centres of western Europe. This made it easy for foreign businessmen with capital and business connections "to make large fortunes" in St Petersburg.⁹¹ During the period of adjustment after 1815 the exchange rate between rouble and sterling became central in dealings involving bills of exchange. This often mattered more when arranging return cargoes than the rouble prices of Russian products.⁹²

The supercargo of Benjamin Pickman's brig *Eliza Ann*, Peter Lander, had to spend the winter of 1816-17 in St Petersburg looking after a cargo of sugar bought in Havana. There were problems in selling due to the almost total cessation of sugar dealing in St Petersburg for three months because an alteration in exchange rates was expected. It was difficult to obtain advances for sugar, as "merchants pay and receive in roubles". Finally, Lander managed to arrange 100,000 roubles in bills payable in London on Wrights & Co., but this was only about a fifth of the value of the cargo. Lander used this to buy a cargo of 27,400 poods of iron from Wright. When the exchange rate first dropped in the autumn, Lander celebrated his "profits of five percent", but as the rate increased later in the winter, the result was "a great misfortune". His consolation was that if shortages of money and the fear of an alteration in the exchange rate had not prevented him from buying Russian manufactures the result would have been even more miserable. The alterations in the exchange rates had a substantial effect on the price of sugar in roubles. In the autumn of 1816 Lander considered 45 roubles per pood for raw sugar at four months' term of payment so poor that it did not even cover the purchase price and costs, but in spite of all this he sold it in the next February at 38 roubles per pood. When the changes in the exchange rate were taken into account, the price was about the same, according to Lander's calculations.⁹³

Various precautions could be taken to avoid the risks caused by changes in the exchange rates. Like many others, Isaac Hicks of New York kept money in Amsterdam and Hamburg as well as using French and British banks. However, his resources were inconveniently tied up on the London-Paris axis with the outbreak of war between England and France. According to Captain Judah Paddock, the reason was "*that Bonaparte was so great a Rascal he might*

⁹¹ Alexander Hill Everett Diary, 1809-11, 110, MHS, ENP; Crosby 1965, 89; Anderson 1967, 76-77. The deterioration of the rouble's value at the beginning of the 19th century was perhaps most of all due to the immense quantities of assignat roubles Alexander I launched on the markets.

⁹² For example the proceeds from the sales of a consignment of indigo worth \$16,000 entrusted to Captain Charles Parsons were to be remitted to the accounts of the senders in St Petersburg if the exchange rate was more than 15 pence sterling per rouble. If the exchange rate was below 12 pence, the captain was instructed to invest the proceeds in products "as you may judge will give us the most profit" and ship them to the United States. If the value of the rouble was between 12 and 15 pence, Parsons could choose the option he preferred; Perkins & Co. and Jackson to Charles Parsons, 7 April 1815, Porter 1937, vol. I, 759-760; STA 1815 (390).

⁹³ Lander to Pickman, 8/20 July 1816, 18/30 September 1816, 24 December 1816/ 5 January 1817, and 26 February 1817, EI, BPP, vol. 2.

forbid Bankers to remit money to England".⁹⁴ Hicks was one of the merchants who had initially started exchange dealing to avoid continually paying premiums on bills of exchange. Hicks financed most of his imports from Britain and St Petersburg by exporting to Caspar Voght in Hamburg.⁹⁵

It was only gradually that bills of exchange became more extensively used in Russia. One reason was that a modern banking system did not exist in the country before the 1860s. However, the use of bills does seem to have been part of the daily routine in the payment transactions of firms involved in foreign trade. When the exchange rate increased in the autumn of 1817, according to John D. Lewis there were "more bills than could be sold" in St Petersburg, and trading on them became more of a gamble than well-considered business.⁹⁶ However, even in the 1850s in a guide for American merchants J.R. McCulloch wrote of how each trade house in St Petersburg had its own cash and how payments between merchants, and for bills of exchange, were made entirely in bank notes and thus "require[d] several hours to count a sum of £2000-3000".⁹⁷

The profits some gained from speculation on exchange rates meant losses for others. Stieglitz was said to have infuriated his trading partners in Boston by delaying his payments to London in anticipation of an alteration in rates.⁹⁸ Samuel Sanford, to take another example, announced to Samuel Williams that he was not going to remit money to Williams before he should demand it, as the exchange rate between dollar and sterling was to his disadvantage.⁹⁹ The exchange rate usually rose in St Petersburg in summer, when most English shipments were made. Similar changes occurred in Havana in the spring, when the start of American and British sugar shipping abruptly increased the prices of bills of exchange, at least at the beginning of the 1850s.¹⁰⁰ As well as seasonal changes, international crises also had an influence on exchange rates and the price of bills. For example, the events of 1837 markedly reduced American activity in St Petersburg. The U.S. Consul Abraham Gibson considered a crucial reason for this to be that the sugar importers in St Petersburg had found great difficulties in negotiating bills of exchange in the United States and London for purchases in Cuba.¹⁰¹

⁹⁴ John Gore & Co. to Judah Paddock, 10 June, 21 June, and 5 July 1803; Paddock to Hicks 13 June 1803, NYHS, IHP, (Paddock).

⁹⁵ Davison 1964, 44-45.

⁹⁶ Lewis to Samuel Endicott and John H. Andrews, 2 November 1817, EI, JHAP, vol. 1/6.

⁹⁷ McCulloch 1854, 987; see Owen 1983, 61, 65.

⁹⁸ William D. Lewis to John D. Lewis, 5 April 1821, and 21 April 1821, HSP, LNP, Letters 1810-41.

⁹⁹ Sanford to Williams, 19 October 1825, HUBL, Samuel Sanford, Letterbook.

¹⁰⁰ John D. Lewis to William Lewis, 9 July 1826, and 4 August 1828, HSP, LNP, Letters 1810-41; Thomas Pritchard to Henry Johnston, 12 March 1852, PM, Pritchards Letterbook. Apart from the balance of payments, the reputation of the drawer and drawee on the credit market and the relationship between supply and demand also had an influence on the price of bills of exchange.

¹⁰¹ Gibson to John Forsyth, 10 July 1837, NA M-81/3.

It was characteristic of financing operations in Cuba that a patchwork of complementary methods and means of payment was in use. The correspondence between Horace and Henry Gray of Boston and their accounts from the 1820s and 1830s give a picture of how different financing options and exchange rate considerations were taken into account, particularly in Havana. The captains and supercargoes had to make the ultimate decisions. There were often several options: e.g. doubloons taken there in the vessels, open credit in Havana, letters of credit arranged in Boston, or series of sterling bills on London. Horace Gray, for example, instructed his captain, Elliott Woodberry, in 1823 to draw upon Joshua Bates in London for £2000 and upon himself for any amount not exceeding \$30,000. However, if the exchange rate on London were no more than 13 percent higher than that upon Boston, Woodberry should draw upon Gray for the total value of the sugar consignment. Woodberry sometimes also carried "unlimited letters of credit" from Gray, and he bought several shiploads of sugar in Havana and Matanzas by that means.¹⁰²

The Greys financed a part of their sugar purchases by selling Russian manufactures in New Orleans and Savannah as well as Cuba. In the autumn of 1821 Horace Gray ordered Thomas Hewes of New Orleans to pay for his Russian sheeting in good bills sent to Boston or to Joshua Bates in London. Hewes was allowed to choose his method of payment, but he should bear in mind that the bills on London were "worth ten percent more" than bills on Boston.¹⁰³ In a similar situation William Rufus Gray advised Hewes to pay "in undoubted bills or Spanish milled dollars". Gray's general principle was that not more than \$30,000 of his funds (including the value of the vessel) should be involved in any individual venture in the sugar triangle. If more funds were needed to set up the business, Gray considered it better to let his vessel sail with freight alone.¹⁰⁴

At the beginning of the 19th century Spanish silver dollars were still universally acceptable in America, the West Indies and Europe. The Spanish milled dollar weighed more than the American silver dollar by two percent, but they circulated at par.¹⁰⁵ Spanish money apparently did not reach the Baltic in abundance, although in some cases it was used, for instance, as payment for the Sound dues.¹⁰⁶ By contrast, according to William D. Lewis it was usual for "Spanish gold" to be taken to Havana for a cargo of sugar worth \$50,000.¹⁰⁷ In 1827 part of Horace Gray's share in the sugar carried by two ships, the *James Maury* and the *Magnolia*, was financed by selling doubloons and piasters to the

¹⁰² HUBL, HGP, vols. 4, 10, 16, 17; e.g. Horace Gray to Woodberry, 12 December 1822, 28 September 1825, and 29 January 1829.

¹⁰³ Gray to Hewes, 7 December 1821, BUHL, HGB, vol.17.

¹⁰⁴ Gray to Hewes, 28 August 1819, and 5 September 1819, William Gray to Henry Gray, 11 October 1819, EI, William Rufus Gray, Letterbook.

¹⁰⁵ See Smith-Cole 1969, 5; Nettels 1962 237; Perkins 1975, 5; Green 1991, 246.

¹⁰⁶ E.g. Peter Lander to Benjamin Pickman, 8/20 July 1816, EI, BPP, vol. 2.

¹⁰⁷ William D.Lewis to John D.Lewis, 8 April 1821, HSP, LNP, Letters 1810-1841.

total value of almost \$110,000. This covered something more than a third of the cargoes of the vessels in question on their voyage to St Petersburg.¹⁰⁸

The right moment to buy and use specie was always a topical question for shippers interested in Cuba. When William D. Lewis arranged shipments to St Petersburg for his brother in the spring of 1821, he considered that it was not worth making remittances to the United States when the exchange rate for sterling was five percent above par. Lewis sold his bill when the exchange rate was ten percent above the par and bought doubloons in New York at \$15.65. He got \$17 a piece for the doubloons carried to Havana. Lewis reckoned to have made a profit of eight percent thereby, or in his own words, "funds are placed in Havana [with] an advantage [of] 18 percent". He further calculated that the exchange rates during the spring in question meant that sugar "could not bring losses in St Petersburg", since the sales price in roubles could drop by as much as 30-40 percent without causing losses to an American operating on his own capital. The only risk was that several other merchants had also realized the benefits of speculation on exchange rates and this "made everybody want to ship". According to Lewis, only if Havana totally ran out of sugar would the damagingly excessive exportation to Russia be stopped.¹⁰⁹

7.5 Profits or losses?

It has been mentioned in several contexts that the way trading houses and merchants kept their foreign trade accounts in the beginning of the 19th century leaves little scope for detailed analysis of its profitability. Peabody, Riggs & Co. of Baltimore, who transacted business with William Ropes, announced in 1830 that it had made 14.5 percent "profit" by trading products sent from St Petersburg. Muriel Emma Hidy, who delved into the firm's comprehensive accounting records, considers this to have been a somewhat arbitrary calculation.¹¹⁰ The same can be said about the hemp Derby imported from St Petersburg and sold in Philadelphia, which was entered in the accounts as having brought a profit of 10 percent, without further elucidation.¹¹¹ Nor did

¹⁰⁸ Gray to Woodberry, 1 January 1827, and Gray to John Eldridge, 12 March 1827, HUBL, HGP, vol.17. In 1831 Henry Gray sent 650 doubloons by the bark *Shylock*, which were bought by Thomson, Bonar & Co. in order to purchase one third of the vessel's cargo of sugar. Gray reserved 350 doubloons for himself for the same purpose. The value of a doubloon was quoted at \$15.75 at that time; HUBL, HGP, vol. 4., Journal 1829-1836, f.96.

¹⁰⁹ William D. Lewis to John D. Lewis, 1 March, 25 May, and 30 May 1821, HSP, LNP, Letters 1810-1841; William D. Lewis to Samuel Williams, 30 May 1821, and 6 June 1821, HSP, JDLP, Letterbook 1821. On the use of specie in Cuban sugar purchases, e.g. Francis A. Gray and Samuel C. Gray to Samuel A. Fabens, 15 April 1845, EI, FP, Letterbook. Browns' banking house resorted to transatlantic specie shipments only when exchange rates were extremely high. The break-even point was calculated by Browns at a sterling premium of 4.5 percent; Perkins 1975, 270, note 40.

¹¹⁰ Hidy 1978, 65-66; cf. Ville 1987; Bruchey 1958, 282-278.

¹¹¹ McKey 1961, 235.

John D. Bates record his results in any more informative way. When a consignment of 200 bales of cotton was sent from Charleston for sale by Stieglitz, Bates recorded the result on the venture as “net 10 ¼ percent”. Freight costs and other expenses were set down in great detail, but the price of the cotton, on which the whole calculation of profit was based, was left out.¹¹² It cannot be deduced from his other accounts either. Similarly, the journals and ledgers of the Boston merchants Henry and Horace Gray, about ten of which are extant from the early 19th century, are often wonderfully detailed in their record of the business and the economic circumstances of the firm as a whole, but they do not reveal the profitability of any single operation in Russia.¹¹³

The accounts of several merchants gives the impression that the journals have been kept more as aides memoire than to provide a complete record of the actual transactions. Double-entry accounts record profits and losses with respect to different vessels, types of merchandise or traders, but they were used to show the contemporary situation of the firm with respect to the cases in question, not to reveal past successes or failures. Moreover, trade with Russia was almost always connected with other, often very complicated business dealings, and so the profits and losses of trade with St Petersburg are hard to discern in the tangled skein of accounting for the totality of operations, which is often very extensive indeed. In estimating profitability one usually has to resort to the merchants’ own calculations, which have often been carried out rather idiosyncratically. What emerges is that although the letters John D. Lewis sent to his trading partners in America paint quite a different picture, it is probably reasonable to assume that in the long term the trade did not produce only losses.¹¹⁴

Insurance premiums increased the costs of trade. They contributed a great deal to the U.S. foreign balance. Around 1790 payments to foreign insurance brokers were around one million dollars, but by 1807 the figure was already \$2.9 million. Between 1792 and 1798, insurance premiums from, for example, Philadelphia to the European continent were 2-4 percent, but in 1798 they increased to 5-17.5 percent due to the French threat. After that they went down again and in 1805 for example, they were only between three and six percent.¹¹⁵

Imports from Russia, as from elsewhere, were sold at varying percentages of “advance” over the invoice cost. This was often 75-80 percent, but could be even higher. It was not “profit” as such, since it might or might not include different sorts of intermediary costs. The invoice price was usually the same as the product’s f.o.b. -price in St Petersburg. However, the invoice for goods

¹¹² PM, JDP, vol. 2.

¹¹³ HUBL, HGP, vols. 2-7, 9-13.

¹¹⁴ See Chandler 1978, 83; Sager & Panting 1990, 128-129. The profit from a business depends on so many factors that estimates can sometimes vary widely. For example, in the trial relating to the charter agreement for the Swedish bark *Lydia*, which R.C. Hooper of Boston had chartered for shipments to St Petersburg in 1837, the experts’ calculations of the profits of the sales of 1400 boxes of sugar varied from \$9000 to \$18,000; HMM 1839, vol.1, 63-66.

¹¹⁵ Adams 1980, 728-729.

consigned to the captain could be made out to almost any amount, provided that customs duties did not depend on it. Data about purchase and sales prices is abundant, but this does not settle the question of profitability by itself. Even just the payment transactions handled in London and fluctuating exchange rates sometimes had a crucial influence on profitability.¹¹⁶

It has already been stated that at least at first American trade with Russia did not seem very profitable. Although the value of the cargo of Elias Hasket Derby's ship, *Grand Turk*, was estimated at £9000, i.e. \$43,000, when she sailed in the summer of 1794, Captain Joseph Moseley sold it for only \$31,000, and when the return cargo cost \$43,000, Moseley had to use \$12,000 in drafts on Lane in London to complete his purchase of iron and hemp. The value of the return cargo was put at \$59,225 in New York, and Derby calculated his "gross profit" at about \$16,000. When wages (\$6000), insurance (\$4000) and sundries (\$3000) are deducted, the actual net profit goes down to \$3000. As the whole business took a year and a half, the profit was, as Derby says, "not so very great considering the time and risk involved".¹¹⁷ If the profits were generally on that scale it is no wonder that in those years merchants in Salem and Boston directed their attention elsewhere. For example, in 1792 William Gray of Salem expected that his "Russia duck" at the Cape of Good Hope and his exports to Calcutta and Canton would make a profit of 20 percent and the imports brought back from there a profit of 50 percent.¹¹⁸ The net profits of Stephen Girard's ventures to China and India could rise to as much as 300 percent a few years later.¹¹⁹

The Revolutionary Wars increased the risks, but also the profits. If the American mercantile marine earned fifty dollars per ton by an estimate of 1801 it meant that ship-building costs were recovered in a year.¹²⁰ In the years of the Continental System, profits were sometimes many times the capital invested in the vessel and the cargo. However, one must also bear in mind that the insurance premiums at such times for voyages to St Petersburg were 25-30 percent.¹²¹ The vessels often sailed short-loaded because of the danger of privateers. Brown & Ives's brig *Hector* arrived at Kronstadt in 1811 with 870

¹¹⁶ See Bruchey 1956, 49; Porter 1937, vol. I, 50.

¹¹⁷ Derby to Moseley, 8 June 1794, Moseley to Derby, 10 August 1794, 28 September and 16 October 1794, and Brothers Blandow to Derby, 6/17 October 1794, EI, DFP, vol. 3, 14; McKey 1961, 381-382; Peabody 1926, 148-149. In 1785, Derby instructed his buyers not to pay more than half of the sales price in Salem for Russian goods shipped from Gothenburg; Derby to Henry Elkins, 6 December 1785, EI, DFP, vol. 22.

¹¹⁸ Gray 1914, 14-15; Porter (1937, vol. I, 50) estimated that even in normal times trade with the East yielded 20 percent on the capital invested for Boston trading houses.

¹¹⁹ Douglass 1971, 37-38.

¹²⁰ See Morison 1921, 189. According to Morison (p. 194), the value of the Boston ship *Catherine* (281 tons) was around \$7000, but she cleared \$115,000 net in one voyage in 1809. However, according to John D. Lewis, the vessel did not visit St Peterburg in the year in question. The Minister to Copenhagen, George W. Erving, was able to account for the vessel, for he recorded her fate as "detained and condemned"; Erving to the Secretary of State, 23 December, 1811, NA M-41/2/12.

¹²¹ Thomas Lee, Jr. to Joseph Lee, Jr. and William Oliver, 26 February 1812, Porter 1937, vol. I, 727. Vessels were not usually insured for their full value. Elias Hasket Derby insured a cargo valued at over \$40,000 for \$20,000 and the premium on it was \$1300; Ludlow & Gould to Derby, 1 June 1793, EI, DFP, vol. 14.

bags coffee that sold at a net advance of 127 percent over the invoice from Providence.¹²²

An analysis of prices in the case of the brig *Jeremiah*, belonging to Sam Endicott of Salem, on its voyage in 1823, shows that the margin for an importer of Russian products was not really that large. The cargo's f.o.b.-value was calculated at \$25,200 in St Petersburg, and its sale in Baltimore by George Williams yielded \$32,200. Endicott still had to pay the wages and the ship's running costs out of that sum.¹²³ When William D. Lewis assessed what should be sent to St Petersburg, he expected his ventures to bring a return of nine percent on the capital, and his brother was also clearly satisfied with operating on that basis.¹²⁴ It can be assumed that for sugar-carrying, which was central to American trade, an expectation of 12-14 percent, which could be achieved in practice by John D. Bates's operations, might be more or less the rule.¹²⁵

William Ropes was satisfied that the "profit" on the goods he sent to the United States in 1833 amounted to \$10,000 and he ended up with the same result in the following year. In the summer of 1835 he estimated that the year in question could produce him a "clear" \$20,000. Three years later he considered it a good, though not astonishing, result that the goods sent to North America produced a "net 25 cent per Rouble".¹²⁶ Sometimes Russian products brought in quite good returns. In the winter of 1835 Ropes calculated that diaper sent on the bark *Drymo* yielded \$1000 profit. According to STA, the consignment was of no more than 9406 pieces, but probably the bark *Drymo* was the last vessel to depart from St Petersburg for Boston in the autumn of 1834, and Ropes had managed to purchase manufactures very cheaply at the end of the navigation season.¹²⁷ Ropes repeated his operation the following year with hemp and iron and reckoned to have made \$30 per ton clear profit, "very handsome indeed".¹²⁸

¹²² Hedges 1968, vol. II, 128.

¹²³ PM, EP, vol.1 (Brig Jeremiah). The vessel carried 60 tons of hemp, 25 tons of iron, 300 pieces diaper, 950 pieces sailcloth and 1200 pieces ravenduck. In this case, hemp was the most profitable item. John D. Lewis purchased it for \$105 per ton and it sold in Baltimore for \$140 per ton. The difference between the buying and selling prices of the other goods was about 20 percent. Top quality sailcloth and the worst quality of ravenduck were most profitable.

¹²⁴ William D.Lewis to John D.Lewis, 5 March 1821, HSP, LNP, Letters 1810-41.

¹²⁵ P. J. C(ramer) to Charles Drake, 15 June 1827, PM, JDB, vol. 1.; However, Bates calculated in 1846 that buying 250 sugar boxes in Havana and selling them in St Petersburg only yielded 72 roubles; PM, JDB, vol. 12.

¹²⁶ William Ropes to Hardy Ropes, 23 October/4 November 1833, 20 May/1 June 1835, and 6 November 1838, HUBL, RFP. Ropes's calculations do not include either the cost of interest or income from freight of vessels in his possession.

¹²⁷ William Ropes to Hardy Ropes, 23 February/ 7 March 1835; HUBL, RFP; STA 1834 (2715).

¹²⁸ William Ropes to Hardy Ropes, 27 February 1836, HUBL, RFP.

8 EXPORTS

8.1 Raw sugar from Havana and Matanzas

8.1.1 Cuba and Russia: a major producer and an unreliable purchaser

Cuban raw sugar and the sugar triangle traffic between New England, Havana and St Petersburg became the dominant phenomenon in trade relations between America and Russia from the 1820s on. Almost all commercial transactions in one way or another were linked with raw sugar, although the product itself played only a minor role in direct trade between the two countries. However, its indirect effect was considerable, since most of the Cuban sugar freighters carried a return cargo from St Petersburg to the United States. This had a crucial affect on the level of imports from Russia into the United States. The fact that most vessels sailing to St Petersburg in ballast had previously carried sugar, leaving their cargo west of the Sound in for example Hamburg, Amsterdam or Antwerp, shows how much depended on the central role of raw sugar. In other words, the demand for sugar in western Europe had a clear connection with U.S. imports from Russia, that is, the export of Russian products across the Atlantic.

West Indian sugar and molasses already played a central role in the maritime economy of the North American British colonies in the 18th century. As the British sugar islands were closed to the United States after 1783, the Americans began to do more business with Santo Domingo, which was under French rule and, for a short time, the world's major producer of sugar and coffee. France maintained a strong position in western European and Baltic markets with the help of sugar from the island. 72 percent of the sugar carried to the Baltic in 1790 came from France.¹ The situation changed entirely in the

¹ Hamburg's share was 12 percent and Britain's seven percent. Bordeaux was by far the most significant single port of loading (61 percent), but the French share plummeted to almost zero in the late 1790s. The British and the French tried to meet the demand, which was clearly greater than the supply. London with 32 percent of

1790s when uprisings and their suppression destroyed the colony's plantation economy.²

Early in the 19th century the old Spanish colony of Cuba rose to become the most important producer of raw sugar in the Caribbean, and later in the world. Combined with the Haitian debacle, the fact that the island had already in the 1780s started to replace the British sugar islands as a source for the North Americans had an influence on this development. The outbreak of the war between Spain and Britain in 1796 weakened Cuba's connections with the mother country and tightened its links with North America. U.S. ship-owners and merchants started to invest in sugar mills at the same time as carrying slaves and American goods to Cuba, extending generous credit and accepting sugar and molasses in payment. The efficient utilization of slave labour together with the fact that the land and the fuel needed for the plantations and mills existed on the island played their part in Cuba's rise. Sugar made Cuba "the richest colony in the world".³ Around 1830 the island's sugar production totalled about 220 million lbs (98,200 tons), and in 1860 it reached 1150 million lbs (513,400 tons). Including beet sugar, this represented about a quarter of world production.⁴

Data about Cuban sugar exports are mostly based on estimates. Ronald Ely calculated that exports increased six-fold from the end of the 1780s to the end of the 1820s.⁵ If the years 1815 and 1859-60 are compared by combining the figures of Eric Williams and Hugh Thomas, the increase in exports is nearly nine-fold – from around 90 million lbs (40,000 tons) to 780 million lbs (348,000 tons). Cuba's rise is vividly shown when it is compared with the British West Indies: its exports in the corresponding years were about 380 million lbs (169,000 tons) and 440 million lbs (196,000 tons).⁶ Opening Cuba to international shipping made the rise possible. Controls on trade had been removed and re-

the total took over as the principal loading port after sugar exports plummeted; Johansen 1983b, 178-179; Johansen 1986, 131-132.

² Galloway 1989, 84-86, 110-111, 163-264; Friginals 1976, 15-17, 20-22. At the end of the 1780s, the French American colonies produced 95,000 tons of sugar, the British sugar islands c. 80,000 tons, Brazil c. 30,000 tons and Cuba less than 15,000 tons; Ely 1964, 457, note 5.

³ Thomas 1985, 281, 283-290; see Goebel 1938, 291-320; Galloway 1989, 88, 162-163; Friginals 1976, 16, 25-27, 72; Ely 1964, 270-274; Knight 1977, 231ff.

⁴ Friginals 1976, 25, 28, 84; Williams 1970, 378-380; see Stein 1980, 8. Thomas (1985, 291) also estimated Cuba's share to be about a quarter of world production in 1860, and according to him the production of the island's 1400 sugar mills was 1008 million lbs (450,000 tons). After producing refined white sugar, Cuba changed to semi-finished products, that is, cheap muscovado in the 19th century. It brought a better return on the capital invested. Moreover, the island's former major product, white sugar, started to encounter difficulties with the customs regulations of European countries that sought to protect their own production. Around 1860 white raw sugar constituted only about 15 percent of Cuba's total production; Friginals 1976, 84-85, 127.

⁵ Ely 1964, 456-457, note 4. According to Friginals (1976, 66-68), the export in 1786-1790 stood at 1.1 million arrobas on average and 6.5 million arrobas in 1826-30.

⁶ Williams 1970, 289, 362, 366, 377-378; Thomas 1971, 121-123; see Green 1991, 37-38, 246. McCulloch (1854, 1243) estimates that around 1850 sugar exports from the British colonies amounted to 270,000 tons, from the Spanish colonies 280,000 tons, from the Dutch colonies 103,000 tons and from Brazil 100,000 tons.

imposed during the European wars, but from 1818 on the major ports of the island were effectively open to vessels from all countries.⁷

The United States, also itself a significant producer of sugar for its domestic market, was the major purchaser of Cuban sugar. In the latter half of the 1840s Louisiana produced almost half of the country's domestic consumption. Nonetheless, Cuban sugar and coffee were so much in demand that the island became the third- or fourth-most important trading partner of the United States in the antebellum period. Two-thirds of the raw sugar the United States purchased around 1850 was from Cuba. Cuba's trade with the United States, for its part, was greater than with any other country.⁸ Usually imports to the United States vastly exceeded the country's demand, and a major part of the product was re-exported. At the peak of this trade a third of the re-exports were directed to Russia.⁹

Despite the sudden but short-term fluctuations, the prices of sugar in the world markets had begun a downward trend already by the end of the 18th century, and this continued after 1815. Between 1840 and 1860 the decline was almost 50 percent. At the same time, consumption in the United States increased almost threefold, in the middle of the 1850s reaching about 34 lbs per capita. Consumption in Russia was about 1.5 lbs.¹⁰

St Petersburg became an important purchaser of Cuban raw sugar immediately after the customs policy adopted by Russia in 1820-21 made this possible. Cuban data on exports carried to Russia vary, but they probably record only a third or a quarter of real exports, if only because part of the sugar that ended up in St Petersburg was entered as sailing "for Cowes and market".¹¹

⁷ See e.g. Friginals 1976, 42; Nettels 1962, 57, 226; Bruchey 1956, 60.

⁸ Nettels 1962, 195-197; Whitten 1970, 227; see Clark 1929, 305; De Bow 1853, vol. III, 281, 312. Cuba's exports "to the ports of Baltic" in 1826-42 averaged \$867,000, or about 5 percent of total exports. The corresponding figure for imports was \$81,000 (0.4 percent); HMM 1843, vol. 9, 348-349. In 1850 U.S. sugar production was 247,718 hhds; De Bow 1852, vol. I, 80.

⁹ Commerce and Navigation, 1821-60; see Thomas 1985, 290; Ely 1964, 458-460; Homans 1858, 1711-1772; De Bow 1853, vol. III, 289, 312-313. An average of 15,800 tons of sugar per year was imported into the United States in the 1790s, and in the 1840s 160 million lbs (71,400 tons) per year. Of the latter figure 107 million lbs (47,800 tons) was from Cuba, and c. 6 million lbs (2700 tons) from Brazil. In the early years of the period, some of the sugar re-exported from America originated in Bengal or in Batavia; Galloway 1989, 199-201. Smallish amounts of this were also carried to Russia; e.g. STA 1836 (653, 2294); CR 1836, NA M-81/3, and T-201/1 (brigs *Autumn* of Plymouth and *Neptune* of Boston); McKay 1961, 375.

¹⁰ See Tooke & Newmarch 1859, vol. I, 868-869; Deer 1949, vol. II, 530-531; Surface 1910, 143; Thomas 1971, 126; Davis 1979, 44 and note 18. Russian sugar consumption was only a pound a year in the 1840s according to import figures, but this low figure was considered to be due to massive amounts of smuggling.

¹¹ According to the calculation of Mariatequi, Knight & Co., one of the major Cuban trade houses, an average of 43,239 boxes of sugar was sent to the Baltic Sea in 1830-31, about 15 percent of total exports; Edward C. Bates to John D. Bates, 12 January 1832 (enclosure), PM, JDB, vol. 16. Hunt's Merchants' Magazine, which closely followed the Cuban economy on the basis of reports from the consuls and trading houses, calculated in 1842 the value of exports to Russia as \$710,400, 2.6 percent of the island's total exports of \$26.7 million; HMM 1843, vol. 9, 341. In 1848, 150,100 boxes out of a total of 635,400 boxes were entered as being carried from Havana to Cowes.

There are two reasons for this practice: firstly, Cowes was reported as the port of destination because the latest market news from the continent was received there, and secondly there was a desire to keep the real destination a secret in Havana.¹² It can be concluded from STA, consular reports and other data that, for example, in the years 1820-25 eight percent of Havana's sugar exports went to St Petersburg in American vessels. The figure rose to 20 percent in the peak years of the sugar boom at the end of the 1830s and beginning of the 1840s.¹³

The French and the Dutch dominated the sugar market in St Petersburg at the end of the 18th century. Mostly refined sugar was imported, although it was claimed that in 1794 eight sugar refining establishments were in operation in the city. In 1804 an average of 455,700 poods (7200 tons) of sugar was imported, only a tenth of which was raw sugar.¹⁴ During the Napoleonic Wars, some domestic sugar beet production and refining began in Russia. In 1812 there were four beet sugar factories in the country, but 46 cane sugar refineries. The high tariff imposed in 1822 made the import of refined sugar unprofitable, since import tariffs were as high as the import values of the cane sugar itself. Cane sugar constituted about 20 percent of Russia's total imports, dropping to 13 percent at the beginning of the next decade. Minister of Finance Jegor F. Kankrin was not at all convinced of the profitability of sugar beet production, but production behind the tariff barrier rose to such a degree that it started to cut into custom revenue. Sugar duties raised 8 million roubles in 1844, but only 5.5 million roubles in 1847. However, even the latter figure was still a quarter of the country's customs receipts.¹⁵ There were already more than two hundred sugar beet factories in 1840, and about 350 at the end of the century. It seems

The corresponding figures for Matanzas were 94,500 and 297,100 boxes. In 1849 the amount exported from Havana to Russia was only a quarter of what was carried there on American vessels sailing through the Sound alone. In 1851-55 export from Havana and Matanzas was 758,000 boxes (about 320 million lbs) on average, and "Cowes and market" received almost one-third of it, the United States one-quarter and "Baltic" an average of 18.6 million lbs. According to consular reports and HMM, c. 25 million lbs departed from Cuba for the Baltic in 1851-53, but in the same years an average of c. 29 million lbs of Cuban sugar arrived in St Petersburg on American vessels; CR 1848-54, NA T-120/ 22-27, (Consular returns and The Mercantile Weekly Report); HMM 1847, vol.16, 52; HMM 1850, vol. 22, 536; HMM 1844, vol. 33, 366.

¹² E.g. William D. Lewis to John D. Lewis, 22 June 1821, HSP, LNP, Letters 1810-41; HMM 1847, vol.16, 529.

¹³ See Appendix, table 32; McCulloch 1854, 667. This calculation presupposes that all the sugar Americans carried to St Petersburg from Cuba was loaded on in Havana; however, its share of total Cuban exports was only about half at the beginning of the 1840s. Although in Elsinore Havana was the most often reported port of departure, the cargoes of several American vessels were partially taken on at other Cuban ports: Matanzas, St Jago and Trinidad. According to Kirchner (1975, 158, note 43), in 1841-42 over a tenth, 87,000 boxes, of Cuban sugar was taken to Russia. If the weight of a box is calculated at 420 lbs, the amount is very close to the amount STA reports being carried on American vessels to Russia. On the basis of figures reported by Homans (1858, 491-494), Williams (1970, 361) and Thomas (1971, 126), at the beginning of the 1830s exports from Cuba to the Baltic constituted only eight percent of the total exports of the island. In 1848-53 export to Russia was two percent of total exports (six percent in the peak year 1851).

¹⁴ PM, BSP, vol. 3; Bater 1976, 47.

¹⁵ Muntig 1994, 113-114.

that the high tariff wall was by chance responsible for bringing about strong domestic production in the Ukraine. In the 1830s the sugar beet industry was the only mechanized “modern industry” in Russia apart from cotton spinning. The government was hard put to devise a sugar policy that would keep the country’s revenues as high as possible and create a balance between the refineries in St Petersburg that used imported raw sugar and the Ukrainian growers. Moreover, the tariff level should not encourage large-scale smuggling of sugar. According to Walter Pintner, the sugar tariffs served the country’s fiscal objectives after the death of Alexander I until 1848. At any rate, raw sugar, along with cotton and cotton yarn, was one of the most important imports into Russia and St Petersburg in the first half of the 19th century.¹⁶

The real customers of the American sugar exporters were the factories that refined foreign raw sugar, of which there were about thirty in St Petersburg in the middle of the 1840s, seven in Riga and two in Archangel.¹⁷ In spite of Russia’s continuously increasing domestic production, it still imported two-thirds of what it consumed, which was calculated at a little over 100 million lbs at the end of the 1840s. Imports amounted to 45 million lbs on average in 1826-30, and 72 million lbs twenty years later.¹⁸ A major part of this was West Indian cane sugar. Then in the 1850s the situation started to change. Already in 1851 William Ropes, who was serving as the U.S. consul to St Petersburg, claimed that the American sugar importers had suffered losses owing to the increased supply of Russia beet sugar.¹⁹ Around the same time the consul to Riga, Alexander Schwartz, also stated that it was precisely the increase in sugar beet production that was responsible for difficulties in importing cane sugar.²⁰ By

¹⁶ Pintner 1967, 222-225; see Kirchner 1975, 156; Crisp 1978, 308. A common, although erroneous, conception among those involved in the raw sugar business was that the high tariff level served to protect beet sugar. It had some influence on the fact that about a tenth of the total imports were smuggled into the country; see McCulloch 1854, 985; Homans 1858, 951. Raw sugar imports to Russia in 1826-30 were worth 31.1 million roubles, or 19 percent of total imports; PRO, FO 65/236. For example, in 1827 raw sugar came second after cotton twist (19.3 million roubles – 15 percent) in imports to St Petersburg, and again in 1830 (26.1 million roubles, about 25 percent); Bayley’s reports 6/18 December 1828, and 22 April 1831, PRO, FO 65/174,194; see Appendix, table 31.

¹⁷ British Minister Buchanan’s report, 28 June 1845 (no.99), PRO, FO 181. According to Buchanan, there were about 250 “sugar factories” in Russia, and their total production was 86 million lbs. Information about the number of refineries and levels of production varies significantly; see Kirchner 1975, 155-156; Consul John Whitehead (Archangel) to Palmerston, 30 December 1840, PRO, FO, 65/263.

¹⁸ See Appendix, table 31. Kirchner 1975, 157-158. According to Friginals (1976, 71), an average mill in Cuba with 100 slaves produced 10,000 arrobas (250,000 lb) sugar per year. By this yardstick the sugar exported to Russia employed at most 200 mills and 20,000 slaves; cf. Ely 1964, 474.

¹⁹ Ropes to Webster, 31 December 1851, and 29 April 1852, NA M-81/5. According to William Blackwell (1970, 55), not only the expansion of domestic production, but also the continuing high sugar prices with the consequence that consumption was mainly limited to the wealthy upper class can clearly be attributed to Russian customs policy. In Walter Pintner’s (1967, 222-225) view, the high sugar tariffs encouraged domestic production and thus brought down raw sugar imports and customs revenues.

²⁰ Schwartz to the Secretary of State, 18/30 March 1853, NA M- 485/1. The British consul to Riga claimed already in 1849 that sugar beet production in southern Russia had

the end of the 1850s only a third of the sugar consumed was imported. The heyday of Cuban raw sugar and the American merchants who shipped it was about to end in Russia.²¹

Some raw sugar imports to St Petersburg came directly from the United States. To all appearances, the figures for sugar in the American export statistics are too low as, for example, in the 1840s the amounts recorded in STA were three times as high.²² According to STA the amounts shipped from the United States to the Russian Baltic on American vessels were an average of 466,000 lbs greater in the years 1821-50 than "official" U.S. exports to the whole of Russia. The Russian foreign trade statistics are very imprecise as far as country of origin and type of sugar are concerned. In some years, "America" only refers to the United States, in others to North and South America together with the West Indies.²³ However, most of the sugar imported into Russia was transported through the Sound and when the figures in ST II and the Russian import statistics are compared, it seems that at the beginning of the 1830s, for example, more than 90 percent of the raw sugar Russia purchased was carried through the Sound.²⁴

greatly reduced imports of "Indian sugar"; Hay to Palmerston, 15 February 1840, PRO, FO 65/263. In 1849 also Consul Clinton Wynyard reported that the increased imports to Riga (6.4 million lbs) in the previous year had been caused by production difficulties with beet sugar; Wynyard's report, 1 March 1849, PRO FO 65/373.

²¹ See Blackwell 1970, 54, 69-71; Pintner 1967, 108-109; Kirchner 1975, 156-158. According to Olga Crisp (1978, 308), beet sugar already accounted for 85 percent of sugar consumption in 1860.

²² On the other hand, also the export figures in ST II are too low at least in the 1830s, as STA recorded higher amounts carried on American vessels from the United States. Perhaps owing to the disturbances caused by the Crimean War, U.S export statistics show significantly higher export amounts going into St Petersburg than the consuls' reports; the difference is an average of 2.3 million lbs per year.

²³ Kirchner 1975, 59, cf. 158. In 1835-39, the average value of sugar imported to Russia was recorded as 28.5 million roubles, with America contributing 21.5 million roubles' worth or about 75 percent; see Appendix, table 31.

²⁴ In 1832-36, Russia imported on average 52.1 million lbs, and the amount carried to Russia through the Sound was 49.3 million lbs. The corresponding figures for 1837-41 were 61.4 and 58.3 million lbs, and for 1842-46 66.6 and 59.0 million lbs; Kirchner 1974, 158; Appendix, table 30. According to statistics compiled by the British Minister, Buchanan, an average of 61.7 million lbs of raw sugar was imported into Russia in 1835-44 and 58.1 million lbs was recorded as being taken to Russia in those years. The raw sugar imported in 1830 was distributed between ports in Russia as follows: St Petersburg 38.0 million lbs, Riga 8.0 million lbs, Archangel 2.3 million lbs and Odessa 0.3 million lbs; Buchanan's report, 28 June 1845, PRO, FO, 65/1818.

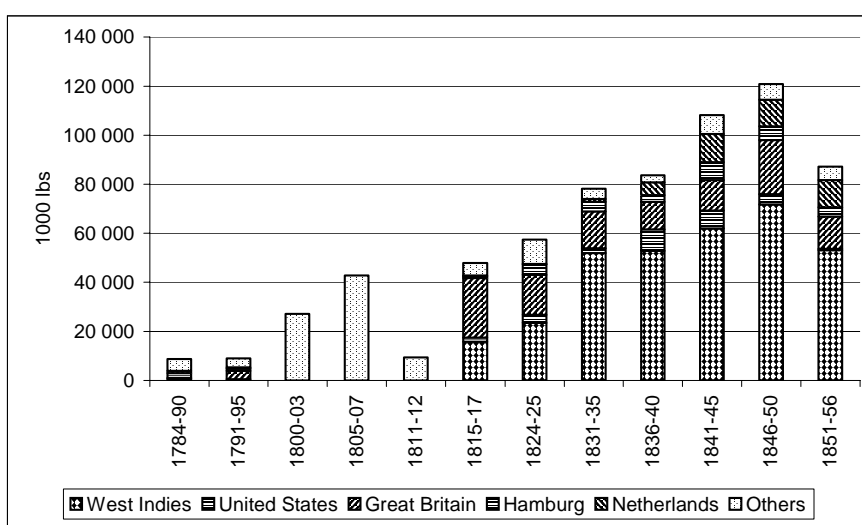
TABLE 18 Export / import of raw sugar (1000 lbs) to Russia according to different sources, 1831-60.

Years	On American vessels					
	From Cuba to St Petersburg		From the U.S. to St Petersburg		From the U.S. to Russia	
	STA	CR	STA	CR	ST II	C & N
1831-35	32 145	..	1 036	..	893	1 577
1836-40	30 317	30 293	6 966	7 695	7 474	7 689
1841-45	34 093	33 531	5 571	5 805	6 974	3 372
1846-50	27 241	27 307	1 034	1 039	3 843	1 081
1851-55	..	17 900	..	436	380	655
1856-60	..	4 303	..	31	..	..

Notes: STA = Sound Toll Accounts; CR = Consular Returns from St Petersburg; ST II = Sound Tables; C & N = Commerce and Navigation.

Sources: Appendix, tables 30, 32 and 43; CR 1836-60, NA M-81/3-6.

The amounts of sugar exported to the Baltic increased about six-fold between the end of the 1780s and the end of the 1840s, from barely 20 million lbs to over 120 million lbs. The growth was not steady, since particularly in the early stages variations between years were rather great.²⁵



Notes: 1) The columns for 1800-1812 show unspecified total exports to the Baltic, 2) Exports from Bremen are included in the figures for Hamburg, and the figures for South America in the exports from the West Indies.

Source: Appendix, table 30.

FIGURE 20 Areas of departure of raw sugar passing through the Sound, 1784-1856.

The Revolutionary Wars completely changed the structure of the sugar trade. In the years 1784-90 70 percent of the sugar that entered the Baltic came from

²⁵ In 1776-80 an average of c. 35 million lbs sugar was carried eastward through the Sound, but in 1793, for example, not even three million lbs. In 1800-02 the average was only 14 million lbs, but already in 1803 the figure was 68 million lbs; ST I, 1776-1803. The European Wars came an increase in re-exports. In 1792-93, only 2.9 million lbs was exported, but in 1796-1800 already 52.0 million lbs and in the years preceding Embargo (1806-07), as much as 144.5 million lbs; Pitkin 1815, 68-70.

France, and half of the amount imported by Russia came from there. Then Britain began to take over from France. In the years after the Napoleonic Wars, by far the most important ports of loading were London and St Croix. Their total share was almost three-quarters when the American ports had only six percent.

TABLE 19 Ports of departure of raw sugar carried through the Sound, 1803-25.

Ports	1803, 1805-07		1816-17		1824-25	
	1000 lbs	%	1000 lbs	%	1000 lbs	%
Boston	662	1.4	359	0.7	2 802	4.9
London	11 210	24.0	18 640	37.3	14 649	25.5
Liverpool	2 066	4.4	1 077	2.2	144	0.3
Lisbon	1 586	3.4	1 277	2.6	104	0.2
St Croix	22 028	47.1	17 812	35.6	4 536	7.9
Havana	150	0.3	1 924	3.8	10 254	0.2
Matanzas	-	-	-	-	6 023	10.5
Rio de Janeiro	-	-	394	0.8	4 210	7.3
Bahia	-	-	660	1.3	3 733	6.5
Others	9 080	19.4	7 841	15.7	10 990	19.1
Total	46 800	100.0	49 987	100.0	57 445	100.0

Source: ST I, 1803, 1805-07, 1816-17, 1824-25, ØTA, DRA.

After 1815 most sugar was carried directly from the West Indies and South America, more than 60 percent of the total in the years 1831-53, but their real share in the supply of sugar was considerably greater, since the sugar re-exported from North America and Western Europe was mainly from the West Indies. U.S. exports to the Baltic were on the same scale on average as exports to Hamburg and Bremen. Russia was by far the most significant destination in the Baltic region, taking 60 percent, while a little under a third went to Prussia and the rest to Denmark and Sweden.

TABLE 20 Ports of destination of raw sugar carried through the Sound, 1784-1825.

Ports	1784-95		1803, 1805-07		1816-17		1824-25	
	1000 lbs	%	1000 lbs	%	1000 lbs	%	1000 lbs	%
St Petersburg	6 025	38.2	6 786	14.5	16 611	33.2	34 045	59.3
Copenhagen	3 117	19.8	26 434	56.5	17 814	35.6	8 429	14.7
Riga	..	..	1 009	2.2	5 086	10.2	5 642	9.8
Stettin	5 508	5.0	1 582	3.4	2 250	4.5	3 124	5.4
Stockholm	858	5.4	1 291	2.8	2 134	4.3	3 105	5.4
Danzig	600	3.8	976	2.1	1 042	2.1	740	1.3
Königsberg	817	5.2	828	1.8	1 528	3.1	407	0.7
Others	3 563	22.6	7 894	16.9	3 522	7.0	1 953	3.4
Total	15 767	100.0	46 800	100.0	49 987	100.0	57 445	100.0

Note: The figures of Stettin and Königsberg lack for the years 1806-07.

Sources: Johansen 1983b, 179; ST I, 1803, 1805-07, 1816-17, 1824-25, ØTA, DRA.

Another change of which signs were already visible earlier was that Copenhagen lost its position as the entrepôt for the distribution of sugar to the Baltic region. This happened even though St Croix sugar was in a special position in relation to

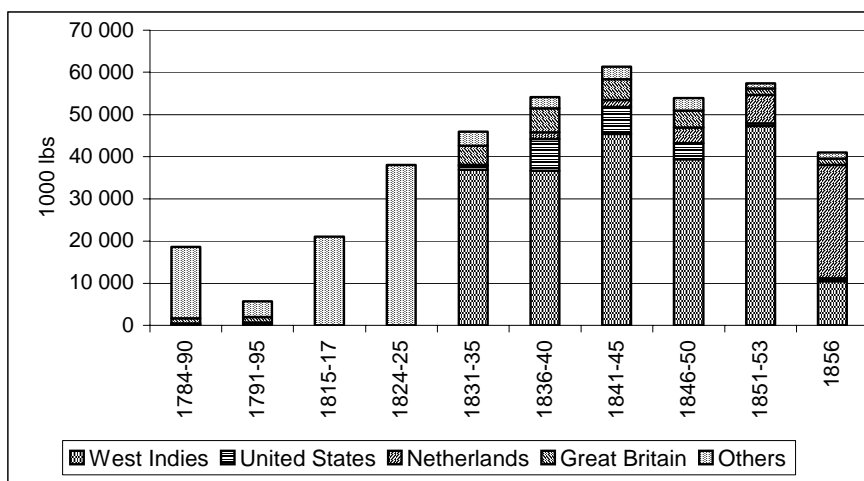
foreign products in the Sound and Denmark. Three-quarters of the raw sugar transported to Russia through the Sound in 1831-56 came from the West Indies and South America. The supply of the rest was quite evenly distributed between the United States, Britain, the Netherlands, Hamburg and Bremen. There was a slump in North American and British sugar exports in the 1840s, whereas amounts carried from the Netherlands increased. Another significant long-term change was that Hamburg started to lose its control over the Baltic sugar market, judging by the quantities carried through the Sound.²⁶

In the years 1816-17 Copenhagen still took more than a third of all the sugar exported to the Baltic, but ten years later only a half of that. Meanwhile, St Petersburg's share doubled. Importers of foreign sugar started to avoid Copenhagen, a change for which the Sound dues, which diverted non-Danish raw sugar to Hamburg, have been blamed.²⁷ It is difficult to estimate to what extent the Sound dues directed trade, but they inevitably had some effect on it, since at the end of the 1830s the duty levied was about four percent on the price of West Indian raw sugar at the port of loading.²⁸ When the duty was reduced in 1842, the amounts transported to the Baltic increased significantly.

²⁶ However, at the beginning of the 1830s raw sugar imports to Hamburg were double those to St Petersburg; see Stein 1980, 11; Tooke & Newmarch 1859, vol. I, 237-238, 245-249; De Bow 1853, vol. II, 280; Kovero 1955, 75, 85. The major market for Hamburg sugar was in Central Europe. For example in 1844-45 an average of 75 million lbs of raw sugar was imported into Hamburg at the same time as the total amount transported through the Sound was 107 million lbs. Apparently a great deal of Hamburg sugar also went on to the Baltic via Lübeck. For example, an average of 10 million lbs more sugar was carried to Stettin through the Sound than to the whole of Prussia; Schillow to Calhoun, 30 March 1845, and to Buchanan 18 March 1846, NA T59/1; Soetbeer 1842, 156.

²⁷ Sveistrup & Willerslev 1945, 143, 146, 154, 166. - On St Croix sugar see: McCulloch 1854, 405; Bergsøe 1846, vol. II, 488; Åstrand 1858, vol. I, 172.

²⁸ Sammenliggende Register över de varer, som ere passerede Øresund fra Nordsøen og fra Østersøen med toldens beløb 1834-39, DRA, ØTA; Schillow to Forsyth, 20 February 1836, NA T-59/1; Hambro to Forsyth, 24 November 1838, NA T-195/4. The duties, which were collected as specific duties, were on the same scale on all sorts of raw sugar, and thus, they favoured Havana white sugar which was most expensive; e.g. Jackson to the Secretary of State, 1 December 1841, NA M-41/4.



Notes: 1) The figures for the years 1815-17 and 1824-26 describe unspecified total exports, 2) Exports from South America are added to the figures of the West Indies.
Source: Appendix , table 30.

FIGURE 21 Areas of departure of raw sugar carried through the Sound to Russia, 1784-1856.

8.1.2 Refined or clayed sugars?

The opportunities for American raw sugar brokers and shippers on the Baltic market were essentially dependent on two inter-linked factors: the Russian customs and the availability of Cuban white raw sugar. There were mainly two rather crudely processed sugars on the international market: muscovado and clayed sugars. The latter type was more refined and contained less molasses than the cheaper muscovado. Havana was a port of export for clayed sugars especially, whereas Matanzas supplied muscovado. The price of cane sugar was based on the degree of refinement, that is, the colour the product took on in the refining process. Brown, yellow and white sugars were most common on the market. The clayed white sugar the Americans carried to Russia was the best and most expensive and thus the easiest to process into proper refined sugar. Most western European countries only allowed the import of muscovado, as they wanted to carry out as much of the refinement process as possible for themselves.²⁹

²⁹ The term "muscovado", which originates from Spanish, referred to unrefined brown sugar, while the term "clayed" referred to a method of refinement common in the West Indies, in which containers were sealed with moist clay which played a part in the refinement process. Clayed sugar was produced in conical containers and water was allowed to flow through the clay to remove as much molasses as possible. When the process had continued for 30-40 days, the crystallized sugar cones were cut according to the colour of the product. The most precise classifications distinguished between more than ten sugars that were different in colour. The solid clayed sugars were packed in wooden boxes with a gross weight of 450-500 lbs. Dark, sticky muscovado, meanwhile, was carried in hogsheads or in casks, each weighing 1200-1500 lbs gross. 100 lbs of raw sugar (one-third white sugar, two-thirds brown sugar) produced somewhat more than 50 lbs of refined sugar. Most types of sugar required further processing if only because the product was often damaged by water during the long voyage; see Galloway 1989, 17, 40, 108-109; Ely 1964, 471; Stein 1980, 8; Albion

The Americans first discovered the opportunities for profiting from trade with Russia in Havana white sugar as well as its drawbacks in 1810. The customs officers in St Petersburg and Archangel, as well as English sugar brokers who were happy to advise them, classified the Cuban raw sugar ("White Havana") as refined loaf sugar, since its colour and qualities resembled this. The matter was crucial for the Americans, as the tariffs on raw sugar were only a tenth of those on refined sugars. Although Minister John Adams and Consul Levett Harris tackled the problem, it took a long time before it was believed that the product the Americans carried was indeed raw white sugar.³⁰ The problem was removed for some time in 1812 when British refined sugar conquered the market in St Petersburg once again during the war. Moreover, the liberal tariff of the year 1816 allowed the import of both refined and raw sugars. The advantage of Havana raw sugar for the American seller was that the product sold in St Petersburg at a significantly higher price than other raw sugars, while the import levies were the same on all types of sugar. Officially the importation of raw sugar was allowed only to meet the needs of the refineries, but high quality Cuban sugar was also sold directly to the consumer against the regulations.³¹ The underdevelopment of Russian refineries was considered a partial reason for the rather confused situation on the market. The firm of Meyer & Brückner, one of the major St Petersburg raw sugar importers, considered the mills' technology inadequate and their operation too slow and expensive. In 1809 firm warned their Salem trading partner Benjamin Shreve against shipping brown sugar that required further refinement, since only two refineries operated in St Petersburg.³² A year later, however, another Salem merchant, Josiah Orne, was advised by Miers Fisher & Co. to hurry up with raw sugar shipments, since several new refineries had been set up in St Petersburg.³³

The case of raw sugar was in fact the only instance in which the British trading houses, accustomed to dominating the Russian markets, had to make

1961,179; HMM 1847, vol. 17, 481; HMM 1852, vol. 17, 677-678; Homans 1858, 489; De Bow 1853, vol. III, 526.

³⁰ In 1810 the customs duty on raw sugar was 40 copecks per pood but on refined loaf sugar a prohibitive 4-6 roubles per pood. According to Minister John Q. Adams, the suspicion of the customs was justified, since the British had smuggled refined sugar into Russia under the guise of raw sugar. The embargo regulations of 1808 had further complicated the situation: in the French view, raw sugar necessarily originated from the British colonies, which automatically justified its confiscation.; Adams to the Secretary of State, 10/22 October 1810, NA M- 35/2/28; Adams to the Secretary of State, 5 February 1811, NA M-35/3/38; Brothers Raimbert, Nephew & Co. to Stephen Girard, 7/19 October 1810, USR 1980, 707-710; Saul 1991, 59.

³¹ Only in the 1849 tariff were white, brown and yellow raw sugar distinguished. At that time, the import levy on white sugar was 3.80 roubles per pood, and on other types, 60 copecks less; e.g. John Randolph Clay to Louis McLane, 16/28 February 1834, NA M-35/12/19; HMM 1849, vol. 20, 313. White Havana sugar was also favoured by merchants as it lost significantly less of its weight during transportation from Havana to St Petersburg: only 2-3 percent; Brothers Cramer to John D. Bates, 15/27 July 1827, PM, JDB, vol. 1.

³² Meyer & Brückner to Benjamin Shreve in 1809, and Meyer & Brückner and Levett Harris to Shreve, 10 February 1809, PM, BSP, vol. 3; cf. Clark 1841,160.

³³ Miers Fisher & Co to Josiah Orne, 23 January/ 4 February 1811, EI, OFP vol. 27/1 (printed in USR 1980, 733-734).

room for the Americans. Russian customs policy had a crucial role in this, since in 1820 the duties on raw sugar, which the Americans carried, and crushed lump sugar, which the British sold, were altered so as to strongly favour raw sugar. This embittered British sugar brokers, who claimed that the Americans had got advance information about the change and had already started in the previous summer to plan a take-over of the market in St Petersburg, purchasing sugar "from the colonies of Portugal and Spain and even from China". The fact that by mid-August 1820 more than double the normal amount had been shipped to St Petersburg was regarded as evidence of this.³⁴

British diplomats in St Petersburg tried in vain to obtain amendments to the 1820 tariffs. Minister Charles Bayard perhaps went straight to the point when he stated that the duties on sugar played a central role in the future of American trade. The Russians wanted to sell their own products to the United States, but American vessels could not be attracted to St Petersburg by other means than by offering advantageous markets for raw sugar.³⁵ The British Consul, Daniel Bayley, blamed his country's preposterous regulations for the situation, as they prohibited the refinement of sugar in the colonies. In Britain refined sugar, that is, crushed lump sugar, was in practice, though not according to the Russian interpretation, the same product as the clayed sugar of the French and Spanish colonies. Bayley, who wanted London to intervene on the issue, also pointed out that, unlike the colonial product, British sugar was refined in Britain by "the free work of men".³⁶ The situation became even more favourable to raw sugar and the Americans when the difference in customs duties between raw and refined sugar increased yet further.³⁷ The changes brought immediate results. According to STA, the Americans exported 2.1 million lbs of sugar to St Petersburg in 1819, but in 1821 already almost 13.7 million lbs. However, that was an excessive amount. Samuel Sanford of Boston, for example, recorded that merchants there had suffered sizeable losses with their senseless sugar adventures to Russia.³⁸ In 1822 exports to Russia dropped almost to the level of 1819. Even so, British sugar lost its position in Russia, a fact that British commercial representatives kept on drawing to the attention of London.³⁹

Problems of classification with refined sugar and different sorts of raw sugar continuously exercised the St Petersburg customs, and the increasing

³⁴ Daniel Bayley to Charles Bagot, 26 August/7 September 1820, PRO, FO 184/8. By the calculations of British merchants an average of 0.5–0.6 million poods of sugar had been imported into St Petersburg in 1812–20, two thirds of it British crushed lump. The fear of an American monopoly was premature since in the navigation season in 1820 the Americans shipped to St Petersburg only a quarter of the alleged total of over 600,000 poods.

³⁵ Bagot to Lord Castlereagh, 22 December 1820/ 3 January 1821, PRO, FO 181/44; cf. Gibson to Adams, 26 February 1821, NA M-81/2.

³⁶ Bayley to Bayard, 26 September/8 October 1820, PRO, FO 184/8.

³⁷ The customs duty on raw sugar carried by sea was put up to one rouble per pood (previously 25 copecks) and on refined sugar to 4.50 roubles (previously 100 copecks) per pood; e.g. Middleton to the Secretary of State, 8/20 April 1821, NA M- 35/7/4.

³⁸ Sanford to Collings & Maigny (Amsterdam), 26 June 1822, HUBL, Samuel Sanford Letterbook; see Appendix, table 32.

³⁹ E.g. Bayley to Palmerston, 28 January 1841, PRO, FO 65/274/3938.

shipments of Brazilian sugar did not make the matter in any way simpler.⁴⁰ John Randolph Clay noted that the real problem was that British and German refineries tried to make their products like Havana white sugar so that it could be accepted in Russia as raw sugar. The expertise of the Russian customs in distinguishing between the different sorts was tested to such a degree that a special commission was appointed to deal with the matter. Vessels were not allowed to unload their cargo before verification of the type of sugar was carried out.⁴¹ Alterations in the sugar duties, as well as rumours of them, kept American and Russian brokers continuously on their toes. It was constantly feared that the situation so advantageous to the Americans would change. In the autumn of 1831 sugar duties were put up by 12 ½ percent and to begin with the regulation was also applied to sugar which was still in government warehouses. The merchants' protests brought results and in the end the additional customs duty was not payable on sugar already imported into the country.⁴² In the summer of 1835 Minister William Wilkins made representations about proposals to decrease duty on Cuban raw sugar. It later transpired that this was only a deliberate ploy intended to bring down sugar prices, which had gone up above average because of lower than usual imports.⁴³

The vulnerability of American trade, which was almost totally dependent on one commodity, was shown up dramatically in the mid-1840s. After hurricanes destroyed part of the Cuban sugar crop in 1843,⁴⁴ prices were expected to increase sharply in St Petersburg. In the middle of March 1845, however, the Russian Ministry of Finance intervened and warned Russian sugar refiners to refrain from ordering at an "exorbitant price". The government announced that it considered provisional orders necessary for the state's economic welfare. Now what St Petersburg and American raw sugar brokers had feared for 20 years became true: Russia announced that it would allow the import of crushed lump sugar from England, which was cheaper than Havana sugar, for reboiling in sugar refineries, subject to the same import levies as white raw sugar.⁴⁵

⁴⁰ E.g. Bayley to Canning, 3/15 December 1824, PRO 65/144.

⁴¹ John Randolph Clay to Martin Van Buren, 10/22 March 1831, NA M-5/12/4.

⁴² John Randolph Clay to Livingston, 3 December, and 24 December 1831, NA M-12/17, 19; Oeste 1966, 92.

⁴³ Wilkins to Forsyth, 22 August, and 1 September 1835, NA M-35/13/9, 10.

⁴⁴ According to McCulloch (1854, 667), sugar exports from Havana dropped to 107 million lbs in 1845, to half of the average for the previous five years, from 736,800 boxes to 365,600 boxes.

⁴⁵ Todd to Calhoun, 19/31 March 1845, and to Buchanan 8/20 June 1845, NA M-35/14/52,56; Thomson, Bonar & Co. to Bloomfield, 30 April/ 12 May 1846, PRO, FO 184/11; see Kirchner 1975,157. The duty was set at 3.80 silver roubles per pood for both sugars. However, according to Todd, the English crushed lump sugar did not meet the sugar refiners' needs as some Havana sugar had to be mixed in with it during processing. According to the Minister, the reason for this was that the British method of refinement using steam power "exhausted strength" from the sugar; Todd to Buchanan, 22 January/ 3 February 1846, NA M-35/14/65 with enclosures; see HMM 1849, vol. 21, 38.

News of the change in the Russian regulations had immediate consequences in Cuba. First of all sugar shipments were suspended, but when the reports were confirmed the sugar trade ceased completely.⁴⁶ The first American vessels carrying sugar passed Elsinore only at the end of June, and the next vessel waited until mid-July. Only nine sugar vessels sailed to St Petersburg during the navigation season compared with 51 in the previous year.⁴⁷

The tariffs of March 1845 were disastrous for the American sugar brokers. When Grays, for example, had the previous autumn anticipated rising prices in Cuba and even greater increases in St Petersburg they had put in big orders from Havana.⁴⁸ The Russian regulations knocked the bottom out of these speculations. Minister Charles Todd was convinced that trading houses in St Petersburg involved in the Cuban raw sugar trade had not been treated in accordance with the terms of the trade agreement between the United States and Russia. Todd claimed that for the British had been granted advantages that the Americans lacked.⁴⁹ Todd's interpretation was not correct, but the Secretary of State, James Buchanan, who did not have any deeper knowledge of the matter, gave them his attention. The Russian Foreign Minister, Count Nesselrode, for his part, was surprised, or pretended to be, at the wide publicity given to the customs question. At first he stated that British sugar was being imported only temporarily to complement Havana sugar, but a little later Todd was told that the March regulation was a concession to the British, who had reduced the duties on Russian goods. According to Count Nesselrode, the American import duties on Russian goods were unreasonably high, and if Congress were to reduce them, the Americans would be granted similar rights

⁴⁶ Captain Samuel Fabens wrote that in 1845 the island's sugar crop was about 80–100,000 boxes, and not a single consignment of it had been sent to Russia by the end of April; Samuel A. Fabens to Francis A. and Samuel C. Gray, 30 April, 10 May, 11 May 1845, EI, Samuel E. Fabens Letterbook.

⁴⁷ STA 1845 (452, 652); CR 1845, NA T-201/2. The first vessel was Fabens's ship *Ariosto* (see p. 307). According to Minister Todd, 53 American vessels sailed from Cuba to St Petersburg in 1844 carrying 53.4 million lbs of sugar, but the next year only nine vessels with 10.4 million lbs; Todd to Buchanan, 22 January/ 3 February 1846, NA M-35/14/65 with enclosures; cf. Appendix, table 32.

⁴⁸ Some merchants managed to withdraw their orders as the harvest was about six weeks late. However, some purchases had been made in advance and consequently the only (rather weak) ground for complaints to Russia was that the deals had been made while the old Russian customs regulations were still effective; Todd to Buchanan, 8/20 June 1845, NA M-35/14/56; Samuel C. Gray and Francis A. Gray to Fabens, 19 July 1844, EI, FP, Samuel A. Fabens Letterbook.

⁴⁹ Todd to Buchanan, 19/31 March, 1/13 June, 8/20 June, 25 June/7 July, and 30 June/12 July 1845 (with enclosures, especially: Nesselrode to Alexander Bodisco, 23 June 1845), NA M-35/14/52, 55-56, 58-59; see also Gibson to Buchanan, 18/30 August 1845, NA M-81/4. According to Todd's survey, brown sugar from Manila and Bahia provided the raw material for the sugar the British shipped to Russia, and modern refineries in London and Liverpool processed it into a product that cost 31 paper roubles per pood in St Petersburg, all costs included. Cuban sugar cost 4-5 roubles more, as its purchase price in Havana had increased from the price of the previous year, 9 reals per arroba, to 15-16 reals. Moreover, the St Petersburg purchasers of Havana sugar were infuriated by the fact that a third of the British crushed lump sugar was directed to one single refiner (Stieglitz?) while the "great mass of refiners" suffered from a lack of raw material.

to the British.⁵⁰ This was of no value to the Americans, who did not have competitive export sugar, but it gave Nesselrode an excellent opportunity to criticize American import duties which were unfavourable to the Russians.

The Americans' virtual monopoly of sugar imports to St Petersburg collapsed in 1845. Russia also allowed the import of crushed lump sugar in 1846 and 1847. During these three years an average of 23.1 million lbs of Cuban sugar was imported into St Petersburg, and 26.1 million lbs of crushed lump.⁵¹ The Americans did not make any further representations. It was a matter for the Russians, and the market problems of Cuban sugar were not directly connected with U.S. national foreign trade. Minister Todd had himself stated earlier that as the Americans only transported sugar and coffee he could not take a particular interest in questions of their importation into Russia.⁵² It followed from the nature of trade relations between the United States and Russia that the collapse of the sugar trade was not reflected in the statistics for foreign trade between the two countries.

The dispute over crushed lump sugar was gradually forgotten. It was kept alive for some years by the St Petersburg firms which specialized in Havana sugar: Abraham van Sassen & Co. and Müller & Hauff. The importers, energetically supported by John Randolph Clay, Secretary of Legation, and less energetically by Minister Ralph J. Ingersoll, tried to show that the customs duties enacted in 1845 without warning and retroactively were contrary to international trade practices. However, the trading houses' claims were never settled.⁵³

8.1.3 From Boston to St Petersburg via Havana

At the beginning of the period under discussion the Americans took almost all the sugar they carried through the Sound to St Petersburg. The amounts were rather insignificant and mostly carried via Le Havre or Lisbon.⁵⁴ The situation

⁵⁰ Buchanan to Todd, 12 May 1845, NA M-77/136/22; Todd to Buchanan, 8/20 June, and 30 June/12 July 1845, NA M-35/14/56,59. Todd's mishandling of the sugar question certainly contributed to his becoming the "laughingstock of the Russian capital" during his time as Minister; Saul 1991, 168; see Kirchner 1975, 26.

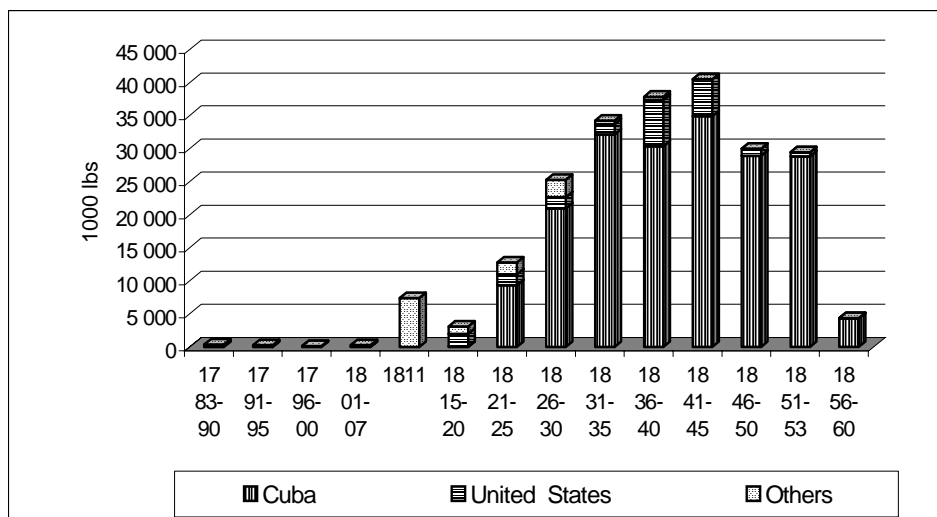
⁵¹ Price levels support the British assurances that their lump sugar was of the same quality: the average price of Havana sugar supplied to the refiners was 26.62 roubles per pood in 1846, while the price of British sugar was only slightly higher, that is 28.87 roubles. The cost of reboiling of the latter was, moreover, slightly lower than in the case of Havana sugar; Thomson, Bonar & Co. to Bloomfield, 30 April/ 12 May 1846, PRO, FO 184/11, also RRO, FO 65/ 368, 397; Clay to Buchanan, 8/20 January 1847, NA M-35/15.

⁵² Todd to Webster, 29/17 November 1841, NA M-35/14/5.

⁵³ These firms imported altogether seven cargoes of sugar (17,300 boxes), which is most of the sugar the Americans carried in 1845; John Randolph Clay to James Buchanan, 22 January/ 3 February 1846, 19 February/ 3 March 1846, 5/17 March 1846, 2/14 May 1846, 15/27 June 1846, 11 July 1846, and 8/20 January 1847 with enclosures, NA M-35/15/1-4, 7, 10-11, 21.

⁵⁴ E.g. Anthony Thirink to Christopher Champlin, 30 November 1787, CRI 1915, 346-347. STA was not a very accurate register of raw sugar at least in the 18th century. For example in 1785 62 vessels carried "unspecified quantities" of sugar from Denmark to Norway, and 42 vessels brought sugar from America to Denmark. The Danish product was duty-free. There is no doubt that part of it was transported from

changed after 1792 in that, according to STA, an average of 2.4 million lbs was carried to the Baltic Sea in the years 1793-1807, though most of this stayed in Copenhagen and only one tenth of it went to St Petersburg. In those years sugar was a major U.S. re-export commodity on a greatly increasing scale, but Russia's share of it was still small. The years 1810-11 were an exception, since in those years exports to Russia amounted to about 40 percent.⁵⁵



Notes: The 1811 figure represents total exports to the Baltic. The figures for 1856-1860 include only St Petersburg.

Source: Appendix, table 32.

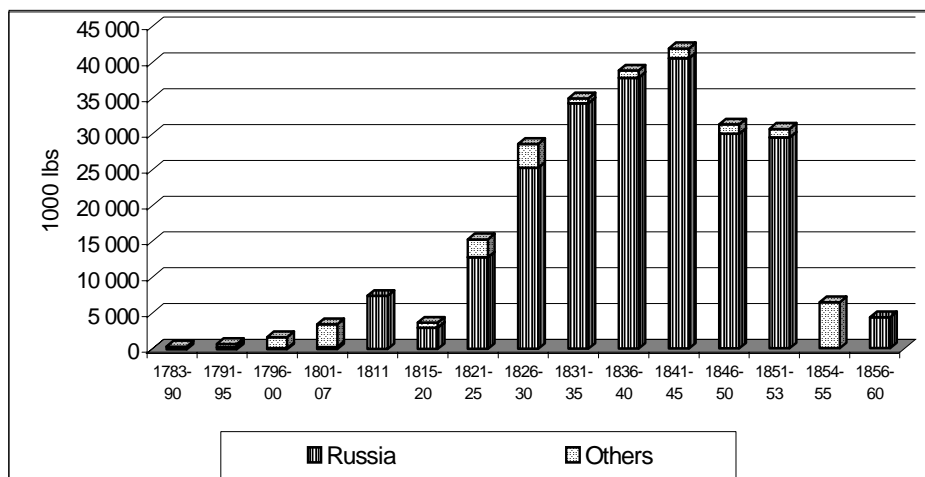
FIGURE 22 Areas of departure of raw sugar carried through the Sound to Russia on American vessels, 1783-1860.

The amounts carried through the Sound to the Baltic after 1815 are on the same level as around the year 1800. However, the crucial difference was that the Americans did not so often leave their cargoes in Copenhagen, and in the period 1815-20 more than 80 percent of the sugar carried to the Baltic went directly to Russia. Most of the sugar recorded in Elsinore had come from the United States, only a quarter of it coming from Cuba. The vessels from Havana that passed through the Sound more often carried coffee than sugar.⁵⁶ It was at England to St Petersburg via Havana, was created, and it only came to an end

Copenhagen to St Petersburg. Moreover, 571,000 lbs of sugar and almonds, 117,000 lbs of sugar and prunes, 138,000 lbs of sugar and raisins, and 100,000 lbs of sugar and tobacco were carried to Russia through the Sound. Two vessels also sailed from Norway to Russia carrying unrecorded amounts of sugar; Johansen 1983a, microfiche, no. 1, 141-142.

⁵⁵ Re-export of sugar from the United States increased in 1805-07 to an average of 137 million lbs, while it had been only 32 million lbs ten years earlier. The amounts carried to Russia before 1810 were sporadic: 1802 – 61,000 lbs, 1805 – 351,000 lbs, 1809 – 2,193,000 lbs; Pitkin 1817, 139. In 1811 an exceptionally large quantity 7,429,000 lbs (worth \$817,000) was carried to the Baltic; Harris to Monroe, 10/22 December 1811, NA M-81/2.

⁵⁶ In 1816 three of six vessels that sailed from Cuba to St Petersburg carried coffee as their major cargo. In 1819 there was only one vessel, carrying 88,000 lbs raw sugar. One of those who sailed this route was William Duncan of Salem, who in 1816 carried



Notes: The 1811 figure represents total exports to the Baltic. The figures for 1856-60 include only St Petersburg.
Source: Appendix, table 32.

FIGURE 23 Destination of raw sugar carried through the Sound on American vessels, 1783-1860.

during the Crimean War. 87 percent of the raw sugar the Americans transported to the Baltic between 1815 and 1860 was from Cuba, 10 percent from the United States and the rest from Brazil and European ports. 95 percent of it went to Russia, and the rest mainly to Copenhagen and Stockholm.⁵⁷

The principal North American cities that sent sugar to Russia were Boston, Salem and New York. In 1817-19 more sugar was sent to the Baltic Sea from Boston than from any other port, and in the 1820s there were still numerous other New England loading ports for sugar. Later as a rule only Boston and New York exported sugar to Russia apart from Cuba.⁵⁸ In the 1820s the Americans also carried Brazilian sugar to St Petersburg. The amounts loaded in Bahia, Pernambuco and Rio de Janeiro contributed about one tenth of the total amount transported to St Petersburg. This trade was at its peak in 1829, when eight American vessels sailed from Brazil to the Baltic, seven of them to St

42,500 lbs of sugar, but also 110,000 lbs of dyewood and 121,500 lbs of coffee. The following year the main cargo of Duncan's vessel *Rebecca* was already Havana raw sugar; STA 1816 (969); STA 1817 (1993); HSP, LP, Lewis Letters 1808-28.

⁵⁷ ST II, 1831-36. Consignments of sugar which have two ports of destination recorded in STA, both Copenhagen and St Petersburg, are considered as going to St Petersburg. For the years 1821-60 this applies to 516,000 lbs on average. According to STA, an average of 1,126,000 lbs was carried to Copenhagen only, 156,000 lbs to Stockholm and 210,000 lbs "to the Baltic Sea". Only in the 1830s did it become usual for STA to distinguish between consignments to different Baltic Sea ports; e.g. STA 1835 (193, 1355). Consular reports rarely specify. The first port recorded in the customs book (unless St Petersburg) is considered the port of destination for unspecified cargoes; e.g. a cargo of sugar for "Stettin and Stockholm" is considered to have gone to Stettin.

⁵⁸ For example, in 1821 the loading ports of sugar carried to St Petersburg were, in addition to Havana, New York and Boston, Pernambuco (930,000 lbs), Salem (538,000 lbs), Marblehead (339,000 lbs), Wilmington (328,000 lbs), San Salvador (20,000 lbs) Beverly (135,000 lbs), Bristol (86,000 lbs), Philadelphia (49,000 lbs), Antwerp (45,000 lbs), Bremen (45,000 lbs) and Charleston (16,000 lbs); STA 1821.

Petersburg.⁵⁹ In general, Brazilian sugar started to lose its position on the St Petersburg market from the 1820s onwards, and its importation almost came to an end altogether in the 1840s.

The information provided by STA and the consuls to St Petersburg on the American sugar trade is generally in agreement,⁶⁰ though some differences are caused by the use of different units of measurement,⁶¹ and by consuls recording cargoes taken on in Cuba as having departed from the United States.⁶² Greater differences came about as some vessels reported in the Sound as sailing to St Petersburg took their cargo to Riga. There were about five such cases after 1834.⁶³ Sugar export to Riga was most lively at the beginning of the 1830s and the end of the 1840s. In 1848-50 an average of 5.7 million lbs was imported into the city, the Americans carrying almost half of it, that is, 2.5 million lbs. The figures were exceptional, since the Riga sugar market was almost totally controlled by Hamburg.⁶⁴

⁵⁹ In 1821-30, an average of 808,000 lbs of sugar was carried from Rio de Janeiro, 768,000 lbs from Pernambuco and 607,000 lbs from Bahia; STA 1821-30; see Appendix, table 32.

⁶⁰ The estimates of the Minister to Denmark, William Irwin, are close to the figures in STA. According to Irwin, an average of 34.7 million lbs was carried to the Baltic on American vessels in 1831-35, and in 1836-40 an average of 38.7 million lbs. The corresponding figures in STA are 34.8 and 38.8 million lbs; Appendix, table 32, Irwin to Buchanan, 3 June 1847, NA M-41/5.

⁶¹ Sometimes the consuls in St Petersburg (more rarely in Elsinore or Copenhagen) record the gross weight of the sugar, which is 10-15 percent more than the amounts reported in STA. E.g. the ship *Manchester* of Bath, the bark *Baltic* of Providence, the ship *Riga* of Kennebunk, the bark *Gilbert* of Bath and the ship *Clinton* of Bath; STA 1845 (180, 755), STA 1846 (856), 1847 (587,588); CR 1845-47, NA M-81/4-5. In some cases the records are quite illogical, for example when the amounts were registered in St Petersburg using Spanish measures, although in STA (as usually in the consuls' shipping lists) the sugar pounds of different countries were accepted as having the same weight; e.g. the bark *California* of Portland, the brig *Gilbert* of Bath and the ship *Arioso* of Boston; STA 1848 (497, 518); CR 1848, NA M-81/5.

⁶² For example, in 1836 this happened with three different ships. The ships *Garonne* and *Peruvian*, both of Philadelphia, carried sugar from Havana according to the customs books, but according to the consuls in Elsinore and St Petersburg, from New York. The sugar in both cases was recorded in Spanish arrobas. The ship *Emperor* of Boston arrived, according to STA, from Cuba, but according to the consul in Elsinore, from Charleston; STA 1836 (2855, 2949, 589); CR 1836, NA M-81/3, and T-201/1.

⁶³ Like the ship *Republic* of Newburyport, which sailed the route Havana-Copenhagen-Riga-New York, the bark *Hardy* of Marblehead also took her cargo of sugar to Riga, although STA recorded her as sailing to St Petersburg. The consul in St Petersburg did not record the vessel. According to the consul in Elsinore the vessel sailed to Riga and later took on a return cargo from there to Boston; STA 1836 (1355/2367, 1300/2048); CR 1836, NA M-81/3 and T-201/1. In addition to three sugar vessels (the ship *Hamburg* of Bath, the bark *Nautilus* of Portland and the bark *Turbo* of Kingston), the ship *Cabinet*, which STA recorded as sailing to St Petersburg, also ended up in Riga in 1842; STA 1842 (665/1585, 664/1976, 1546/2115, 1452/2193), CR 1842, NA M-81/4 and T-201/2.

⁶⁴ The import figures recorded by the consul in Riga, Alexander Schwartz, are significantly higher than those of STA. He reported that in 1835 the Americans imported 2,857,000 lbs (\$306,300) and in 1838, 2,245,000 lbs (\$255,200); Schwartz to Forsyth, 25 January 1836, and 31 January 1837, NA M-485/1; see Appendix, table 32. On the Riga sugar market, e.g. reports of the British consuls in Riga; 15 February 1840, 20 July 1850, and 28 February 1851, PRO, FO, 65/263,382,397. Significant amounts of sugar were not carried to any other Baltic provinces apart from Riga. In 1860 the bark *Anna*

At the peak of this trade American merchant shipping supplied almost 80 percent of the raw sugar for the refineries in St Petersburg and imports to St Petersburg represented about 90 percent of all imports to Russia. America's share was at its greatest at the beginning of the 1830s, although in total amount the peak was only reached in the next decade.⁶⁵

Almost a thousand American vessels sailed in the sugar triangle and this took place in a period of over 30 years with an average of thirty vessels per year. One of the first regular vessels on the route was the brig *Jeremiah* owned by Salem merchant Samuel Endicott and commanded by Captain William Duncan. According to STA, Duncan visited St Petersburg eleven times in the period 1816-27. He sailed there most often from Havana, but sometimes also from Pernambuco or Charleston. Duncan sometimes also entered the Sound late in summer with a cargo of sugar from Salem. In 1822 the brig unloaded her cargo in Hamburg and sailed to St Petersburg in ballast. Duncan most often transacted business with Drake & Mitchell in Havana, with George Williams in Baltimore and with John D. Lewis in St Petersburg.⁶⁶ The brig *Dawn*, owned by Salem merchants, was another example. Nathan Endicott sailed her from Archangel to Salem in the summer of 1815 and then the *Dawn* was put onto the route to the West Indies, the Mediterranean and the Baltic. In 1816 she took on fruit and wine in Palermo and Livorno, and in the next summer the vessel took Havana sugar to St Petersburg via Salem. In 1818 sugar was carried directly from Havana to St Petersburg, but in 1819 it was once again taken to Salem. In 1820 Nathan Endicott sailed first to Marseille and from there to St Petersburg carrying olive oil.⁶⁷

In the summer of 1840 the Boston bark *Gulnare* (273 tons) under the command of Captain R. Wheatland made a voyage typical of the sugar triangle in terms of route and timetable. The bark departed from Boston for Havana on 10 April, arriving there on 25 April and leaving there on 11 May. Wheatland reached Cowes on 2 July, spent three days there and subsequently arrived in Elsinore on 19 July and St Petersburg on 25 July. The bark carried 34,515 arrobas, or 862,900 lbs, of white sugar. The vessel left St Petersburg on 10 September, passed Elsinore on 24 September, and reached Boston on 14

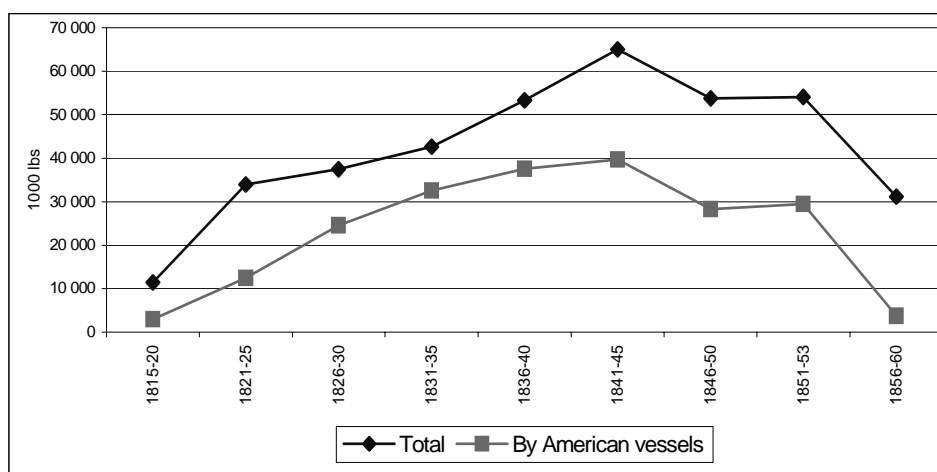
of New York transported to Helsinki probably the only cargo of sugar from Havana to Finland; CR 1860, NA T-389/1.

⁶⁵ John Randolph Clay estimated that the Americans supplied three fifths of St Petersburg's sugar consumption at the beginning of the 1830s; Clay to Louis McLane, 16/28 February 1834, NA M-35/12/19. According to the British consul, the amount transported on American vessels constituted three-quarters of the total imported to St Petersburg in 1844. According to him, 65 sugar vessels arrived from Cuba in the year in question, 49 of them American and 9 British. He estimated that the British share of the St Petersburg sugar trade was only 10 percent; Buchanan's report, 18 February 1845, no.29, PRO, FO 181/190; cf. Appendix, table 32.

⁶⁶ STA 1816-27; Hitchins, Digest of Duties, PM; e.g. Orders to William Duncan, 25 March 1823, PM, EP, vol. 1 Duncan took five cargoes taken on in St Petersburg to Salem, four to Baltimore and one to Boston.

⁶⁷ Nathan Endicott sailed repeatedly to St Petersburg throughout the 1820s; PM, PPP; STA 1816-30.

November. Her return cargo consisted mostly of iron, hemp and cordage together with small consignments of flems, raveduck, diaper and quills.⁶⁸



Sources: Appendix, list 1 and table 32.

FIGURE 24 Import of raw sugar to St Petersburg, 1815-60.

Those who sailed the sugar triangle usually departed from New England ports in the new year, and by the end of January several vessels were already waiting off the Havana coast for the year's first sugar consignments. Cane sugar grinding started in December and continued usually until July, but the main crop was on the market from March to May. The vessels arrived in Havana either in ballast or with cargoes of grain and lumber. Sometimes vessels taking sugar to St Petersburg also carried ice from the Boston region to Cuba. The aim was to schedule departure from Cuba so that the vessel would not be in the West Indies during the hurricane season.⁶⁹ American purchasing agents arrived in Havana before the vessels waiting to take on cargo. They often tried to conclude agreements directly with plantation owners, by-passing the Havana trading houses. In the expectation of suitable sugar consignments at lower prices, American captains sometimes spent as much as three months at the ports of Havana and Matanzas. The first sugar consignments were somewhat more expensive than the main crop, but the prices for the first shipments to reach in St Petersburg in the spring were also correspondingly higher than those in the summer, at least according to William Ropes. On the other hand, several Russian products were at their most expensive in the spring and their prices dropped towards the end of the navigation season. Taking advantage of that involved two drawbacks for the return voyage: the vessel had to cross the

⁶⁸ Logs of bark *Gulnare*, 1839-40, EI, Logbooks; STA 1840 (2170/3415); CR 1840, NA M-81/4, and T-201/2.

⁶⁹ Mariatequi, Knight & Co. to William D. Lewis, 1 February 1829, HSP, LNP, Letters 1810-41. For example, in 1839 the ship *Drymo* of Boston and the bark *Suffolk* of Boston carried ice from Boston to Havana and sugar from there to St Petersburg; CR 1839, NA T-20/7.

North Atlantic in the winter, and there was also the risk that too many Russian goods might be carried to the east coast of the United States for that season.⁷⁰

In the basic model of the sugar triangle, purchases in Havana were financed in part by the sale of Russian goods either in the United States or Cuba.⁷¹ In 1827 Horace Gray of Boston ordered Elliott Woodberry, captain of the ship *James Maury*, to take 120 bales of "Russias" and 32 tons of fustic. He was also given 20,600 piasters and 2050 doubloons to exchange. The total value in goods and specie was put at \$46,200, which covered a third of the vessel's cargo of sugar.⁷² Russian goods played a central role in financing the sugar business, at least in the operations of Brothers Cramer and their Boston and Havana trading partners. Knight & Co. of Havana ordered goods directly from St Petersburg, regardless of whether they were transported via Boston or not, and paid Cramers in raw sugar.⁷³ Knight & Co. seem to have aimed at direct barter with the Russians without using American brokers. In 1832 the firm sent the Spanish ship *Pepito* to St Petersburg, and the next year the ship *Rossini*. The vessels carried sugar and returned directly from St Petersburg to Havana with Russian goods. However, such trade links between St Petersburg and Havana were quite marginal. These two ventures certainly brought losses to the Havana firm as well as to Brothers Cramer, part-owners of the refiners Mollwo & Co. The bankruptcy of the refinery in 1834 and the consequent losses of 250,000 roubles were one reason for the ending of Brothers Cramers' activities.⁷⁴

Vigorous competition was characteristic of the American sugar trade, and decisions about purchases were often made on the basis of the amount of sugar known to have already been carried from Cuba to Russia. Those involved in the business for several years were able to estimate the amounts of Havana sugar that had reached the St Petersburg market. The fewer the consignments, the higher the price was expected to rise, and thus more could be paid for the product in Havana also. News and rumours about the prices being paid in St Petersburg easily affected the market in Havana. It was considered important to

⁷⁰ William Ropes to Hardy Ropes, 29 January, and 16 March 1830, HUBL, RFP; see HMM 1847, vol.17, 481; Johansen 1986, 131.

⁷¹ For example, in 1836 two vessels that were continuously engaged in trade with St Petersburg, the bark *Drymo* of Boston and the ship *Timoteon* of Boston, took a cargo of "Russias" from their home port to Havana; CR 1836, NA T-120/7.

⁷² Gray to Woodberry, 1 January 1827, HUBL, HGP, vol. 17. Gray sent another vessel, the ship *Magnolia*, to Havana at the same time. Her captain took 176,000 piasters and 1700 doubloons with him, valued at \$73,566 altogether; Gray to Captain John Eldridge, 12 March 1827, HUBL, HGP, vol.17. On another similar arrangement also: Horace Gray to Joshua Orne, 18 July 1825, HUBL, HGP, vol.17.

⁷³ Edward C. Bates to John D. Bates, 25 April 1833, PM, JDB, vol. 16; Sometimes consignors of Russian goods required sales on North American markets and the exchange of the proceeds for doubloons for Cuban sugar purchases; e.g. Brothers Cramer to Nathan Bridge & Co., 24 September / 6 October and 8 October 1826, PM, JDB, vol. 1.

⁷⁴ Edward C. Bates to John D. Bates, 5 June, 11 June, 7 July, 12/25 September 1833 and Charles Cramer to John D. Bates, and 27 March 1834, PM, JDB, vol. 12 and 17. "Ponomareff" and "A. Jademiroffsky's Sons" are refiners mentioned who financed their purchases of Havana sugar through Cramers; Brothers Cramer to Nathan Bridge & Co., 11 June 1829, PM, JDB, vol.1.

keep an eye on the competition, and this led to subterfuge and bluffing on the part of captains and supercargoes. Edward C. Bates, who arranged sugar purchases in Havana in the spring of 1832-33, once or twice a week sent his brother John D. Bates lists of the vessels and cargoes that were thought to be sailing to Cowes or St Petersburg.⁷⁵ On that basis it had to be decided in Boston whether it was worth planning additional shipments from North American ports to St Petersburg.

The arrival of excessive amounts of sugar in St Petersburg and the consequent drop in prices was perhaps considered the greatest risk in the sugar business. For example, in the summer of 1831 the sugar markets were, according to William Ropes, "dreadfully depressed", as the refineries had stopped buying raw sugar. This was a consequence of lower demand for sugar in Russia than had been expected.⁷⁶ At the beginning of the 1830s excess sugar was imported in the sense that competition between the Americans kept the price level low in Russia. This, at least, was the view of Minister Wilkins. In the summer of 1835 a situation advantageous to the American brokers seemed to come about when high prices in Havana reduced the number of vessels sailing to St Petersburg and as a result prices went up even more in St Petersburg than in Cuba. However, this led to an exceptionally large number of sugar vessels arriving in St Petersburg late in the autumn and sugar prices plummeted. As often in such situations, "compensatory shipments" to St Petersburg late in the autumn were made from (or via) New England ports and not directly from Havana.⁷⁷

Trading houses in St Petersburg were well aware of the fact that the Americans could easily import too much raw sugar. They therefore used to put off their purchases until late autumn, when prices sometimes fell by tens of kopecks per pood.⁷⁸ In theory the sugar brokers would have got the best results by exploiting the cheap Havana summer prices and best spring prices in St Petersburg, but in practice this was difficult to arrange. One way to solve the

⁷⁵ E.g. Samuel C. Gray and Francis A. Grey to Samuel A. Fabens, 15 April 1845, EI, FB, Letterbook; John D. Bates to Nathan Bridge, 3 May 1830, and 24 June 1830, PM, JDB, vol.1.; Edward C. Bates to John D. Bates, 9 March, 6 April, and letters from 14 April to 4 May 1833, PM, JDB, vol. 16. -Edward C. Bates sent thorough shipping lists also on American vessels that departed from St Petersburg; letters from 16/28 September to 23 October 1833, PM, JDB, vol. 16. - According to HMM (1847, vol.16, 529), 121,700 of 515,300 Havana boxes were taken to Cowes in 1846. The respective figures for Matanzas were 92,300 boxes and 285,200 boxes. - After HMM (1850, vol. 22, 536), 612,400 boxes were exported from Havana three years later, and more of it to Cowes (36 percent) than to any other place. After the same statistics, only 31,500 boxes were carried to Russia.

⁷⁶ William Ropes to Hardy Ropes, 20 August, and 10 September 1830, HUBL, RFP. On the same phenomenon also: Thomson, Bonar & Co. to Joshua Orne, 25 February 1802, EI, Price Currents, St Petersburg.

⁷⁷ In September Wilkins estimated that, exceptionally, at least 15 American sugar vessels would arrive in St Petersburg in the autumn. His guess proved correct, as according to both STA and consular reports, after mid-August precisely 15 vessels arrived in St Petersburg; Wilkins to Prince Lieven, 20 August 1835, enclosure in despatch Wilkins to Forsyth, 1 September 1835, NA M-35/13/10; STA 1835; CR 1835, NA M-81/3.

⁷⁸ E.g. Benjamin Shreve to his wife, 17 August 1830, PM, BSP, vol. 20.

problem, though uncommon, was to store sugar in England and transport it from there to Russia as early as possible during the following spring. Horace and Henry Gray, for example, used this method. Bates & Baring delivered their sugar from London to St Petersburg and the London firm was perhaps the major financier of this kind of business.⁷⁹

Trading houses in St Petersburg as well as sugar shippers came to realize that profits in the sugar business were sometimes huge, but so were losses.⁸⁰ In the autumn of 1821 John D. Lewis reported on several sugar refinery bankruptcies that led him to stop the delivery in St Petersburg of two cargoes of sugar (altogether 543,000 lbs) ordered from Havana. Lewis instructed the firm of Balfour, Ellah, Rainals & Co. of Elsinore to stop these cargoes in Copenhagen, as sugar was selling in St Petersburg at only 23 roubles per pood and "people were falling in every direction". One cargo remained in Copenhagen, but the other was probably carried to St Petersburg. Some of the sugar left in Copenhagen was sold, and the rest was transported to Russia the following year. However, Lewis had misjudged the situation, as raw sugar prices in St Petersburg suddenly increased late in the autumn. The sugar sold in Copenhagen would have sold in St Petersburg at a much better price. Boltons of New York, who took part in financing the operation, criticized Lewis for his arbitrary instruction.⁸¹

The prices paid for Havana raw sugar in St Petersburg varied rather significantly. Over the long term they went down. For example, in the mid-1820s the average price was around 30 roubles per pood, but by the beginning of the 1830s it was already below 25 roubles.⁸² One way to reduce the risks caused by any alteration in prices was to take sugar from Havana only as freight. However, this practice presupposed that a suitable financier could be found.⁸³ Decisions as to the freight option as well as purchasing decisions were often left to captains and supercargoes. In March 1823 Samuel Sanford of Boston suggested to his captain, John Brown, that one option was to take on assorted sugars of good quality and return from Havana to Boston, while another option was to take on white sugars and sail to St Petersburg. In any case, Brown was also to buy brown sugar, and if he did not bring it to Boston, he should send it to John Hodshon & Son in Amsterdam, or Collings & Maingy in Rotterdam.⁸⁴ Sanford's instruction to purchase brown sugar was related to the fact that white sugar could be purchased somewhat cheaper if inferior

⁷⁹ E.g. Horace Gray to John Eldridge, 25 November 1825, to Elliot Woodberry, 28 September 1825, and to Joshua Bates 7, January 1826, HUBL, HGP, vol. 17.

⁸⁰ E.g. William Ropes to Hardy Ropes, 7/19 September 1832, HUBL, RFP.

⁸¹ John D. Lewis to Good, Rainals & Co., 9 September, and 23 September 1821; Lewis to Balfour, Ellah, Rainals & Co., 27 September 1821; Lewis to William D. Lewis, 6 September, 8 September, 30 November, and 15 December 1822, HSP, LNP, vol. 44, 69, 70.

⁸² Kirchner 1975, 157. Generally speaking sugar prices on the world market decreased between 1820 and 1850, although they were higher than for about twenty years at the end of the 1850s; Whitten 1970, 228; see Homans 1858, 1775.

⁸³ E.g. Horace Gray to John S. Sleeper, 16 March 1826, HUBL, HGP, vol. 17.

⁸⁴ Sanford to John Brown, 25 March 1823, HUBL, Samuel Sanford Letterbook.

qualities were also bought at the same time. Thus those sailing to St Petersburg would buy brown sugar, but try to get rid of it by sending it to the United States or leaving it in Hamburg or Copenhagen.⁸⁵

8.1.4 The ship *Ariosto* of Boston

The ship *Ariosto* (361 tons), owned by the Boston merchants Samuel C. Gray and Francis A. Gray, was one of almost a thousand vessels altogether that sailed the sugar triangle. She sailed from Boston to St Petersburg via Havana about ten times. The Gray brothers usually had two vessels working the sugar triangle in the 1830s and the 1840s, though unlike others trading with St Petersburg they also often participated also in the coffee trade between Brazil, New Orleans and Boston.⁸⁶ The letterbook of the *Ariosto's* captain and supercargo, Samuel A. Fabens, from 1842-53 gives a representative picture of everything to do with the ship's sailing routes and the trade in raw sugar. Before Fabens' time, in 1838 and 1840-41, the ship had sailed the triangle Boston-Havana/Matanzas-St Petersburg-Boston under the command of Captain Daniel Lothrop, carrying around 1.1 million lbs of sugar and small consignments of coffee, cigars and logwood from Havana and Matanzas to St Petersburg. Her return cargo to Boston or New York usually consisted of hemp, iron and large quantities of manufactures.⁸⁷

As Fabens was new to the sugar business in 1842, his employers gave him detailed instructions concerning the financing and shipping of the product. In 1842 a third of the cargo was financed by Stieglitz, a third by the vessel's owners, a sixth by the captain and a sixth by the seller of the sugar in Havana. Above all Fabens was to comply with the condition imposed by Stieglitz, that the sugar should not cost more than 8 reals per arroba in Havana, with an exchange on London of 7 percent. Fabens took a cargo of 41,659 arrobas of sugar and 35,000 lbs of coffee to St Petersburg and brought back 11,820 poods of iron, 3110 poods of hemp and 1300 poods of cordage to Boston.⁸⁸

The arrangements in 1843 pretty much followed the pattern of the previous year. The price limit in Havana was now 10 reals per arroba. The Gray brothers' anxiety about excessive shipments of sugar to St Petersburg proved to be justified since Fabens did not manage to sell at the desired price of 27 ¼ roubles per pood. The Americans' share was left for sale with Stieglitz. Fabens

⁸⁵ E.g. Peter Lander to Benjamin Pickman, Jr., 30 March, and 2 April 1816, EI, BPP, vol. 2.

⁸⁶ In 1843 there were apparently three vessels involved, but for example in 1846 not a single one. Four ships belonging to the Gray brothers, the *Florence*, the *Mason* (295 tons) the *Republic* and the *Peterhoff*, were mentioned as excellent sugar vessels and sailed the sugar triangle until the Crimean War; STA 1836 (1355/2367), STA 1838 (2183/3299, 1583/2332), STA 1839 (462/1645), STA 1841 (1234/2154), STA 1842 (1066-/1896), STA 1843 (857/1615, 2806/3781), STA 1844 (227/1071, STA 1845 (652/1427), STA 1848 (375/640), STA 1849 (430/839), STA 1850 (2849/3777); CR 1836-53, NA M-81/3-5; see Kirchner 1975, 218-219.

⁸⁷ STA 1838 (2640/3277), STA 1840 (1265/2345), STA 1841 (445/1764); CR 1838-41, NA T-201/2, and M-81/4.

⁸⁸ Samuel C. Gray and Francis A. Grey to Samuel A. Fabens, 8 April 1842, and Samuel A. Fabens to Baring Brothers & Co., 30 May 1842, EI, FP, Letterbook; STA 1842 (1784/2550); CR 1841, NA M-81/4.

also had problems with the return cargo. The owners of the ship *Ariosto* instructed him to carry deal planks 16 feet long and three to four inches wide to Rio de Janeiro, but in the event, according to the consular reports of St Petersburg and Elsinore and STA, Fabens took a cargo of 1420 sklbs of hemp from Riga to Boston.⁸⁹

As the 1843 cargo of sugar sold badly, the Grays withdrew from the partnership with Stieglitz in 1844 and chartered their vessel to Morison, De'Conick & Co. of Havana. According to their freight agreement, the Boston firm took a third of the cargo, which they wanted to be sold in St Petersburg by Müller & Hauff, who were recommended by William Ropes's son-in-law. The Grays once again stipulated 27 ¼ roubles per pood as the price limit for their own sugar and instructed Fabens to stay in St Petersburg until he could sell the sugar at that price. However, the captain did not follow this instruction but instead took a freight cargo of deals and a small consignment of cordage from St Petersburg to Rio and then sailed from there to New Orleans, probably with a cargo of coffee.⁹⁰

In the spring of 1845 Captain Fabens got into trouble over a speculation in Havana because of the failure of the sugar harvest and the introduction of new Russian customs regulations. Even Fabens himself came to think that he had acted precipitately in investing his own resources as well as those of his employer and their new partner in St Petersburg, Abraham van Sassen, who had been introduced to them by the Bostonian Robert Hooper, in sugar which was exorbitantly priced. Fabens was alarmed by the purchases of "Spanish speculators" and decided to make his own "bold strike" by buying white sugar at 16 reals per arroba. Immediately afterwards, however, news of the changed regulations in St Petersburg brought the price down to 12 reals.⁹¹ After Fabens had endured a physically and mentally arduous voyage that lasted one and a half months, he found that the situation was brightening up a little in St Petersburg, since the price of Havana sugar had increased to 32 roubles. This, Fabens reckoned, was exactly equivalent to the buying price in Havana. Worse had been feared! Some of the sugar was sold and the rest was left with van Sassen to await an increase in prices. The discovery that freight rates had increased because there were then exceptionally few American vessels in St Petersburg brought some additional consolation. Fabens considered carrying lumber to Rio, but as the prices of sawn goods had increased in St Petersburg and at the same time decreased in Brazil because of massive Swedish exports, he decided to carry freight to New York. Fabens estimated that a cargo of iron,

⁸⁹ Samuel C. Gray and Francis A. Grey to Fabens, 25 January, 28 February, and 30 June 1843, Samuel A. Fabens to Stieglitz & Co., 19/31 July 1843, EI, FP, Letterbook; STA 1843 (1304/2359); CR 1843, NA M-81/4, and T-201/2.

⁹⁰ Samuel C. Gray and Francis A. Gray to Fabens, 7 April, 19 April, 14 May, 30 June and 7 October 1844, Fabens to Müller & Hauff, 28 August 1844, EI, FP, Letterbook; STA 1844 (953/1751); CR 1844, NA M-81/4.

⁹¹ Fabens to Samuel and Francis Gray, 30 April, 10 May, 11 May, 16 June, and 30 June 1845, Fabens to van Sassen, 8 May 1845, EI, FP, Letterbook; Kirchner 1975, 219.

hemp and flaxseed would bring in \$3000, three times as much as in the years when the freight rates were at their lowest.⁹²

In the summer of 1846 Fabens sailed in the *Ariosto* on the route Havana-Amsterdam-Rio-New Orleans, but he returned to the St Petersburg sugar trade in the spring of 1847 despite the fact that Francis Gray had visited St Petersburg the previous summer to see for himself the place where his sugar sales had "resulted terribly". His new trading partners were Edward C. Bates of Boston and John Thomas & Co. of St Petersburg. Fabens' instructions were that he was to buy sugar for not more than ten reals per arroba. If the price was higher Fabens was to wait in Havana for 20 days, after which the freight agreement between Bates and Gray would become void.⁹³ Raw white sugar was available well below the price limit, but the voyage to St Petersburg met with difficulties. The vessel leaked and part of the cargo got wet. The price in St Petersburg was about 26 roubles at eight months' credit. The shippers had to settle for that. The Grays did not give any further special instructions to Fabens; he was to proceed with the sale and the return cargo as he considered best. Some of the sugar was left with John Thomas & Co. in the hope of an increase in prices. When it came to arranging a return cargo, Fabens rejected an offer of \$2500 to take deals from Sweden to Rio. He decided instead to invest the proceeds of the sugar in 4870 deals and 1473 poods of cordage. He took Russian lumber as he judged it to be of better quality than the corresponding Swedish product, and 15 percent cheaper. The fact that in the summer of 1847 only one vessel had departed from St Petersburg for Rio de Janeiro and that carrying mainly linen manufactures also influenced his decision.⁹⁴

In 1848 Captain Henry Perkins sailed the *Ariosto* from Havana to St Petersburg and from there to Rio with a cargo of lumber, but the following year the ship once again under Fabens' command sailed the familiar route Boston-Havana-St Petersburg-Rio de Janeiro. Earnings from sugar, lumber and cordage were invested in Brazilian coffee, which was carried to New Orleans and Boston.⁹⁵

At the beginning of the 1850s, the Americans resumed control of the raw sugar market in St Petersburg. In 1851 American vessels carried nearly 53

⁹² Robert Hooper to Fabens, 14 April 1845, Samuel C. Gray and Francis A. Gray to Fabens, 15 April 1845, Fabens to Samuel and Francis Gray, 5 July, 16 July, August 1845, and Fabens to van Sassen & Co., 5 August 1845, EI, FP, Letterbook; STA 1845 (452/1196); CR 1845, NA M-81/4.

⁹³ By the agreement, Bates would supply his own supercargo and would take on two-thirds of the *Ariosto's* cargo. The freight rate was agreed at 5 pounds 5 shillings per ton. The owners of the vessel would take on the remaining third at their own expense; Samuel and Francis Gray to Fabens 3 May 1847, Fabens to Francis Gray, 3 May 1847, EI, FP, Letterbook.

⁹⁴ Samuel and Francis Gray to Fabens, 14 July, 16 July, 30 July, 30 September, and 21 October 1847, Fabens to Samuel and Francis Gray, 4 August, 23 August, 4 September, 16 September and 2 October 1847, EI, FP, Letterbook; STA 1847 (732/ 2140); CR 1847, NA M-81/4-5.

⁹⁵ STA 1848 (518/1048), STA 1849 (590/1255); CR, NA M-81/5 and T-201/2. In the autumn of 1847 Samuel Fabens took another vessel from Rio to San Francisco and from there to Honolulu; Kirchner 1975, 220.

million lbs (23,600 tons) of raw sugar, which was almost as much as in 1844. According to the Consul, William Ropes, the situation was unusual: high prices in St Petersburg due to strong demand coincided with exceptionally low prices in Cuba due to a bumper sugar harvest.⁹⁶ As Russia allowed the importation of refined sugar again after 1856 American sugar triangle sailing, which had lasted for thirty years, came to an end.⁹⁷ This could have been predicted as early as 1847, when Russia's own sugar plantations, mainly located in the Ukraine, already produced 16,300 tons. More than double (39,600 tons) the country's own production of cane sugar was still imported at the time, but imports were decreasing steadily and in 1860 they amounted to only 18,000 tons.⁹⁸

8.2 Cotton from New Orleans

In the first part of the 19th century cotton became the mainstay both of U.S. exports and indeed of the country's entire national economy. The industrial revolution in Britain and the cotton gin created the basis for mass production and by the 1850s both demand and supply seemed to be "unlimited".⁹⁹ In 1800 the production of cotton was still below 50 million lbs, but by 1860 it was already 1650 million lbs. The former figure was a tenth of world production, the latter a third. Raw cotton made up over half of U.S. domestic exports in the four last antebellum decades. According to Stuart Bruchey, the United States managed to finance 60 percent of its total expenditure on imports and to "accelerate rates of economic growth" on the strength of its cotton exports. Cotton sales directly and indirectly had a manifold impact on industrial development, the specialization of enterprise and international improvements.¹⁰⁰

In C. Knick Harley's view, cotton led the industrial revolution in the United States between 1812 and 1860. In the first quarter of the century the world's second-largest factory-based textile industry was created in the United States. According to Harley, the high tariff wall which slowed down the flow of British and Indian textiles had some influence on this development. The import of

⁹⁶ Ropes to Webster, 31 December 1851, NA M-81/5.

⁹⁷ The duty on raw sugar was cut from 3.80 silver roubles to three roubles per pood. The tariff on refined sugar was five silver roubles per pood. This was expected to lead to massive sugar smuggling, but this did not happen. In 1856-57 an average of 57.2 million lbs of sugar was imported into St Petersburg; only 10.5 million lbs of which was Havana sugar and less than half carried on American vessels; Appendix, list 1, table 32. In 1852, 29 English sugar vessels sailed from Britain to the Baltic Sea, and only 19 from elsewhere; McCulloch 1854, 567.

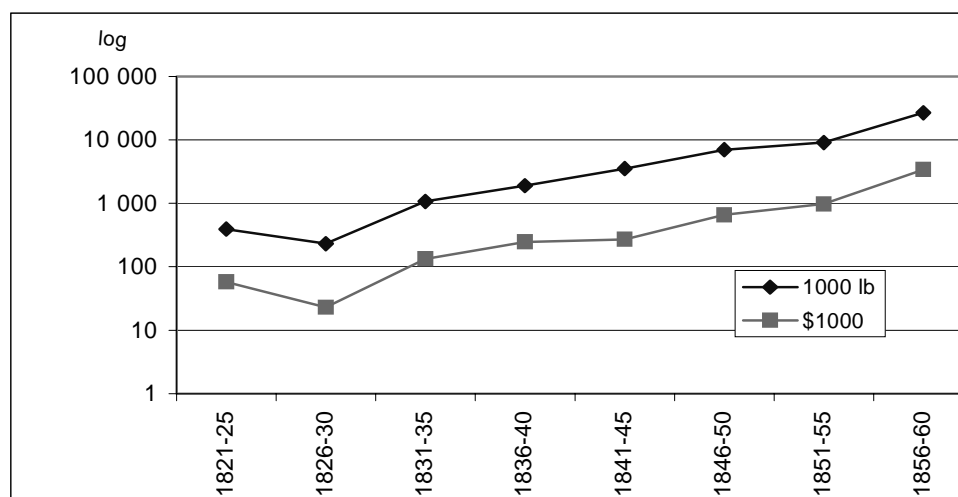
⁹⁸ Blackwell 1968, 54-55.

⁹⁹ McCulloch 1854, 454. On the importance of cotton, see e.g. North 1966, 67-70, 189.

¹⁰⁰ Bruchey 1967, 2-3 and table 1A; see Chandler 1978, 74 -75; Williams 1979, 305. Cotton contributed 22 percent of exports in 1803-07, 30 percent in 1816-20, and 63 percent in 1836-40. Average exports in 1821-25 amounted to \$24 million, while during the five antebellum years almost \$150 million; Taylor 1951, 451; North 1966, 75-76.

British textiles doubled, but American domestic production increased tenfold.¹⁰¹ British industry was the major purchaser of American cotton wool. Between 1820 and 1860 Britain's cotton imports increased tenfold, and the Americans sent 70 percent of their exports to British spinning mills. In 1840 Britain consumed almost 600 million lbs, and in 1860 1100 million lbs of cotton wool. U.S. consumption was roughly one third of these figures. In the years in question, cotton consumption in Russia was 14 million lbs and 87 million lbs, respectively.¹⁰²

Cotton wool played a central role in trade relations between the United States and Russia after 1815, and it became dominant in the 1850s when the level of American re-exports was low and the triangular trade via Cuba was about to end. The export of cotton to Russia rose to 43.6 million lbs at its peak in 1859, which was about three percent of total exports of American cotton.



Source: Appendix, table 43.

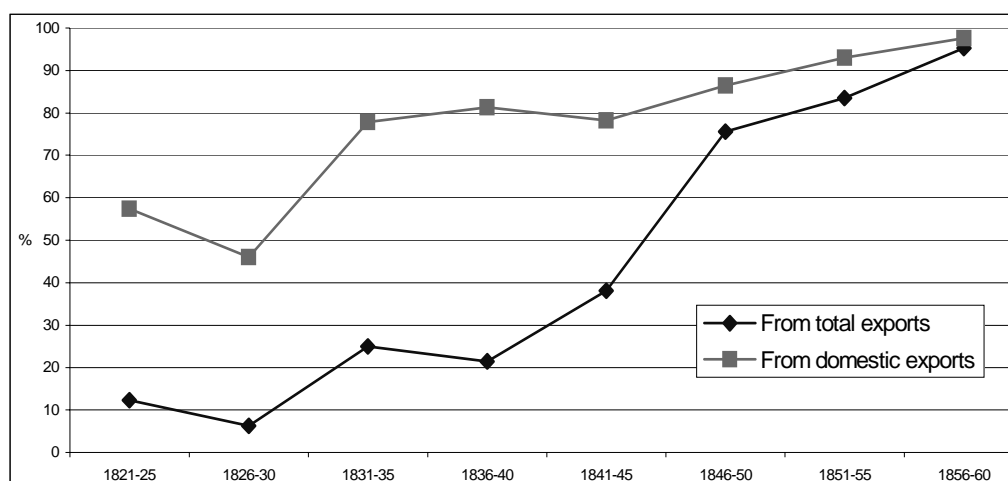
FIGURE 25 The export of American cotton to Russia, 1821-60.

Russian import statistics indicate that in rouble terms the United States (or "America") imported about a quarter of the raw cotton entering Russia in the 1820s, but the rate decreased in the next decade to about 15 percent. Meanwhile Britain's share approached 80 percent at the end of the 1840s. After the Crimean War the situation changed again and direct cotton imports from the United States rose to a third of the total, while the British share dropped to about 50 percent.¹⁰³ In any case cotton dominated U.S. domestic exports to Russia over the whole period. When re-exports declined, cotton gained the leading role in total exports as well.

¹⁰¹ Harley 1994, 511-536. In 1820 British textiles were imported worth \$7.6 million and American production was \$6.4 million. In 1849 the corresponding figures were \$14.8 million and \$65.5 million.

¹⁰² Williams 1979, 305; Bruchey 1967, 46 and table 1B; Jeremy 1981, 92; Davis 1979, 15, 41; Cain & Hopkins 1980, 475; De Bow 1853, vol. II, 49. More than half of Britain's cotton imports in the 1820s were taken from the United States to Liverpool. In the 1840s the proportion was almost 70 percent; Williams 1969, 183.

¹⁰³ See Appendix, table 33.



Source: Appendix, table 43.

FIGURE 26 The share of cotton in American exports to Russia, 1821-60.

For the 1820s American statistics record exports to Russia as only 11 percent of the amount the Russian statistics show being imported from America at the same time. In the next two decades the share was 17 percent on average, and in the 1850s 26 percent.¹⁰⁴ The great difference can be explained by the fact that cotton re-exported from Britain was recorded as arriving from “America”.

The figures for exports to Russia in the American statistics are slightly higher than the amounts ST II reports being carried from North America to the Russian ports on the Baltic Sea at least until the middle of the 1840s. A radical change took place later, when for some reason the American statistics recognize only a part of the cotton that was transported to Russia according to ST II. For example, in 1846-50 an average of 6.2 million lbs of cotton was exported from the United States to Russia according to ST II, which is almost double the amount the Commerce and Navigation series presents.¹⁰⁵ The Russian import figures must also be treated with suspicion. Illicit trading included a fair amount of cotton textiles, and cotton yarn was also imported without being declared to the customs.¹⁰⁶ Although it is difficult to imagine massive cotton wool smuggling, since this was a bulk product and almost duty-free, Russian statistics show much more entering the country than the Sound statistics

¹⁰⁴ Commerce and Navigation, 1821-60; Kirchner 1975, 162, note 54.

¹⁰⁵ For 1831-56 American exports statistics put the cotton exported to Russia at nearly 42 million lbs less than ST II. The American cotton exports to Russia reported by Homans (1858, 933) and McCulloch (1854, 454) are the same as in the Commerce and Navigation.

¹⁰⁶ The British consuls in St Petersburg, Daniel Bayley and John Gisborne, accused Polish and Russian Jews of illicit trading, purchasing large consignments of cotton at Frankfurt and Leipzig fairs and selling them in Moscow at prices that hardly covered the customs duties collected on “fair trade”; Gisborne’s report, 12/24 January 1824, PRO, FO 181/47; Bayley to Castlereagh, 12/24 March 1821, PRO, BT 6/68; John Parkinson (Königsberg), 1 February, 1818 and William Tuke, 27 February, 1819, PRO, BT 6/68.

recorded.¹⁰⁷ ST II figures show that in terms of the totals recorded in the Russian import statistics about 70 percent of the cotton wool Russia bought was carried there through the Sound in the 1830s, and about 85 percent in the 1840s. In both decades cotton yarn accounted for about 90 percent of the total.¹⁰⁸

Most of the cotton of American origin that ended up in Russia came via English ports either as a British re-export or in the form of cotton twist/yarn. In 1853 32,844 tons of cotton wool was imported, 32,607 tons of it of American origin, but only a quarter of it was carried from the United States in American vessels. Almost all the rest reached Russia via England.¹⁰⁹ The Russian customs did not require certificates of origin, but on the basis of English import and re-export figures, Walter Kirchner estimates that at least four times as many shipments of cotton reached Russia by way of England than directly from America. In the 1850s the amounts were double or triple that.¹¹⁰ In the 1840s, at least as represented by official statistics, Russia consumed perhaps five times the amount of cotton exported directly from America. Britain and the United States were not the only exporters of cotton wool to Russia: at least in the 1830s a fifth of the country's demand was met by imports from continental Europe and Turkey.¹¹¹

The cotton industry has been considered the most progressive branch of Russian industry in the early 19th century, and it has often been attributed a central role in initiating both industrialization and a purely capitalistic model of entrepreneurship.¹¹² Keys to the explanation of this state of affairs can be found

¹⁰⁷ For example, in 1841-45 the consular reports claim that St Petersburg received an average of 16.4 million lbs, but according to ST II, only 11.3 million lbs was transported to Russia through the Sound. The difference shows already in the 1820s in the figures of ST I relating to specific cities: ST I reports an average of 43,000 lbs less exported to St Petersburg in 1824-25, and 367,000 lbs less in 1827-28 than the consuls; ST I, 1824-29; ST II, 1841-45, DRA, ØTA; CR 1824-45, NA M-81/2-4. According to a British calculation, an average of 19.4 million lbs of cotton wool and 16.8 million lbs of cotton twist was imported into St Petersburg in the decade 1839-48. According to ST II, 17.1 million lbs of cotton wool and 17.2 million lbs of cotton yarn was transported to Russia; RPO, FO 184/11; Appendix, table 34.

¹⁰⁸ ST II, 1831-50, DRA, ØTA; Falkus 1972, 38; Kirchner 1975, 162; de Tegoborski (1856, vol. II, 37) reports almost the same cotton import figures as Falkus and Kirchner, with the difference that according to the former in 1820-50 an average of 7000 poods less cotton yarn and 6000 poods more cotton wool was imported. Significantly greater amounts of cotton wool and cotton yarn entered Finland than ST I shows. According to it, in 1824-29 altogether 10,500 lbs of cotton wool and 1100 lbs of yarn was carried to 14 different Finnish ports through the Sound. According to Virrankoski (1963, 139), however, imports to Finland averaged 92,700 lbs of cotton wool and 9400 lbs of yarn.

¹⁰⁹ Blackwell 1968, 86.

¹¹⁰ Kirchner 1975, 164-165. Kirchner's estimate gains support from various figures the consuls report. For example, the consul in Elsinore calculated that in 1851 115,600 bales of cotton were transported to St Petersburg through the Sound, 88,999 bales (77 percent) of it arriving from British ports, and 24,300 bales (21 percent) directly from the United States; Rainals to Webster, 3 January, 1852, NA T-201/3/17.

¹¹¹ Kirchner 1975, 164-165. According to ST II, only four percent of the cotton transported to Russia through the Sound originated anywhere but the United States and Britain; Appendix, table 34.

¹¹² See e.g. Blackwell 1970, 42-46; Crisp 1978, 308; Owen 1983, 4-65; Aer 1995, 38. The cotton-spinning industry produced many of the first Russian industrial stock

in several different areas. Walter Pintner considered the cotton industry, like the sugar industry, an “accidental” result of the protective customs tariff that served fiscal objectives.¹¹³ William Blackwell, for his part, emphasizes the low price of the British semi-manufactured article, cotton twist, the abolition of the British ban on the export of machines and the importance of American raw materials. Large-scale production of English cotton yarn made mass production of textiles possible already in the 1820s. However, the Russian tariff policy was the initial condition for this development: it protected the textile industry, as it did weaving and printing, at least after 1822.¹¹⁴ Already in 1824 Consul Daniel Bayley complained that the protective tariffs seriously undermined the market for English cotton textiles in Russia. The loss was not irrecoverable, however, as the import of English cotton twist increased considerably around the same time. Bayley considered the change an indicator of the “thriving state of cotton manufactures” in Russia.¹¹⁵ The situation was essentially the same as it was with raw sugar and the sugar industry, though the reasons behind it were more complicated. The case if the cotton industry was different in that foreign raw materials, cotton wool in particular, were considered to be competing with Russian hemp, flax and wool and thus damaging the linen industry. It was also feared that cotton factories would create an urban proletariat uncharacteristic of Russia, and that they would make the country dependent on foreign machines and raw materials.¹¹⁶

Relatively heavy import levies were collected on cotton yarn in Russia, whereas cotton wool could be imported almost duty-free. The practice may have been intended to protect the country’s domestic spinning industry, but it is difficult to avoid the impression that the import levies on British yarn were

companies, for example the Russian Cotton Spinning Company, which was founded in 1835 with a capital of 3.5 million roubles. This area was labelled “capitalistic” mainly because it employed “free labor”. However, the proportion of factory workers employed by the industry hardly reached 30 percent in the mid-1830s; Falkus 1972, 37-39.

¹¹³ Pintner (1967, 4, 107, 226) says that around 1820 practically no cotton industry existed in Russia. The situation had changed by 1850, but France still consumed three and Britain ten times more cotton wool than Russia. The “model” of Russian industrialization was, however, the same as in the West. Owen (1981, 7) also considers the high tariff wall one of the most important factors contributing to the birth of the cotton-spinning industry. Even in 1804-05 43, 900 poods of cotton yarn was imported to St Petersburg and only 1700 poods of cotton wool, but almost 1.8 million arshines of finished textiles; PM, BSP, vol. 3.

¹¹⁴ Import levies on finished cotton, silk and wool textiles were 100-250 percent; see Aer 1995, 38; Blackwell 1970, 42- 46, 250.

¹¹⁵ Daniel Bayley to E. Ward, 3/15 December 1824, PRO, FO 181/60. According to Bayley, 330,000 poods (11.9 million lbs) of cotton yarn were imported to Russia in 1824. According to ST I the amount was 11.4 million lbs; Appendix, table 34. In 1830 cotton twist was imported to St Petersburg to the value of 31.9 million roubles and cotton wool only to the value of 1.7 million roubles. In 1848 1.8 million silver roubles’ worth of twist was cleared for consumption, but 7.8 million silver roubles’ worth of cotton wool. Together with cotton textiles, these products accounted for just under a fifth of imports; Bayley’s reports 22 April 1831, and 31 July 1849, PRO, FO 65/194, 368.

¹¹⁶ See Pintner 1967, 226; Kirchner 1975, 160-161.

intended to shore up the national economy.¹¹⁷ However, the tariffs were not set so high as to give American cotton wool a crucial competitive edge. The import of cotton yarn remained vastly greater than that of cotton wool also because the production costs of British yarn and its price decreased suddenly. At the same time, the cost of transporting cotton wool increased significantly early in the 19th century.¹¹⁸

At the beginning of the 19th century the only spinning mill in Russia that used American cotton wool was the state-owned Alexandrovsk manufacturing plant, founded in 1798, which long remained the biggest such mill. Cotton spinning enterprises were set up during the Continental System, but privately owned mills vanished during the French invasion. Only a few spinning factories had been established by 1825.¹¹⁹ The Neva Factory, founded by Baron Stieglitz in 1833, became the most important factory for the Americans among those established later.¹²⁰ Cotton spinning arrived in Russia already in the form of a mechanized factory industry, and at the end of the 1830s there were three major private cotton mills in Russia as well as the Aleksandrovsk factory. The real breakthrough in the spinning industry took place in the middle of the following decade.¹²¹

The end of the British ban on machine exports in 1842 facilitated the expansion of the mechanized spinning industry, which was concentrated around St Petersburg. However, Belgian and German machines imported duty-free together with equipment produced by the Russian machine industry had already lifted the country to fifth place in the world in number of spindles.¹²² One who took advantage of the situation was a trading partner of William Ropes, William

¹¹⁷ In 1841 Charles Todd, U.S. Minister to Russia, considered the cotton tariffs entirely fiscal in character and essential to the national economy; Todd to Webster, 29/17 November 1841, NA M-35/14/5.

¹¹⁸ In 1821-25 price of yarn imported to Russia was 111 roubles per pood on average, but in 1831-35 only 59 roubles; Falkus 1972, 39; see Mavor 1914, 531-532. In 1826-30 the cotton twist imported into Russia was worth 18 times the cotton wool, and in 1831-35 yarn imports were still worth more than six times as much. Twist accounted for an average of 18 percent and 13 percent of total Russian imports in the same years; PRO, FO 65/236.

¹¹⁹ If the printing of imported calicoes is taken into account, the cotton industry was created in Russia at the end of the 18th century. The same applied to weaving, but both of them involved manufacturing plants producing on a small scale; Yatsunsky 1974b, 114-115; Dowler 1987, 40.

¹²⁰ Blackwell 1970, 46-47; Kirchner 1975, 160-163. The Aleksandrovsk factory also tried mechanical spinning of flax and hemp. The factory was closed in 1862; Aer 1995, 38, note 4. The Neva factory employed 1300 workers on 160,000 spindles by the early 1860s. HMM listed in 1852 (vol. 26, 85) the first founders of private cotton spinning factories in Russia: General Wilson (1800), Stieglitz, Wilson & Co. (1834), Mattzoff & Sobolefsky (1836), T. Wright & Co. (1838), E. Hubbard (1843), Loder, Busk & Co. (1845) and J. Thomas & Co. (1847); see Blackwell 1970, 250-251.

¹²¹ Yatsunsky 1974b, 114-115. The biggest private spinning factory was, according to Yatsunsky, "The Russian cotton-spinning plant" with a capital of 3.5 million paper roubles. Several merchants were founders of this joint-stock enterprise, and the Minister of Foreign Affairs, Count Nesselrode, was also a part owner.

¹²² Kirchner 1975, 161; cf. Pintner 1967, 107. Olga Crisp (1991, 262) considers that Russia gained the greatest benefits from the repeal of the British ban on machine exports.

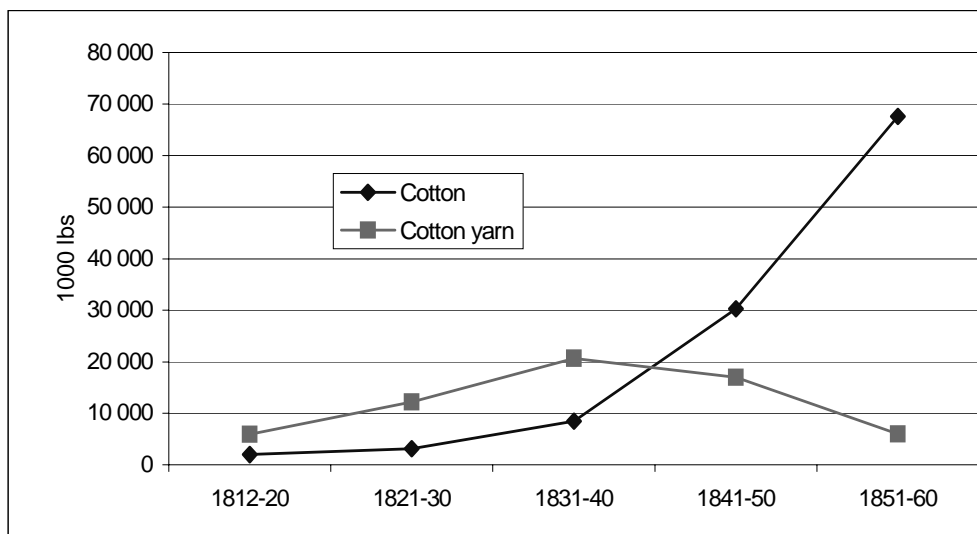
Gellibrand, who became a partner in a cotton spinning factory with 25,000 spindles set up by Hubbard in 1842.¹²³ Russia increased the tariff on cotton yarn to 6.50 silver roubles per pood simultaneously with the repeal of the British ban, whereas the tariff on cotton wool was 25 copecks. At that point the tariffs started to have a protective influence in favour of cotton wool and the spinning industry. Already in the summer of 1843 Minister Charles Todd thought that he had noticed that the higher tariffs on twist had increased the demand for American cotton wool. Two years earlier he had not believed that his fellow countrymen would have any chance of competing with British twist.¹²⁴

The Russian cotton industry underwent a thorough structural change in the mid-1840s: a major purchaser of cotton yarn turned into a major consumer of cotton wool. 1845 was the first year when more cotton than cotton yarn was imported. The spinning industry became the first “modern” branch of industry, as mechanization of the weaving industry was significantly slower, and weaving mostly remained at the level of handicraft until the 1860s. Between 1820 and 1860 cotton textile production increased six-fold. Moreover, while in 1820 the raw material was a British semi-finished product, by 1860 90 percent of the textiles were produced from domestic yarn. Around 1860 Russia was the fifth greatest cotton consuming country in the world, and many of the world’s largest cotton factories were around Moscow and St Petersburg. Cotton wool also became the country’s principal import article, accounting for 12.8 percent of imports in 1856. The products of the Russian cotton industry were not of especially good quality, and except on the domestic market and in Finland they were only saleable in Asia. The development of the cotton industry caused gradual long-term decline of the peasant-based linen industry, which had been a major contributor to Russian exports.¹²⁵

¹²³ According to Gellibrand, the heavy customs tariffs on twist made the enterprise advantageous; Gellibrand to William Ropes, 21 August/2 September 1842, HUBL, RFP; see Blackwell 1970, 250; Owen 1991, 7; Pintner 1967, 228. The tariff on cotton yarn had been 5 roubles per pood since 1824. The new tariff was set at about 30 percent of the price of the product. The tariff on yarn was of the same order as the price of cotton wool in St Petersburg.

¹²⁴ Todd to Webster, 17/29 November 1841, and to Legaré, 19 June/1 July 1843, NA M-35/14/5,32. Cf. Cobden 1994, 195; Gibson to Webster 30 December/ 11 January 1842, NA M-81/4.

¹²⁵ In 1859 it was calculated that there were 14 cotton mills in St Petersburg (494,000 spindles), 27 in Moscow (470,000 spindles), and three in Riga (38,000 spindles); The weaving industry produced 35 million arshines of cotton textiles in 1820 and 228 million arshines in 1860; see Crisp 1978, 308; Falkus 1972, 38-39; Blackwell 1970, 42-46; Kirchner 1975, 160-163; Aer 1995, 40, note 1; Owen 1991, 7; Rieber 1982, 76; Yatsunsky 1974b, 114-115. Consul Gibson noticed already in 1846 that the Russians hankered especially for Chinese markets for their cotton textiles; Gibson to Buchanan, 1/13 January 1846, NA M-81/4.



Sources: Falkus 1972, 38; Kirchner 1975, 162.

FIGURE 27 Imports of cotton and cotton yarn to Russia, 1812-1860.

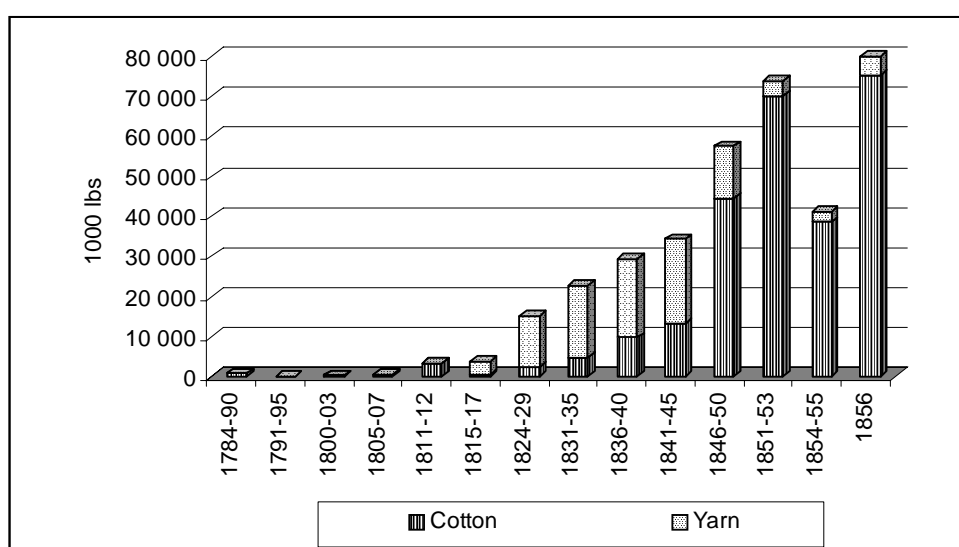
The sale of cotton yarn to Russia was solely in the hands of the English, although the Americans had tried to enter the market during and after the Napoleonic Wars. In 1815 several small consignments of cotton yarn were shipped from North America to St Petersburg, and in 1817, for example, the Boston merchants Charles and Thomas Parsons shipped twist from the Dorchester Cotton Factory to John Venning.¹²⁶ However, the venture was not successful, judging by the fact that, despite Parsons' lively contacts with Russia, the shipments did not continue. In 1823 John D. Lewis observed jealously on the spot how English merchants "made great profits on twist", but cotton wool did not sell.¹²⁷ The following year he claimed that the Americans could have monopolized the twist market within a few years, if they had so desired. The sale of twist "belongs of right to the United States", but that was not enough, since according to Lewis the American manufacturers should also have noted the sorts of yarn the Russians used, which differed significantly from those used by the American spinning industry. Moreover, "owing to the injudicious mode of manufacturing and packing", the sale of twist had been left to the English.¹²⁸

¹²⁶ STA 1815 (390, 917, 555, 772); STA 1817 (1009), PM, CTPP, "Bark Garland". In 1811 the Americans carried east 11,900 lbs of possibly British cotton twist through Sound, priced at \$1 per lbs, whereas bales of cotton wool were at only 11c per lbs; NWR 1817, vol. XII, 219.

¹²⁷ John D. Lewis's circular, 14 November 1823, HSP, LNP, vol. 70.

¹²⁸ John D. Lewis's, undated memorandum in 1824, HSP, LNP, vol. 70. On Lewis's earlier attempts to sell twist: William D. Lewis to John D. Lewis, 1 March 1821, and 6 July 1821, HSP, LNP, Letters 1810-41. Consul Gibson calculated at the end of 1827 that during the year in question 36,600 poods of cotton wool and 334,500 poods of twist had been imported to St Petersburg. The latter were valued at 33.0 million roubles, but the former at only 1.1 million roubles. Due to the high import levies, finished cotton textiles were imported to the city only to the value of 7.5 million roubles; Gibson to Clay, 27 October 1827, NA M-81/2. Consul Bayley reported the same figures as Consul Gibson; Bayley's report 6/18 December 1828, PRO, FO

The change in the relative quantities of cotton yarn and cotton wool imported is also clearly apparent in the figures of ST II, which show that until 1845 more cotton yarn than cotton wool was shipped through the Sound to Baltic Russia.¹²⁹ Practically all the cotton yarn transported to the Baltic came from Britain, and it was exported almost exclusively to Russia. The annual total reached approximately 20 million lbs at the beginning of the 1830s, and remained at that level for about fifteen years. After that the amounts passing Elsinore started to decline considerably. Meanwhile by the middle of the 1840s the figure for cotton wool had increased to 20 million lbs and within less than ten years, before the outbreak of the Crimean War, it had reached almost 70 million pounds.



Sources: Johansen 1983a (1784-95); ST I (1800-03, 1805-07, 1811-12, 1816-17, 1824-29), DRA, ØTA; ST II (1831-56); DRA, ØTA.

FIGURE 28 Cotton and cotton yarn passing through the Sound, 1784-1856.

In 1815-17 by far the most important port of cotton export was Savannah. An average of 164,000 lbs of cotton was shipped from there to the Baltic, almost 30 percent of the amount that passed Elsinore. The loading ports next in importance were also American: Boston, Charleston, New York and Salem. However, ten years later a major proportion of cotton as well as twist was exported to the Baltic from British ports.¹³⁰ The change was abrupt, since according to ST I almost 80 percent of the cotton carried to the Baltic in 1815-17 came directly from the United States, but the proportion dropped to 25 percent by the end of the 1820s. The change may be related to the fact that the Americans started major shipments

65/174. According to ST I only 26,800 poods of cotton wool was transported through the Sound to St Petersburg in 1827, but 335,500 poods of cotton twist.

¹²⁹ 1845 was also the first year when more cotton wool (24.9 million lbs) than cotton yarn (17.2 million lbs) was imported to St Petersburg; PRO, FO 184/11.

¹³⁰ According to ST I, an average of 12,954,000 lbs of cotton yarn was transported to the Baltic Sea in 1824-29. The major port of export was Hull (94 percent) and the major port of destination St Petersburg (98 percent).

of raw sugar from Cuba to Russia at the same time. It may have been less profitable to transport cotton to St Petersburg. However, British merchants took over the cotton market in St Petersburg at that time.

TABLE 21 Ports of departure of cotton passing through the Sound, 1803-29.

	1803, 1805-07		1815-17		1824-29	
	1000 lbs	%	1000 lbs	%	1000 lbs	%
London	57	10.1	22	3.9	1 331	58.0
Liverpool	43	7.7	8	1.4	314	13.7
Charleston	62	11.1	65	11.7	127	5.5
New York	13	2.3	45	8.1	122	5.3
Boston	17	3.0	93	16.7	119	5.2
Savannah	125	22.3	164	29.4	55	2.4
Philadelphia	17	3.0	6	1.1	54	2.4
Others	227	40.5	154	27.6	172	7.5
Total	561	100.0	557	100.0	2 294	100.0

Sources: ST I (1803, 1805-07, 1815-17, 1824-29), ØTA, DRA.

The situation presented in Table 21 had changed by 1851 in that Hull had become the major port of cotton export. Rainals, consul in Elsinore, calculated that altogether 115,600 bales of cotton passed the Sound, 46,900 bales (41 percent) of it coming from Hull. The next most important port of export for cotton was Liverpool (24,100 bales), with New Orleans (11,900 bales) only coming after that.¹³¹ Right at the beginning of the 19th century, Copenhagen was the principal destination for on the Baltic Sea, but by the late 1820s the amounts transported there were only on average a sixth of the amounts carried to St Petersburg.

TABLE 22 Ports of destination for cotton passing through the Sound, 1803-29.

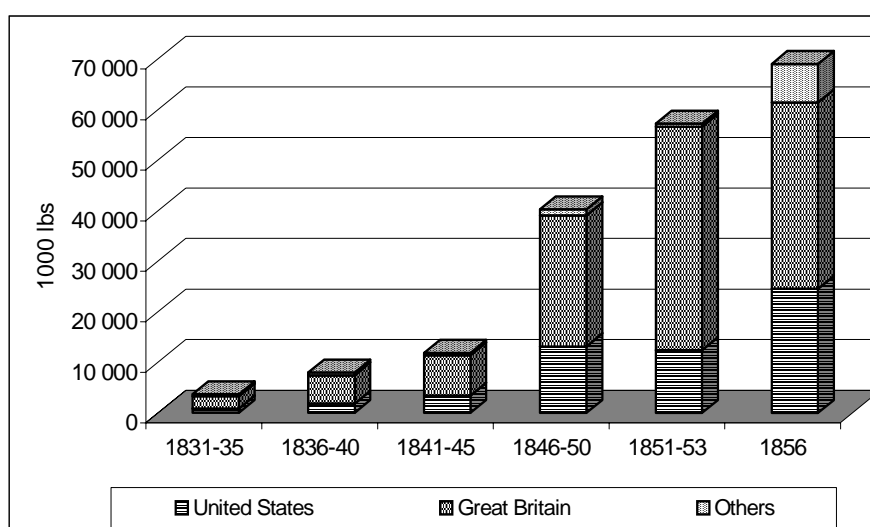
Ports	1803, 1805-07		1824-29	
	1000 lbs	%	1000 lbs	%
St Petersburg	139	24.8	1 425	62.1
Riga	7	1.2	240	10.5
Stockholm	42	7.5	192	8.4
Stettin	5	0.9	186	8.1
Danzig	1	0.2	41	1.8
Königsberg	1	0.2	28	1.2
Copenhagen	255	45.5	101	4.4
Others	113	19.8	81	3.5
Total	561	100.0	2 294	100.0

Sources: ST I (1803, 1805-07, 1815-17, 1824-29), ØTA, DRA.

According to ST II, 80 percent of cotton passing Elsinore eastbound in 1851-56 was destined for Russia, 13 percent for Prussia and five percent for Sweden.

¹³¹ Rainals to Webster, 3 January 1852, NA T-201/3/17. The next ports in importance were Leith (11,000 bales), New York (6300 bales), Charleston (2500 bales), Boston (2100 bales) and London (2100 bales). The total amount coming from American ports was 24,300 bales (21 percent).

Although most of the product originated in the United States, ST II recorded almost 70 percent of the total amount as coming from Britain. The United States contributed about a quarter in the 1830s, in the 1840s a third but only a fifth at the beginning of the 1850s. Although British cotton yarn exports started to decline abruptly in the mid-1840s, the “deficit” was made up by cotton wool transported from British ports. American exports could not, at least at first, meet the increased Russian demand. In 1836-40 an average of 2.9 million lbs of cotton loaded on in the United States was carried through the Sound per year, and an average of 6.6 million lbs loaded on in Britain. In the years 1851-53, i.e. before the Crimean War, the corresponding amounts were 13.1 and 47.1 million lbs.¹³²



Source: Appendix, table 34.

FIGURE 29 The countries of departure of cotton passing through the Sound to Russia, 1831-56.

U.S. cotton exports started to grow already in the 1790s¹³³, but this expansion did not reach the Baltic. Small amounts were carried as far as Copenhagen. The U.S. export statistics record the first consignment of cotton (17,100 lbs) to Russia

¹³² Consul Gibson calculated that in 1842 2.6 million lbs was carried directly from the United States to St Petersburg (according to ST II, 1.4 million lbs to Russia). This was 17 percent of the total amount imported to the city. He calculated the figures for 1845 at 7.3 million lbs (also ST II) and about 30 percent; Gibson to Buchanan, 1/13 January 1846, NA M-81/4/101. According to Consul Hutton, direct import from the United States to St Petersburg was only less than a fifth of total imports in 1831-35; Hutton to Marcy, 17/29 November 1856, NA M-81/5. According to ST II, 27 percent of the total amount of cotton carried to Russia came from the United States and 70 percent from Britain in 1831-35. 90 percent of the cotton carried from the United States as well as from Britain to the Baltic was for Russia. ST II is not complete for cotton, reporting for example for 1831-35 an average of 893,000 lbs carried from the United States to Russia, when, totalling the amounts each vessel was reported as carrying in the customs books, American vessels alone carried 1,071,000 lbs; Appendix, table 34.

¹³³ According to Pitkin (1815, 58), average exports in 1791-93 were 270,000 lbs, as much as 9.3 million lbs in 1796-1800 and even 69.9 million lbs in the triennium after the Embargo.

only in 1797.¹³⁴ It is entirely due to the exceptional conditions during the Napoleonic Wars that, according to Pitkin, in 1809-11 an average of 4.6 million lbs was exported from the United States to Russia, an amount that was reached again only at the end of the 1840s.¹³⁵ According to Consul Levett Harris, the Americans transported 5.3 million lbs of cotton through the Sound in 1811, valued at \$797,000. This was almost 90 percent of U.S. exports to the Baltic. Miers Fisher reported that for the first time significantly more cotton had arrived in St Petersburg than the market could take. However, not all of it was intended for Russian consumption.¹³⁶

About 95 percent of the cotton transported to the Baltic by American vessels between 1815 and 1853 went to St Petersburg, and 92 percent of it carried directly from the United States. It is highly probable that shipments that were registered as loaded on in London or Amsterdam also originated in North America.¹³⁷ The information to be found in STA II and in the reports of the consuls in St Petersburg differs slightly with respect to cotton exports and imports. According to STA II an average of 123,000 lbs (four percent) less cotton was carried to St Petersburg than the American consuls recorded arriving in 1834-50.¹³⁸

¹³⁴ ASPCN 1797, 356. Relatively little cotton was exported to the Baltic before the Napoleonic Wars: in 1791-95 an average of 206,000 lbs, but on the other hand, the total U.S. export was not more than 1.7 million lbs; Johansen 1983b, 175; Johansen 1986, 130; Pitkin 1815, 56. Small amounts of the consignments reported as going to Copenhagen sometimes went to St Petersburg. It is not sure, for example, where Captain Benjamin Henderson took a cargo of 10,000 lbs of cotton in March 1794, since the vessel brought her return cargo from St Petersburg; STA 1794 (61/951). An average of 24,000 lbs cotton the Americans supplied ended up in Copenhagen in 1796-80, and an average of 70,000 lbs in the years 1806-07. After 1815 only small consignments were left in Copenhagen, and even they sold badly; e.g. Forbes to Thomas H. Perkins, 28 July 1818, HUBL, FC, A-3 (Brig Josephine).

¹³⁵ It was exceptional for the Americans to carry cotton wool directly to St Petersburg prior to the Continental System. In the autumn of 1802 the ship *Charleston* belonging to Isaac Wright & Co. of New York carried 2600 lbs of cotton among a mixed cargo. In the autumn of 1803 the ship *Alex Smith* belonging to Minturn & Champlin of New York carried 88 bales, that is 26,400 lbs, of cotton to St Petersburg; Pitkin 1815, 196; Appendix, table 34.

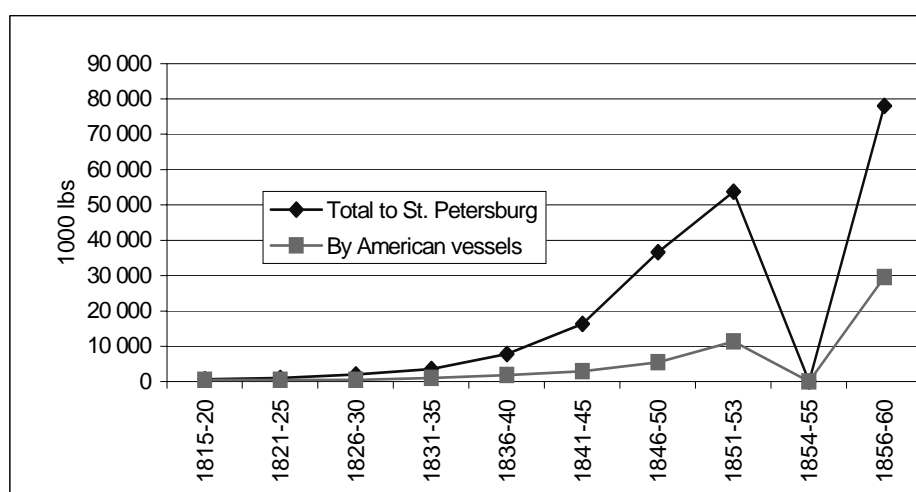
¹³⁶ Harris to Monroe, 10/22 December 1811, NA M-81/2; Fisher to Josiah Orne, 5 June 1811, EI, OFP, vol. 27/1.- According to Pitkin (1815, 196), 9.4 million lbs was exported to Russia in 1811.

¹³⁷ E.g. STA 1840 (1218); CR 1840, NA M-81/4 (brig *Essex* of Newburyport).

¹³⁸ Appendix, table 35. The differences are inconsistent and cannot always result from the difference between the gross and net weights only. STA and the consuls of Elsinore and St Petersburg can all give somewhat divergent total amounts. For example, in 1849 altogether 19 vessels carried cotton to St Petersburg, and all sources provide different figures for 15 of them. According to STA II, these 15 vessels carried altogether 7,525,000 lbs of cotton, according to the shipping list of the consul in St Petersburg 7,763,000 lbs (according to the consul's annual report only 6,784,000 lbs), and according to the shipping list of the consul in Elsinore 7,922,000 lbs. The same volume of cargo is reported for four vessels in all three different sources; STA 1849; CR 1849, NA M- 81/5 and T-201/2. In 1845, for example, the gross and net weight produced the different cargo records for the following vessels: the ship *Mauran* of Providence, the ship *John Dunlop* of Portland, the ship *Denmark* of Providence, the ship *Rajah* of Boston, and the bark *Byron* of Newburyport; STA 1845 (224, 371, 413, 564, 638); CR 1845, NA M- 81/4.

Cotton was mainly carried from the United States to Russia in American vessels. If the figures in STA and the consular reports give for each vessel are compared with those in ST II, the American proportion is almost 70 percent of the total in 1831-53. In the 1830s and the 1840s usually only American vessels transported goods directly from the United States to St Petersburg. The most remarkable exception to that rule was the year 1850, when according to ST II about 21 million lbs of cotton loaded on in the United States went to Russia, but according to STA and the consul in St Petersburg only a little over a million lbs was carried on American vessels. It may be that the Cuban sugar traffic, which had temporarily revived, had some effect on this, attracting American merchants to a more profitable business than the transport of cotton.¹³⁹

The cargoes of American vessels contributed as much as 70 percent of total cotton imports to St Petersburg after the Napoleonic Wars, but the proportion decreased later and was at its lowest in the 1840s, at the very moment when the Russian demand suddenly started to increase. Perhaps the end of the sugar trade from Cuba after the Crimean War also had some influence on the fact that the American proportion clearly increased. The Civil War interrupted this development. The amount of cotton carried to other Russian ports on the Baltic Sea, not including St Petersburg, remained insignificant.¹⁴⁰



Source: Appendix, list 1 and table 35.

FIGURE 30 Total import of cotton and cotton carried by American vessels to St Petersburg, 1815-60.

Already at the beginning of the 19th century the St Petersburg firm of Meyer & Brückner, which was actively involved in trade between America and Russia, considered cotton the thing of the future on the Russian market. According to the

¹³⁹ Appendix, table 35. In 1850 only one American vessel sailed to St Petersburg with a full cargo of cotton: the ship *Monterey* of Boston, which departed from New York. Ten foreign vessels sailed in the same year directly from the United States to St Petersburg; STA 1850 (7719); CR 1850, NA M-81/5.

¹⁴⁰ In 1835-38 an average of 0.4 million lbs was imported to Riga, for example, and 1.7 million lbs in 1850-52 CR 1834-52, NA M-485/1, and PRO, FO 65/397, 413.

firm, the best Georgia upland cotton was the most suitable raw material for the Russian cotton industry which was about to come into existence.¹⁴¹ This may have been true, but the British spinning mills and cotton brokers derived advantages from the situation with the help of the Russian tariffs. It is significant that the cotton wool the Americans carried to St Petersburg in the 1820s did not always sell, and it was rumoured that it was re-exported to Central Europe and sometimes even to France.¹⁴² In the autumn of 1822 John D. Lewis enjoined: “*Warn every person not to send cotton here ... cannot sell a pood*”,¹⁴³ and according to STA, the next year only 180,000 lbs was carried to St Petersburg and an exceptional amount to the “Baltic”: 422,000 lbs. However, it is highly probable that most of the latter amount also ended up in St Petersburg.

A significant proportion of the cotton wool arriving in St Petersburg in the 1830s passed through the hands of William Ropes & Co. Already in 1833-34 Ropes traded about 1800 bales, and according to him the Russian market could take no more. For Ropes, cotton was “*a perfectly safe and good business – not yielding great but secure profits*”.¹⁴⁴ Initially he supplied the product for the Aleksandrovska factories, and later for Stieglitz. In the 1840s, Barings in London as well as Stieglitz became increasingly involved in the American cotton wool business. Barings gained ground over for instance Browns, the American trading house, through their more generous provision of credit.¹⁴⁵

U.S. ministers and consuls paid much more attention to the market for cotton wool than to “foreign” Cuban raw sugar, with its much higher market value. In 1833 James Buchanan was still quite optimistic about the prospects for cotton wool, as he believed that Russia would come to establish cotton tariffs as favourable to the Americans as they had with sugar.¹⁴⁶ John Randolph Clay, also thought it obvious that Russia would not hesitate to increase the tariff on cotton yarn sharply once the country’s own spinning industry capacity was sufficient. He was also concerned about the fact that to an ever-increasing degree cotton wool was carried by way of Britain and not directly from the United States.¹⁴⁷ Minister William Wilkins, for his part, considered cotton “the essential and deeply interesting” product in American trade with Russia. Its sale would be advantageous to both the southern planters and the northern carriers, and this made it a much more desirable commodity than raw sugar, which would only benefit the latter.¹⁴⁸

For the Americans cotton wool remained almost always the thing of the future on the Russian market, as the British took over the supply of cotton wool when the export of twist ceased. After the Crimean War, the situation changed

¹⁴¹ Meyer & Brückner to Benjamin Shreve 1809, PM, BSP, vol. 3.

¹⁴² John Gisborn’s report 12/24 January 1824, PRO, FO 181/47.

¹⁴³ John D. Lewis to William D. Lewis, 30 November 1822, HSP, LNP, vol. 30.

¹⁴⁴ William Ropes to Hardy Ropes, 7/19 July 1834, HUBL, RFP.

¹⁴⁵ E.g. William Ropes to Hardy Ropes, 23 October/4 November 1833, HUBL, RFP; see Kirchner 1975, 214; Perkins 1975, 102.

¹⁴⁶ Buchanan to McLane, 31 July 1833, NA M-35/12/21.

¹⁴⁷ Clay to McLane, 6/18 February 1834, NA M-35/12/19.

¹⁴⁸ Wilkins to Forsyth, 1 September 1835, NA M-35/13/1.

for a year or two, and at that time trade between the United States and Russia was almost totally a matter of cotton.¹⁴⁹ The perceived bright future prospects for cotton wool also made the Americans intensify their network of consuls. In February 1857 Francis S. Claxton was appointed consul in Moscow, as the city was expected to become the most significant centre of consumption of American cotton. The consulate in Helsinki, founded in 1850 under Reynold Frenckell, also came into existence for reasons connected to American cotton interests.¹⁵⁰

The cotton wool the United States supplied to Baltic Russia originated of course from the Southern States, but the real cotton ports did not dominate the trade before the antebellum years. Cotton was shipped to Europe from the southern ports along the so-called cotton triangle for much of the first half of the 19th century. The traffic was triangular in that cotton vessels arrived from Europe with goods for New York and the voyage continued from there to some cotton port and then across the Atlantic once again. In that way trade with Russia followed the general model, except that New York was the original port of this triangle rather than Boston. Significant amounts of cotton intended for export travelled in the opposite direction too, first from the South to New York and from there to British ports. In the mid-1850s this changed and there was markedly more direct trade between the cotton ports and Europe.¹⁵¹

South Carolina and Georgia were the major centres of cotton production at the beginning of the 19th century, but the emphasis gradually shifted to Alabama, Mississippi and Louisiana. At the same time Savannah and Charleston gave way to New Orleans and Mobile, which became the major export ports. The transportation of cotton from New York, however, was left to New England merchants and their vessels.¹⁵² Commission and insurance income from the cotton trade also went to the north, while New York became clearly the financial centre of American trade.¹⁵³ Although direct exports from the south strengthened, cotton still remained New York's principal export commodity. Usually more cotton went from the southern ports to Boston than

¹⁴⁹ According to Consul William Wilkins, the value of the goods carried to St Petersburg from the United States by American vessels in 1858 was altogether 9,367,000 silver roubles, of which cotton wool accounted for 7,779,000 silver roubles; Wilkins to the Department of State, 1 January 1859, NA M-81/6.

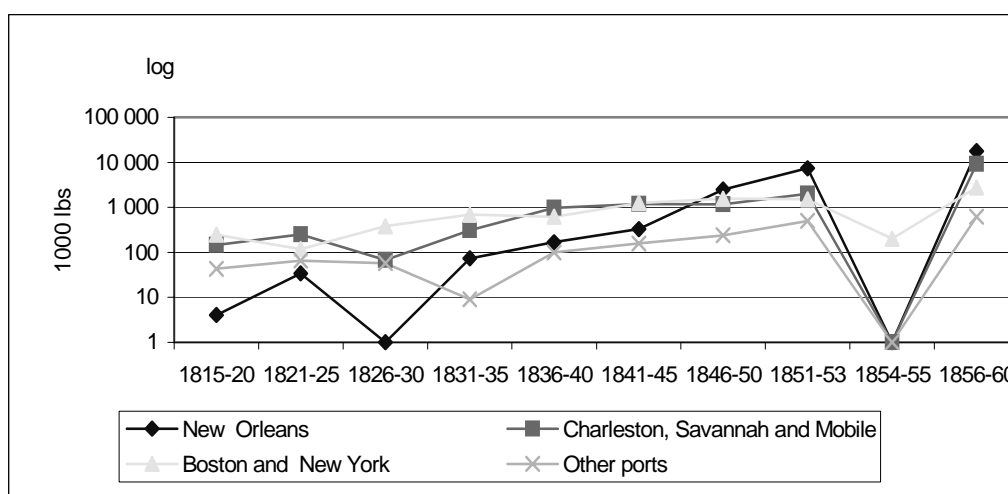
¹⁵⁰ Seymour to Marcy, 12/24 July 1856, NA M-35/17/81; Kirchner 1975, 22; Saul 1991, 260.

¹⁵¹ During the cotton season 1858/59 ending in mid-May, Mobile and New Orleans sent 28,800 bales to New York, 310,400 bales to northern ports and 1,866,000 bales directly to foreign ports; Albion 1961, 115-116.

¹⁵² Already in 1822 cotton was New York's major domestic export commodity (about 40 percent), and when rice and tobacco carried from southern ports are added in to the figure, they made up 55 percent of exports. In the same year New Orleans sent 156,000 bales of cotton, 64,000 bales of which directly to Britain, 28,000 bales to New York and 7000 bales to Boston; Albion 1961, 100-101

¹⁵³ Bruchey 1967, 222, 226, table 1D; Douglass 1971, 94; Kirchner 1975, 132; Taylor 1951, 197-198; see Matthews 1979, 307-308; Chandler 1978, 76. Southern cotton was carried to Europe via New York, although this made the voyage about two hundred miles longer, and freight and re-loading costs increased the price. According to Albion (1961, 96), above all "the commercial attitude of the southerners explains this kind of model of trade".

to New York, but there it served more as the raw material for the domestic industry than as an export commodity.¹⁵⁴



Source: Appendix, table 35.

FIGURE 31 Ports of departure of cotton carried on American vessels to St Petersburg, 1815-60.

The importance in the cotton trade of ports in the northern states and New York was particularly clear with respect to Russia. According to STA and consular reports, 40 percent of all the cotton the Americans shipped to Russian ports in the years 1815-50 was sent from Boston and New York. Vessels that had left New York with a full cargo of cotton were quite usual in the Sound¹⁵⁵ and in several years Boston was actually the principal port of departure for cotton bound for the Baltic market. Unlike cotton from ports further south, the cotton that left from New England was sent in comparatively small consignments of below 100,000 lbs. Cotton could also be a part of the general cargoes that Boston merchants used to carry,¹⁵⁶ in which case even quite large consignments were possible. In 1841, for example, the ship *Hanover* of Providence (329 tons) belonging to James J. Rhodes carried 245,000 lbs of cotton from her home town to St Petersburg along with rice and logwood. It is indicative of the volume of

¹⁵⁴ In the season 1836/37 New Orleans sent 39,000 bales to Boston and 23,000 bales to New York; Albion 1961, 101. In 1852-53 New Orleans' average export was 1,540,000 bales. Half of it (811,000 bales) went to Liverpool, 188,000 bales to Le Havre, 140,000 bales to Boston, 87,000 bales to New York and 26,000 bales (under two percent) directly to St Petersburg; HMM 1853, vol. 24, 626.

¹⁵⁵ In 1843, for example, the ship *St. Lawrence* of Philadelphia (523 tons) carried 581,000 lbs of cotton from New York to St Petersburg, the rest of her cargo consisting of only mahogany, campechewood and sarsaparilla. The bark *Louisa* (267 tons) and the ship *Elsinore* (597 tons), both of New York, carried similar cargoes; STA 1843 (683, 733, 1466); CR 1843, NA M-81/4 and T-201/2; cf. Williams 1979, 309-310.

¹⁵⁶ For example, the cargo of the ship *Cabinet* of Boston (302 tons), which passed *Elsinore* in September 1835, included in addition to 155 bales of cotton (62,700 lbs), 111 boxes (55,700 lbs) of sugar, 40 casks (31,900 lbs) of coffee, 132 bales (15,700 lbs) of sarsaparilla and as much as 514,000 lbs of logwood and fustic; STA 1835 (2271); CR 1835, NA M-81/3, and T-201/1.

cotton exports that the cargo in question amounted to more than a third of the cotton the Americans exported to St Petersburg that year.¹⁵⁷ Before the mid-1840s cargoes taken to the Baltic from southern ports, especially from Charleston, generally consisted of both rice and cotton. In 1840, for instance, the bark *Brighton* of Boston (337 tons) carried 349,000 lbs of cotton and 125,000 lbs of rice from Charleston via Gothenburg to St Petersburg.¹⁵⁸ Cargoes of cotton from southern ports to St Petersburg were exceptional.¹⁵⁹

In the 1850s cotton exports to Russia increased many times over. The amount carried in American vessels in the five years after the Crimean War was almost six times greater than the amount carried ten years earlier. At the same time the emphasis in exports moved further south, although exports from northern ports and from New York actually increased. According to consular reports from St Petersburg, more than 90 percent of cotton exports to Russia departed from southern ports and 60 percent from New Orleans alone.¹⁶⁰ In 1856 the number of vessels carrying only cotton from southern ports to St Petersburg increased to 18, many of them vessels of more than 1000 tons which could carry over 1.5 million lbs.¹⁶¹

Despite the fact that by the summer of 1856 there was already a surfeit of American cotton on the St Petersburg market,¹⁶² imports nevertheless increased during the next three years. Non-American vessels also started to carry cotton: in 1857 four foreign vessels carried a total of 2.1 million lbs of cotton from Boston, Mobile and New Orleans to St Petersburg. However, this amount was still small compared with the 31.4 million lbs the Americans carried. This sudden increase in the cotton trade can partly be attributed to political developments. At least according to Consul Hutton, the Russians were now prepared to deal directly with the Americans rather than resorting to the help of English brokers, since the

¹⁵⁷ According to the consul in St Petersburg, the quantity was 257,000 lbs. In 1842 the ship *Hanover* repeated her voyage with a cargo of 315,000 lbs of cotton, but this time the vessel was recorded in Elsinore as having departed from Charleston; STA 1841 (1226); STA 1842 (993); CR 1841-42, NA M-81/2, and T-201/2; Appendix, table 35.

¹⁵⁸ STA 1840 (2432). Combined cargoes of cotton and rice were also taken on in Savannah. For example, in 1843 the bark *Zenobia* (280 tons) and the ship *Corea* (367 tons), both of Providence, took such cargoes to St Petersburg. Both vessels repeated their voyage with similar cargoes in the following year, although then the *Corea* departed from New York; STA 1843 (1465, 1843); STA 1844 (231,604); CR 1843, NA M-81/4 and T-201/2.

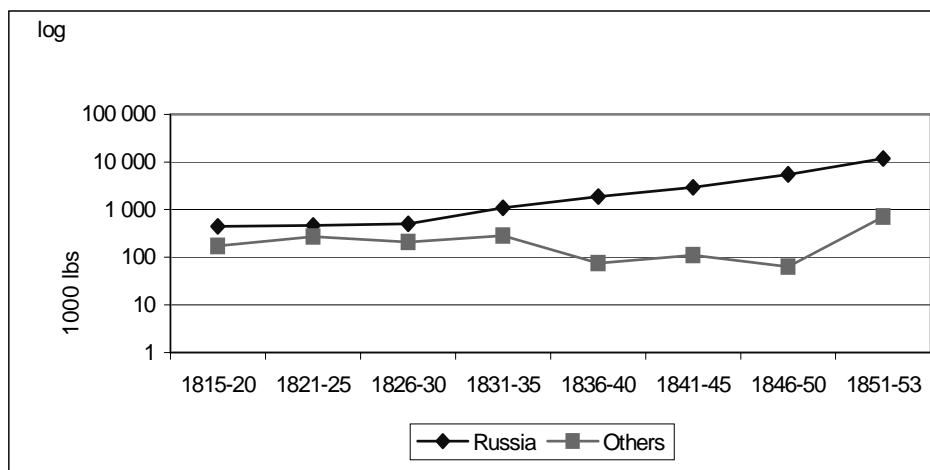
¹⁵⁹ One example is the ship *Sterling* of Boston (360 tons), which in 1840 took a cargo from Mobile directly to St Petersburg. According to STA and the consul in Elsinore, the vessel carried 541,000 lbs of cotton; according to the consul in St. Petersburg 569,000 lbs; STA 1840 (3401); CR 1840, NA M-81/4, and T-201/2.

¹⁶⁰ According to Homans (1858, 1419) an average of 26,300 bales was exported from New Orleans to "St. Petersburg etc." in 1852-53, and in 1856-57 an average of 37,100 bales. The latter amount was about two percent of the city's total exports.

¹⁶¹ CR 1856-60, NA M-81/5-6. The amounts exported to St Petersburg and the number of vessels sailing there were insignificant in comparison with the figures for Liverpool, where more than 500 cotton vessels arrived at the beginning of the 1830s and more than 700 in the mid-1850s. Liverpool received 80 percent of Britain's cotton imports; see Williams 1979, 305, 309.

¹⁶² Seymour to Marcy, 19/31 July 1856, NA M-35/17/82.

British had been their enemies in the recently ended war.¹⁶³ In the 1850s American cotton vessels also started to appear at other ports on the Baltic besides St Petersburg. In 1852 two vessels carried cotton from New Orleans to Riga, and according to the shipping lists of the consul in Elsinore one or two vessels a year also went to Kristiinankaupunki in Finland after the Crimean War.¹⁶⁴



Source: Appendix, table 35.

FIGURE 32 Destination of cotton carried on American vessels through the Sound, 1815-53.

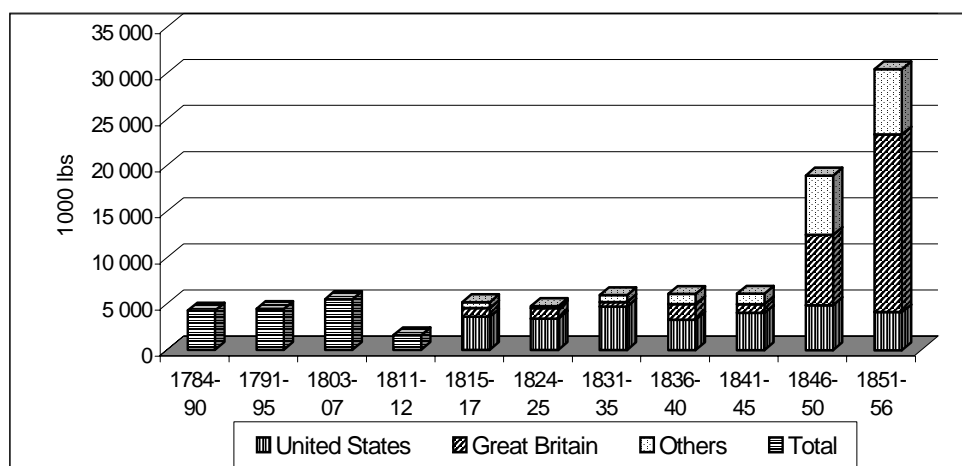
8.3 Rice from Charleston

Rice had been a major North American export commodity since colonial times, but its significance gradually decreased from the 1780s onwards. In 1816-20 rice still made up seven percent of domestic exports, but in the five antebellum years barely one percent. Most of what was exported went to the British market and the West Indies. According to the U.S. export statistics, Denmark was by far the main importer of rice in the Baltic area, and about four percent of total

¹⁶³ Hutton to Marcy, 17/29 November 1856, NA M-81/5; see Kirchner 1975, 210. HMM (1856, vol.35, 89) thought that the Chinese market, where Russian cotton products were considered more suitable than British, was one reason for the sharp increase in Russian production.

¹⁶⁴ For example, in 1852 971,000 lbs was carried to Riga; Schwartz to the Department of State, 18/30 March 1853, NA M-485/1. In the summer of 1856 the ship *M. de Embil* of Bath carried 1699 bales (818,000 lbs) of cotton from New Orleans to Kristiinankaupunki (Sw. Kristinestad) and in 1860 the bark *Lyman* and the bark *Hazeltine* (both of Boston) carried altogether 3000 bales from Charleston and New Orleans, close to 1.5 million lbs. In 1861 two American vessels carried almost 3000 bales to Kristiinankaupunki. The value of exports in 1859 was calculated at 213,700 silver roubles and in 1861 169,200 silver roubles; Frenckell to the Department of State, 1 October 1957, 31 December 1860, and 30 December 1861, NA T-483/1. According to Virrankoski (1963, 139), 4.2 million lbs of cotton wool was imported into Finland in 1860 and 3.8 million lbs in the following year.

exports went there in the 1830s.¹⁶⁵ Russia's share was significantly smaller, but still rice played a major role in the trade between the two countries in the 1820s, when it accounted for a fifth of U.S. domestic exports to Russia. During the next three decades the proportion went down sharply, although the amounts exported remained unchanged. At the beginning of the 19th century rice was still considered a luxury item in Russia, and for example in 1804-05 only 8700 poods (314,000 lbs) on average, or one shipload, was imported into St Petersburg.¹⁶⁶ Imports had increased tenfold from that level by the years following the Crimean War, but remained low compared with the import figures of western Europe.



Note: The columns for the years 1784-1812 show only the total amounts carried through the Sound. The area of departure is not specified.

Source: Appendix, table 36.

FIGURE 33 Countries of departure of rice passing through the Sound, 1784-1856.

According to ST II, most of the rice carried by way of the Sound to the Baltic before the end of the 1840s came from the United States. After that the amounts involved, which had remained quite steady at a level of 5-7 million lbs, increased many times over. The increase was mainly caused by British shipments of cheap rice from Bengal to Prussia. The amounts shipped from the United States to the Baltic did not show any major decline, but the American share of total exports through the Sound dropped sharply.

¹⁶⁵ In 1826-30, for example, the United States exported an average of 46.2 million lbs of rice and in 1856-60 36.7 million lbs. Rice made up as much as 60-70 percent of domestic exports to Denmark and Prussia; Commerce and Navigation, 1821-60; Taylor 1951, 187, 451; Smith & Cole 1969, 20. According to Pitkin (1815, 127), the first consignment of rice (499 tierces) was carried from the United States to Russia in 1807.

¹⁶⁶ Meyer & Brūxner to Benjamin Shreve in 1809, PM, BSP, vol.3.

TABLE 23 Ports of departure of rice passing through the Sound, 1803-25.

Ports	1803, 1805-07		1824 -25	
	1000 lbs	%	1000 lbs	%
Charleston	1 872	34.0	2 603	54.7
Boston	186	3.0	535	11.3
Savannah	586	10.6	15	0.3
New York	320	5.8	191	4.0
Other American ports	520	9.4	14	0.3
London	1 079	19.4	529	11.1
Liverpool	536	9.7	569	12.0
Others	408	7.4	299	6.3
Total	5 507	99.8	4 755	100.0

Sources: ST I, 1803, 1805-07, 1824-25, ØTA, DRA

TABLE 24 Ports of destination of rice passing through the Sound, 1803-25.

Ports	1803, 1805-07		1824 -25	
	1000 lbs	%	1000 lbs	%
St Petersburg	446	8.1	754	15.9
Copenhagen	3 159	57.4	3 016	63.4
Stettin	258	4.7	176	3.7
Stockholm	87	1.6	125	2.6
Danzig	157	2.9	250	5.9
Riga	151	2.7	124	2.6
Others	1 249	22.7	280	5.9
Total	5 507	100.0	4 755	100.0

Sources: ST I, 1803, 1805-07, 1824-25, ØTA, DRA.

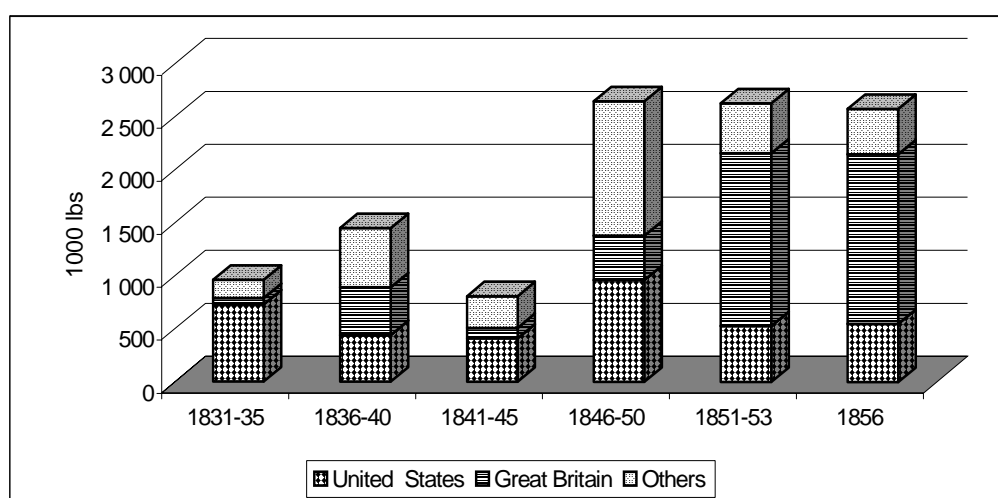
According to ST II, about 15 percent of the rice transported through the Sound in the period 1831-56 originated in the United States and almost half of it came from Britain. The total amount carried to the Baltic Sea was distributed in such a way that more than half ended up in Prussia, a third in Denmark and around a tenth in Russia. Rice was one of the rare cases where Copenhagen could compete with Hamburg.¹⁶⁷ Around 1840 the only mills in the Baltic area that could treat unprocessed rice were in Copenhagen and Stettin. Most of the output of the Copenhagen mills was re-exported to the Baltic area.¹⁶⁸

Most rice (60 percent) transported directly from the United States to the Baltic was offloaded in Denmark, and the rest was fairly evenly distributed between Russia and Prussia. According to ST II, almost 40 percent of the rice carried to Russia came from the United States and a third from Britain. On the basis of a specification in ST I according to ports, the major suppliers of rice to the Baltic in the mid-1820s were Charleston, Liverpool, London and Boston. About half of the rice came directly from Charleston, and indeed most of the

¹⁶⁷ The consul in Stettin estimated that an average of 10.4 million lbs of rice was imported to Hamburg in 1844-45, 7.8 million lbs to Bremen and 7.9 million lbs to Stettin. According to ST II, only one million lbs was carried to Prussia in the years in question, and 3.3 million lbs to Denmark; Schillow to Calhoun, 30 March 1845, and Schillow to Buchanan, 18 March 1846, NA T-59/3.

¹⁶⁸ Bergsøe 1846, vol. II, 401, 517. American rice was mostly transported "in paddy", as it withstood transportation better than refined rice; e.g. Jackson to the Secretary of State, 1 December 1841, NA M-41/4; see De Bow 1853, vol. II, 407.

rice shipped from Boston and probably also some of the rice sent from British ports originated in South Carolina.



Source: Appendix, table 36.

FIGURE 34 Countries of departure of rice passing through the Sound to Russia, 1831-56.

ST II reports significantly lower figures for rice exports from the United States to Russia than the consuls in St Petersburg report being imported into the city, and they are even below the STA figures for the amounts carried to Russia in American vessels. For example, in 1824-25 ST I records 723,000 lbs being carried to St Petersburg when the total imports to the city were 1,230,000 lbs.¹⁶⁹ Thus it is obvious that some part of the 3 million lbs of rice carried to Copenhagen in the years in question found its way to St Petersburg. The amounts the U.S. export statistics record are more than triple what ST II records going to Russia. The difference between the gross and the net weight as well as the fact that tierces, bushels, casks and barrels were often converted into pounds using quite eccentric rates explains some of the differences between the statistics.¹⁷⁰

¹⁶⁹ Appendix, list 1.

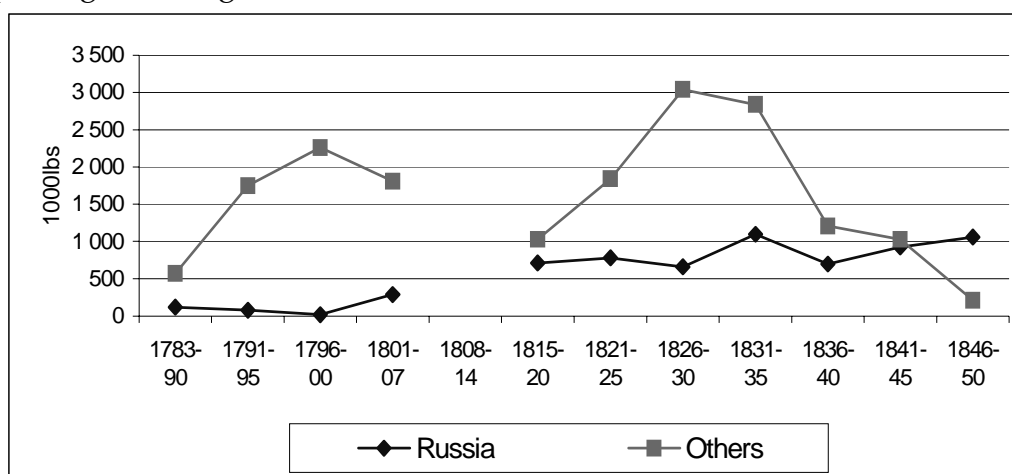
¹⁷⁰ The differences were greatest with respect to vessels that sailed from Charleston. For example, in 1837 the cargo of the ship *Acturus* of Boston was recorded as 83,838 lbs at the Sound, but 92,926 lbs in St Petersburg. The differences between the gross and the net weight also showed very clearly with, for example, the following vessels: the bark *Baltic* of Providence, the bark *Zenobia* of Providence, the ship *Warwick* of Boston, the ship *Pauline* of Boston, the ship *Gilbert* of Boston, the ship *Reliance* of Boston; STA 1837 (506), STA 1844 (231, 232); STA 1845 (290); STA 1847 (547, 587, 787); CR 1837-47, NA M-81/3-5.

TABLE 25 Rice exported to Russia according to different sources, 1834-50.

	Source	1000 lbs/ year
From the United States to Russia through the Sound	Sound Tables II	588
From the United States to Russia	Commerce & Navigation	2 006
From the United States to St Petersburg by American vessels	Consular Returns	941
As above; through the Sound	Sound Toll Accounts	876
To Russia by American vessels through the Sound	Sound Toll Accounts	888
(From the United States to the Baltic Sea through the Sound	Sound Tables II	4 071)

Sources: Appendix, tables 36, 37 and 43.

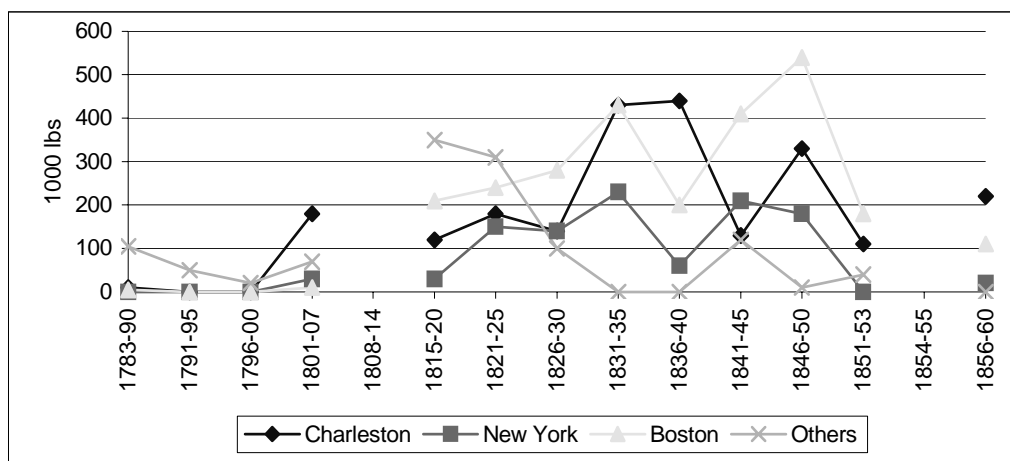
According to STA, most of the rice the Americans exported to the Baltic region remained in Copenhagen. For example, in 1789 only one vessel carried rice to St Petersburg, but eleven to Copenhagen. Only a tenth of the rice shipped to the Baltic before the embargo year ended up in St Petersburg, and four-fifths in Copenhagen. The Americans also carried more rice to Denmark than to Russian ports after 1815 and at least until the end of the 1830s. Even at the beginning of the 1830s, five or six vessels carrying mainly South Carolina rice sailed to Copenhagen through the Sound.¹⁷¹



Source: Appendix, table 37

FIGURE 35 The destination of rice carried in American vessels through the Sound, 1783-1850.

¹⁷¹ At the peak of rice exports an average of 3.8 million lbs was transported in American vessels eastward through the Sound, 2.4 million lbs of it to Copenhagen, 0.9 million lbs to St Petersburg and 0.4 million lbs to Stettin; Appendix, table 37; STA 1826-35. According to the consul in seven American vessels carried to the port cargoes of rice in 1831-40; CR 1831-40, NA T-59/1.



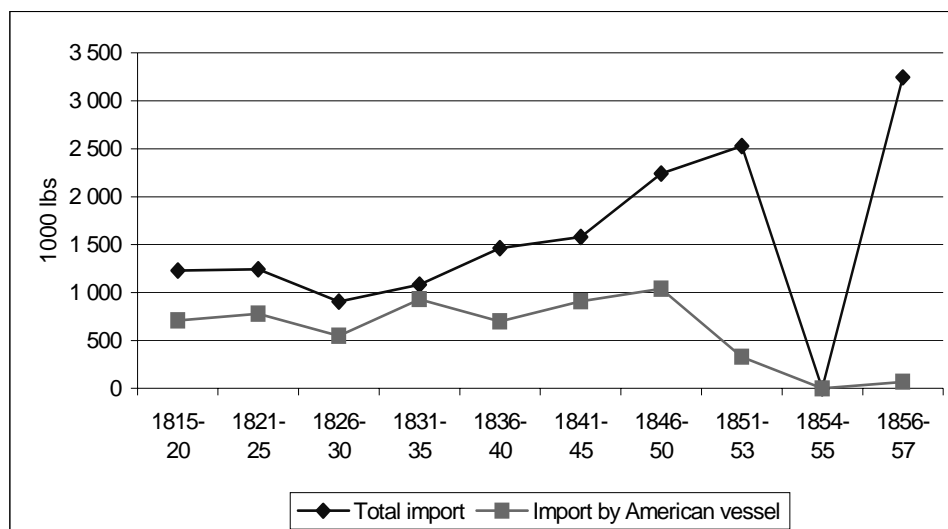
Source: Appendix, table 37.

FIGURE 36 Ports of departure of rice carried in American vessels to St Petersburg, 1783-1860.

At the end of the 18th century and the beginning of the 19th rice was mainly carried to the Baltic as part of a general cargo of colonial products. Rice was left in Copenhagen, and either Russian products were purchased there or the vessel sailed on to St Petersburg.¹⁷² After 1815, however, it became usual for cargoes exclusively of rice to be taken from southern ports when the destination was Copenhagen. Rice intended for St Petersburg, on the other hand, was still only one item in a cargo also made up of sugar, coffee, spices and very often cotton.¹⁷³ More than a third of the rice the Americans carried to St Petersburg was from Boston, and almost an equal amount from Charleston. The total amounts remained relatively low, but at their peak accounted for 70-80 percent of the total amounts St Petersburg received.

¹⁷² For example, in the spring of 1806 the brig *Conquest* belonging to John Gardner & Co. transported 5800 lbs of coffee, 4200 lbs of sugar and 91 hogsheads of rum from Philadelphia to Copenhagen in addition to 12,900 lbs of rice. The brig returned to her home port from Copenhagen with Russian hemp and iron; STA 1806 (494/627); CR 1806, NA T-201/1. In some cases, albeit rarely after the 1830s, rice reported as being bound for Copenhagen was in fact transported to St Petersburg. In the spring of 1839 the bark *King Philip* of Boston left only a part of her cargo intended for Copenhagen there. On the other hand, the cargo of 2000 lbs of indigo intended for St Petersburg was left in Copenhagen; STA 1836 (169); CR 1836, NA M-81/3.

¹⁷³ For example, the brig *Pembroke* of Boston and the brig *Garland* of Boston took cargoes of rice from Charleston to Copenhagen in mid-March 1836 and returned to Gothenburg in ballast. In May 1839 the ship *Florence* of Boston took 187,000 lbs of cotton, 118,200 lbs of logwood and 29,100 lbs of fustic from Charleston to St Petersburg in addition to 253,000 lbs of rice. Also the ship *Vestavia* of Boston in 1839 and the bark *Baltic* of Providence in 1844 sailed with cargoes of rice and cotton from Charleston to St Petersburg. The latter made a similar voyage from Savannah to St Petersburg in the following year. According to STA, the vessel carried 217,000 lbs and 36,600 lbs of rice and 329,000 lbs and 474,800 lbs of cotton respectively on these voyages. The consuls reported that the amounts were 246,000 and 32,900 lbs of rice and 329,000 and 474,000 lbs of cotton; STA 1836 (53/66, 55/93); STA 1839 (453, 462); STA 1844 (232); STA 1845 (630); CR 1839-45, NA M-81/4, and T-201/1-2.



Source: Appendix, list 1 and table 37.

FIGURE 37 Total imports of rice, and rice carried on American vessels to St Petersburg, 1815-57.

8.4 Tobacco from Maryland

Tobacco remained an important export commodity even in the 1780s after the Revolution, as the market of the former mother country was quite easily replaced by new markets in France, Spain and the Netherlands. Raw tobacco constituted about a third of exports at the turn of the century, and at the beginning of the 1820s production remained on the same scale as at the end of colonial times, that is 120 million lbs per annum. Around 1860 production rose above 300 million lbs. Raw tobacco constituted 15 percent of U.S. domestic exports in the years 1816-20, but the figure had fallen to six per cent by the end of the 1840s and remained at that level until the Civil War. However, the total value of exports almost tripled in the same period.¹⁷⁴

Tobacco met with resistance in the European market. The growers and exporters considered European "monopolies" and high tariffs the major obstacles. These provided artificial protection for the cheaper tobacco that, at least according to the Americans, was of inferior quality. In the mid-19th century just as much tobacco was produced on the continent as in North America. At the end of the 1830s U.S. tobacco growers demanded government

¹⁷⁴ Production is estimated, as the United States had no agricultural census before 1840; Commerce and Navigation, 1821-60; see Robert 1949, 55-56; Robert 1965, 120, 129; De Bow 1853, vol. II, 349; Bjork 1964, 544; Nettels 1962, 194-195; Taylor 1951, 185-186, 451; Chandler 1978, 75. In 1816-20 the export of unprocessed tobacco was worth an average of \$47.5 million, which dropped to \$27.8 million in 1826-30 but rose to \$86.5 million in 1856-60. In 1817-18 Virginia and Louisiana tobacco made up 25 percent of American tobacco exports and Maryland tobacco 15 percent. Niles Weekly Register (1819, vol.17, 107) reported that Britain took 36 percent of it while 32 percent went to "the Hanse Towns and ports of Germany."

action against the high European tariffs. Russia was one of six countries considered to discriminate most severely against American tobacco. Protests were organized, especially by growers in Maryland demanding retaliatory tariffs on goods from those countries that prevented the flow of American raw tobacco onto their market. However, the fierce proposals of a committee appointed by the House of Representatives only ever existed on paper.¹⁷⁵

The demands of the tobacco producers led the Americans to send several special agents to Europe to make representations about the tobacco trade, while U.S. ministers were directed to gather information in as much detail as possible on market conditions at their posting. One reason that was alleged to be responsible, at least in part, for the difficulties met by American tobacco was that the country's representatives abroad had been indifferent to the problems of tobacco exporters.¹⁷⁶ George Dallas, Minister to St Petersburg, sent in the report demanded by the Department of State in October 1837. He had conducted a survey which revealed that the greatest problem of American tobacco in Russia was the immense difference in price between it and the domestic product. American raw tobacco cost 40-50 roubles per pood, whereas Russian tobacco could be purchased at 7-8 roubles per pood. Protective Russian tariffs were the main reason for this, but Turkish tobacco also did better than the American product.¹⁷⁷ Jonathan F. Woodside, Minister to Denmark, sent a very detailed and thorough report to the Department of State at the beginning of 1838 on the situation in Denmark and Germany. The report stated that ports on the North Sea were the route by which American tobacco reached Central and northern Europe.¹⁷⁸

Although Dallas's report was intended to prove a particular point, it gave a clear account of the problems facing American tobacco in Russia. It stated that after the French invasion in 1812 smoking and snuff-taking had increased considerably, but chewing was still very rare. Around 1830, the tobacco on the Russian market was mainly American, Turkish and domestic. The American tobacco imported via St Petersburg was the "most powerful", and although it was expensive, it was used for cigars and snuff. The Turkish tobacco that was transported by land from the south was mixed with the domestic product and used as pipe tobacco. Dallas was certainly correct when he remarked that American tobacco was imported to Russia "through circuitous, protracted and expensive Voyages". The Minister gave as an example the import figures for St Petersburg of the first nine months of 1837. Only one smallish cargo was imported from the United States, while 30 consignments were imported from

¹⁷⁵ Robert 1949, 72-73; Robert 1965, 122; Oeste 1966, 180. The British protected tobacco from their colonies by means of import levies calculated at double the value of American tobacco.

¹⁷⁶ See Oeste 1966, 182-183.

¹⁷⁷ Forsyth to Dallas, 19 April 1837, NA M-77/136; Dallas to Forsyth, 6 October 1837, NA M-35/13/8; Dallas 1892, 16; Oeste 1966, 262. According to Dallas, the Americans needed to reduce the tariffs on sailduck, ravenduck and iron, after which the Russians would let American tobacco into the country with lower import levies.

¹⁷⁸ Woodside to the Secretary of State, 10 January 1838, NA M-41/4; Robert 1949, 73.

Bremen, nine from Amsterdam, five from Lübeck and four from Hamburg. Dallas estimated that American tobacco was imported into Russia to the value of almost half a million dollar per year.¹⁷⁹ However, his estimate was little more than pure guesswork.

Bremen tobacco was a particularly irksome competitor as far as the Americans were concerned, especially since it was known to be of North American origin. In 1843 Minister Todd considered that almost nothing could be done about the St Petersburg market. American raw tobacco was sorted and processed in Bremen to a form that suited the Russian and northern European markets. Tobacco manufacturers from St Petersburg were involved in ensuring that only products for which there was some demand and which had low import levies were sent to Russia.¹⁸⁰ The Germans for their part had agents in Richmond and elsewhere who purchased large quantities of leaf tobacco for wholesale firms in Bremen. American tobacco had a good reputation in Europe and the tobacco shipped from Bremen to St Petersburg was therefore marketed as "American", although it was in fact mixed with cheaper non-American qualities.¹⁸¹ According to the consuls, 300,000 lbs of leaf tobacco was imported into St Petersburg at the beginning of the 1820s, and almost two million lbs from the mid-1830s onwards.¹⁸²

The exports the U.S. trade statistics and the corresponding Russian import figures do not actually indicate in any way the position of American tobacco on the Russian market. Both leaf tobacco and manufactured tobacco were supplied to Russia by brokers, and usually the Russian statistics registered imports from intermediary ports only. Moreover, because of smuggling on a massive scale, the statistics are undependable. According to the U.S. foreign trade statistics, exports were greatest at the end of the 1840s and at the beginning of the next decade. An average of almost a million pounds was exported, constituting half a percent of total American tobacco exports. The amounts exported to the "Hanse Towns" at the same time were sometimes over 50 million lbs and accounted for a fifth of total tobacco exports.¹⁸³

More than three million pounds of raw tobacco was transported through the Sound at the end of the 18th century and at the beginning of the 19th

¹⁷⁹ Dallas to Forsyth, 6 October 1837, NA M-35/13/8; see Kirchner 1975, 159-160. In 1850 almost 46,400 hhds, that is almost one-third, of U.S. tobacco exports went to the "Hanse Towns", and significantly less to Britain (31,000 hhds), to the Netherlands (22,700 hhds) and to France (15,600 hhds); Commerce and Navigation, 1850.

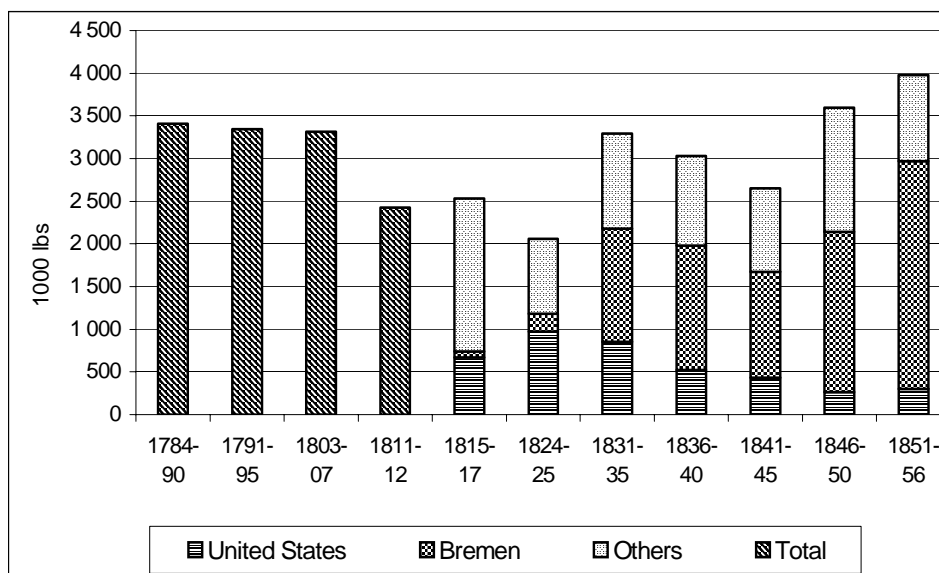
¹⁸⁰ Todd to Upshur, 30 November/12 December 1843, NA M-35/14/39; Oeste 1966, 262.

¹⁸¹ Hutton to Marcy, 17/29 November 1856, NA M-81/5; Robert 1965, 115.

¹⁸² In addition to leaf tobacco, 1.3 million lbs of stalks and smallish amounts of snuff and cut tobacco were imported into St Petersburg in 1840-42, for example, Appendix, list 1. According to ST I, an average of 131,000 lbs was exported to St Petersburg in 1824-25, 171,000 lbs to Riga, 1,069,000 lbs to Copenhagen and 415,000 lbs to Stockholm. The consuls reported triple the amount of leaf tobacco imported into St Petersburg recorded in ST I figures: 384,000 lbs, Appendix, table 39.

¹⁸³ Commerce and Navigation, 1821-1860; see Kirchner 1975, 159. Tobacco represented at the most 50 percent of U.S. exports to the Hanse Towns and 30-40 percent of U.S. exports to Sweden. Tobacco was worth only 3.7 million roubles on average, that is two percent, of Russian imports in 1831-35; PRO, FO 65/236.

century, two million lbs in the 1820s and almost four million lbs in the 1850s. According to ST II, more than half of the tobacco transported eastwards in the period 1831-56 was from Bremen, a fifth from the Netherlands and around a tenth from the United States. In the mid-1820s almost half of the tobacco was exported directly from North America, but after that the proportion decreased, as did the actual quantities exported.¹⁸⁴



Note: For the years 1784-1812 columns indicate the total amounts transported through the Sound. The point of departure is not specified.
Source: Appendix, table 38.

FIGURE 38 The origin of tobacco passing through the Sound, 1784-1856.

A quarter of the tobacco transported through the Sound at the beginning of the 19th century came directly from the United States, and about 40 percent in the mid-1820s. At that time Boston and New York were the major loading ports after Amsterdam. The leading position held by Liverpool and London passed to Amsterdam, Boston and New York at the beginning of the 19th century, while Bremen began its rise to a clear leading position in the 1830s.

¹⁸⁴ ST I and ST II. According to ST I, 1,085,000 lbs of the 2,277,000 tobacco pounds exported to the Baltic was shipped directly from the United States in 1825, and according to STA, 675,000 lbs of it was carried by American vessels. In 1824-25 Amsterdam (679,000 lbs on average), Boston (437,000 lbs), Bremen (210,000 lbs), New York (186,000 lbs) and Hamburg (108,000 lbs) were the major loading ports of tobacco.

TABLE 26 Ports of departure of tobacco passing through the Sound, 1803-25.

Ports	1803, 1805-07		1824 -25	
	1000 lbs	%	1000 lbs	%
Boston	86	2.6	437	21.1
New York	22	0.7	383	18.6
Charleston	33	1.0	1	0.0
Providence	142	4.3	-	-
Salem	57	1.7	-	-
Savannah	128	3.9	-	-
Other U.S. ports	169	5.1	15	0.7
Amsterdam	..	..	697	33.9
Liverpool	680	20.5	28	1.4
London	672	20.3	26	1.3
Other ports	1 328	40.0	471	22.9
Total	3 317	100.0	2 058	100.0

Source: ST I, 1803, 1805-07, 1824-25, ØTA, DRA.

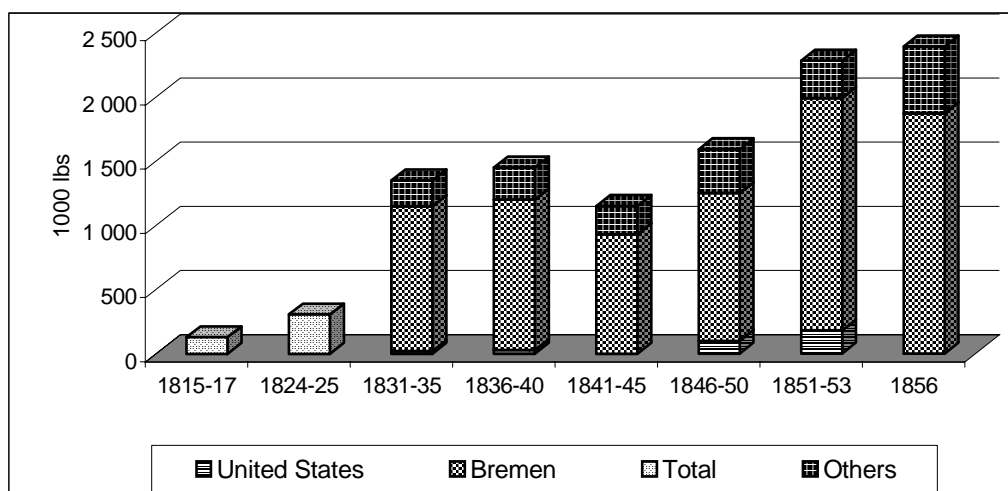
TABLE 27 Ports of destination of tobacco passing through the Sound, 1803-25.

Ports	1803, 1805-07		1824-25	
	1000 lbs	%	1000 lbs	%
St Petersburg	94	2.8	131	5.4
Riga	52	1.6	171	8.3
Copenhagen	1 526	46.0	1 069	51.9
Stockholm	350	10.6	416	20.2
Danzig	320	9.6	45	2.2
Königsberg	53	1.6	8	0.4
Stettin	72	2.2	72	3.5
Others	850	25.6	146	7.1
Total	3 317	100.0	2 058	100.0

Source: ST I, 1803, 1805-07, 1824-25 ØTA, DRA.

Two fifths of the tobacco transported eastwards through the Sound in the period 1831-56 went onto the Russian market and the rest was distributed quite evenly between Sweden, Prussia and Denmark. According to ST II, tobacco from Bremen dominated the Russian markets and only a fifth of total imports between 1831 and 1856 came from the Netherlands, the United States and Hamburg.¹⁸⁵

¹⁸⁵ According to de Tegoborski (1855, vol. I, 422-455) an average of 662,000 lbs of American tobacco was imported into Russia in 1832-36, and 929,000 lbs in 1842-46. The corresponding figures in ST II were only 47,000 lbs and 98,000 lbs. The figures in ST II for tobacco exported from the United States to Russia are, for some reason, too low, as according to STA American vessels alone carried much greater quantities to St Petersburg, see Appendix, tables 38 and 39; Kirchner 1975, 159.



Note: For the years 1815-17 and 1824-25 columns show exports to Russia. The point of departure is not specified.

Sources: Appendix, table 38.

FIGURE 39 The origin of tobacco passing through the Sound to Russia, 1815-56.

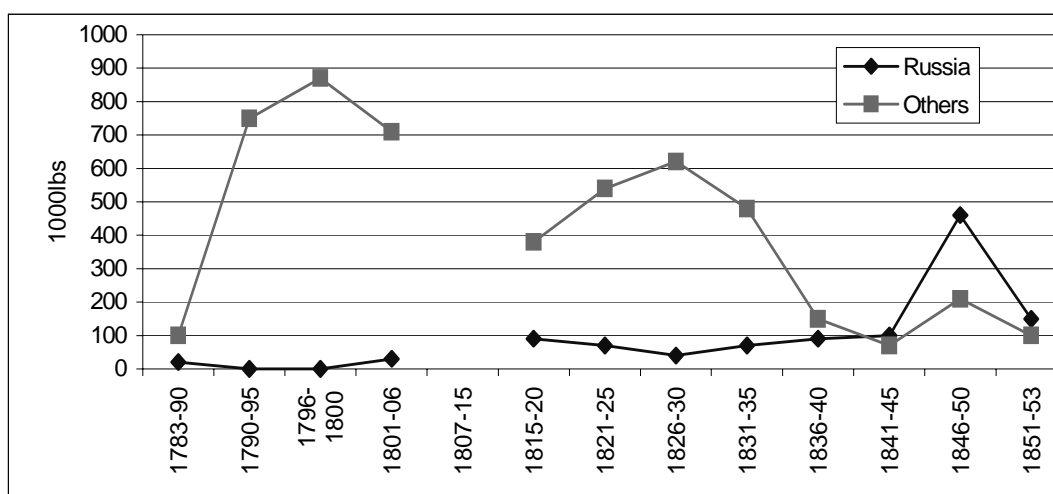
Copenhagen was in a class of its own as a port of destination for tobacco in the first two decades of the 19th century, taking about half of it. The share taken by Russia and St Petersburg started to increase only with the help of tobacco from Bremen.

Relatively large quantities of tobacco carried in American vessels stayed in Copenhagen before the Embargo and the warnings of firms in St Petersburg against importing American tobacco apparently had some influence. Meyer & Brückner said that nobody should dream that even the top qualities of Maryland and Virginia tobacco could have more than a very limited demand.¹⁸⁶ Immediately after 1815 most tobacco still did not go beyond Copenhagen, but in the 1820s almost equal quantities were also exported to Stockholm. From the beginning of the 1840s onwards, most tobacco was carried to St Petersburg, but the amounts were quite insignificant. This is clearly revealed by the fact that when the bark *Henry Shelton* of Baltimore, which sailed for the account of Rothschilds in New York, took a full cargo of tobacco from her home town to St Petersburg in 1845, the 500,000 lbs of tobacco she carried was more than the total amount imported in the previous ten-year period.¹⁸⁷ The variations between years were great: in 1847-48 only insignificant amounts arrived in St Petersburg, but in 1850 1.3 million lbs. The full cargoes of tobacco carried by the ship *Metaxa* of New York and the above-mentioned bark *Henry Shelton* of

¹⁸⁶ Meyer & Brückner to Benjamin Shreve in 1809, PM, BSP, vol.3. In 1804-05 an average of 970 poods of "Virginia & English" tobacco was imported to St Petersburg; PM, BSP, vol. 3.

¹⁸⁷ Todd to Buchanan 15/27 September, 1845, NA M-35/14/63; Appendix, table 39. The cargo of the bark was recorded as 491,000 lbs in STA, but according to the consul in St Petersburg the amount of tobacco was 558,000 lbs. In 1846 the ship *Napier* of Baltimore sailed the same route, and she was recorded in Elsinore as carrying 595,000 lbs of tobacco but 661,000 lbs in St Petersburg; STA 1846 (1204); CR 1845-46, NA M-81/4.

Baltimore accounted for more than 40 percent of the leaf tobacco imported to St Petersburg in the year in question.¹⁸⁸



Source: Appendix, table 39

FIGURE 40 The destination of tobacco carried in American vessels through the Sound, 1783-1856.

More than 90 percent of the leaf tobacco shipped to Russia in American vessels came directly from the United States, and the rest was shipped along with coffee and sugar from Cuba to St Petersburg. Significant quantities of cigars were also shipped from Havana, but they were recorded in STA and consular reports only occasionally. It was from Boston that tobacco was sent most regularly, but the largest consignments were from Baltimore.¹⁸⁹

8.5 Coffee from New England and Havana

Already at the end of the 18th century coffee was among America's most important re-export commodities. On average 45.4 million lbs of coffee was exported in 1796-1800, and 22.0 million lbs in the three years after the Embargo. These figures were achieved under the protection of neutral trade. However, even in 1826-30 coffee exports were still 16.3 million lbs, worth \$1.6 million, which was 11 percent of re-exports. Annual variations were sometimes substantial, but in the antebellum five years the amounts and their value were on the same scale as about thirty years earlier. Between 1821 and 1860 the country's coffee imports increased eightfold and in the latter year were worth

¹⁸⁸ STA 1850 (6336, 6530); CR 1850, NA M-81/5 and T-201/2. If STA records both St Petersburg and Copenhagen as ports of destination, the tobacco consignments are included in exports to St Petersburg. This covered altogether 318,000 lbs in 1815-50.

¹⁸⁹ In 1815-60 an average of 29,000 lbs a year was carried in American vessels from Boston to Russia, and an average of 75,000 lbs from Baltimore; Appendix, table 39; STA 1815-50; CR 1851-60, NA M-81/5-6.

almost \$20 million, six percent of total imports.¹⁹⁰ Coffee played an important role in U.S. trade with Russia until the 1830s. It was the principal export in several years, and at its peak constituted a third of total exports. Russian import statistics indicate that half of coffee imports in the 1830s came from “America”, but the figures also include imports from the West Indies and South America. Coffee was not a very significant commodity as far as total Russian imports are concerned. In the years 1826-30 coffee imports were worth 5.4 million roubles, which was only a few percent of total imports.¹⁹¹

Almost all the coffee reaching Europe at the end of the 18th century, until the time of the Revolutionary Wars, came from the French colonies of Santo Domingo and Martinique. 30-40 million lbs was carried from the West Indies to Bordeaux and ten percent of this went on to the Baltic. The rest of the coffee transported through the Sound came mainly via Hamburg, Bremen or the Netherlands.¹⁹² At the beginning of the 19th century, after the collapse of Santo Domingo, Cuba, Puerto Rico and Brazil became the main areas of coffee production. In Cuba for a long time coffee competed with sugar for the status of principal export, but the customs policy of the United States, hurricanes and cheap Brazilian coffee changed the situation and put the emphasis on raw sugar.¹⁹³ The Brazilian share of world production increased at the beginning of the 1840s to about 40 percent, which was slightly more than the production of Java and Sumatra put together.¹⁹⁴

The coffee production of the British West Indies declined with the abolition of slavery, whereas although the Brazilian product continued to be “slave coffee”, this did not prevent it from penetrating the North American and European markets. World production of coffee was about 560 million lbs (250,000 tons) at the beginning of the 1850s. It was estimated that the United States consumed a fifth of it, which was as much as Russia, Germany and northern Europe together. In Russia coffee was a luxury product and its

¹⁹⁰ In the 1820s imports averaged 42 million lbs (\$5.1 million) and in the 1830s 90 million lbs (\$8.6 million). Re-exports in the period in question were 16 million lbs and 17 million lbs (\$ 2.2 million and \$ 2.0 million), respectively. In 1856-60 exports averaged 20 million lbs, worth \$1.9 million. The latter figure is seven per cent of re-exports but less than one percent of total exports; Pitkin 1815, 56-57; Commerce and Navigation, 1821-60; Taylor 1951, 449.

¹⁹¹ In 1824 coffee was imported to the value of 4.5 million roubles. Total imports to St Petersburg at the time were worth 126.7 million roubles. In 1826-30 coffee accounted for three percent of total Russian imports. In 1846-50 imports averaged 1.4 million silver roubles, and the United States contribution was worth 50,000 silver roubles; PRO, FO 65/167,174,182,188,236.

¹⁹² Johansen 1983b, 181; Johansen 1986, 132-133.

¹⁹³ Cuban sugar recovered quickly from the hurricanes of 1845, but coffee production did not. 1,070,000 hhds was transported via Havana and Matanzas in 1840-44, whereas the annual total was 271,000 hhds in the next five years and in 1845 only 170,000 hhds, HMM 1850, vol.22, 662.

¹⁹⁴ By the 1830s Brazil was already challenging Cuba in terms of coffee production. Cuba's exports were 16 million lbs on average in the 1820s, and 28 million lbs in the 1830s. The corresponding figures for Brazil were 6 million lbs and 34 million lbs; HMM 1842, vol. 6, 84, and HMM 1850, vol. 22, 662.

consumption was calculated at only 0.2 lbs per capita. At the same time for example the Dutch consumed 11 lbs and even the British 1.3 lbs per capita.¹⁹⁵

An average of 7.2 million lbs coffee was transported through the Sound in the years 1786-90. In 1805-07 the amount increased to 10.2 million lbs, and remained at that level for the next twenty years. At the end of the 1830s, however, the figure dropped to a half of what it had been earlier.¹⁹⁶ The reason for this was probably the Sound dues which, collected not on the value of the goods but at fixed rates, had risen to six percent on South American coffee following the decline in world coffee prices. This unquestionably diverted coffee to Hamburg and Bremen. When in 1841 the tariff dropped to a quarter of its earlier level, shipments via the Sound increased many times over within a year or two.¹⁹⁷

Coffee had a high value in relation to its weight and was easily reloaded. It was therefore quite commonly carried from Hamburg to Lübeck and from there to Baltic ports in the 1830s. Statistics compiled by A. F. Bergsøe show that already in 1842 the amount carried via Schleswig-Holstein was 3.6 million lbs, which was just under a third of the amount transported through the Sound.¹⁹⁸ The effect of the Sound dues also shows clearly in the import figures for St Petersburg: before the 1840s much more coffee entered the city than was carried there through the Sound.¹⁹⁹

Over 50 percent of the coffee that passed Elsinore in 1784-95 came from Bordeaux.²⁰⁰ However, during the wars the city almost completely lost its Baltic market, and London took over its position. Between the Napoleonic Wars and the Crimean War about half of the coffee transported through the Sound came directly from the West Indies and South America. Nevertheless, South American coffee started to arrive in large quantities only in the 1830s and before that coffee from the British colonies dominated Baltic markets. According to ST II, barely a tenth of the total was carried from the United States in the 1830s and 1840s. The amount increased three fold in the years preceding the Crimean War, but while the amounts shipped from the Netherlands, Hamburg and

¹⁹⁵ See Thomas 1985, 290; Kirchner 1975, 166; Homans 1858, 489; De Bow 1853, vol. I, 283; McCulloch 1854, 317.

¹⁹⁶ Johansen 1983a, table 12; ST I, 1805-07; Appendix, table 40. At least at the end of the 18th century much coffee was carried to the Baltic Sea also as prunes, on which only a tenth of the sugar tariff was payable.

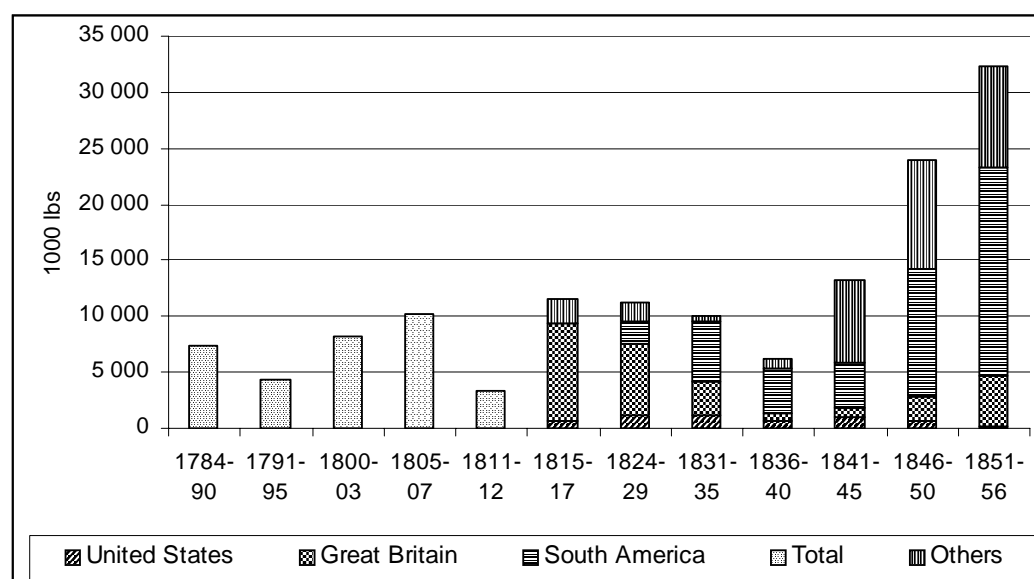
¹⁹⁷ The tariff was reduced from 24 stivers per 100 lbs to six stivers; e.g. Jackson to the Secretary of State, 1 December 1841, NA M-41/4.

¹⁹⁸ Bergsøe 1846, vol. II, 517; Appendix, table 40.

¹⁹⁹ In the late 1820s coffee imports to St Petersburg were roughly equivalent to the amounts that were transported to the city through the Sound. According to ST I, an average of 3.2 million lbs was carried to St Petersburg in 1824-29, while the consuls recorded imports as averaging 3.4 million lbs. In 1836-40 only 1.7 million lbs of coffee was recorded as sailing to Russia through the Sound, but according to the consuls more than double that amount, 3.5 million lbs, was imported to St Petersburg alone. Reduction of the Sound dues radically changed the figures for 1846-50: ST II reports an average of 6.9 million lbs carried to Russia, and the consuls in St Petersburg an average of 5.7 million lbs received; Appendix, table 40 and list 1.

²⁰⁰ Johansen 1983b, 174, 182; Johansen 1986, 134.

Bremen showed a particularly strong increase, the U.S. share of Baltic markets shrank to almost nothing.²⁰¹



Notes: The columns for 1784-1812 show unspecified total exports to the Baltic. The figures for South America also include exports from the West Indies.

Source: Appendix, table 40.

FIGURE 41 The areas of departure of coffee passing through the Sound, 1784-1856.

TABLE 28 Ports of departure of coffee passing through the Sound, 1803-29.

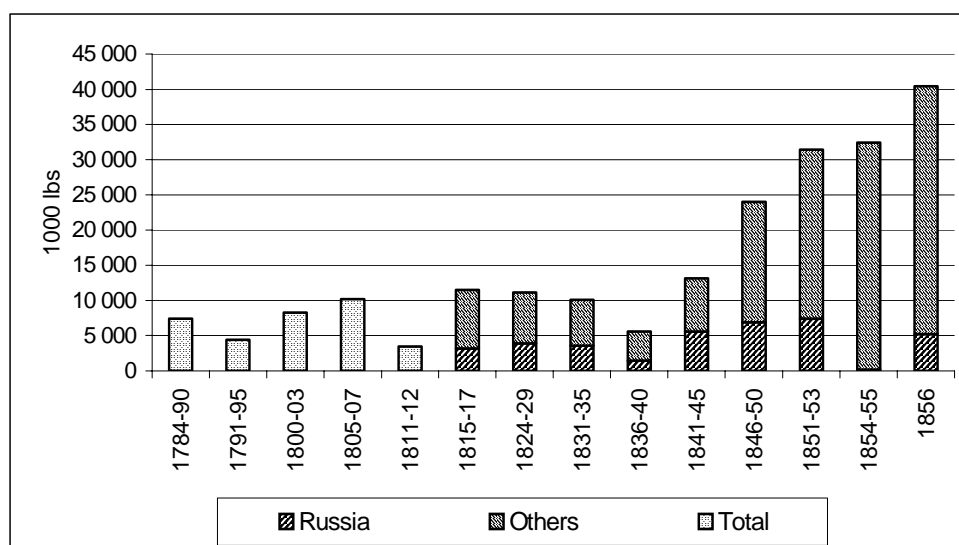
Ports	1803, 1805-07		1815-17		1824 -29	
	1000 lbs	%	1000 lbs	%	1000 lbs	%
Boston	121	1.2	315	2.7	961	8.6
New York	25	0.3	139	1.2	102	0.9
Philadelphia	46	0.5	59	0.5	16	0.1
Salem	261	2.7	86	0.7	6	0.1
Charleston	44	0.5	12	0.1	5	0.0
Baltimore	-	-	130	1.1	3	0.0
Other U.S. ports	315	3.2	16	0.1	73	0.7
London	4 662	47.7	6 912	60.1	6 030	54.1
Liverpool	2 902	29.7	873	7.6	88	0.8
Rio de Janeiro	-	-	64	0.6	1 960	17.6
Havana	-	-	920	8.0	340	3.0
Others	1 396	14.3	1 982	17.2	1 568	14.1
Total	9 772	100.1	11 508	99.9	11 152	100.0

Sources: ST I, 1803, 1805-07, 1815-17, 1824-29, ØTA, DRA.

A quarter of the coffee transported through the Sound to the Baltic between 1831 and 1856 went to Russia, almost a third to Denmark, a fifth to Prussia and the rest to ports on the east coast of Sweden. Copenhagen kept the position that

²⁰¹ In 1851-53 over 5 million lbs a year was carried from the Netherlands through the Sound, and an average of two million lbs from Hamburg and Bremen; Appendix, table 40; ST II, 1851-53, DRA.

it had gained at the end of the 18th century as a major coffee broker. Coffee exports were concentrated on the three or four biggest cities of the Baltic, although the tables summarizing the period 1824-29 specify 31 other ports receiving coffee in addition to the 6 mentioned in Table 29. However, the amounts carried to these ports were quite insignificant. By way of illustration, only 38,000 lbs on average was exported to 15 Finnish ports. More than half of the coffee shipped to the Baltic still came from London at the end of the 1820s. Matanzas, Bordeaux and Hamburg were other loading ports of roughly the same importance as St Thomas and Guernsey.²⁰²



Note: The columns for 1784-1812 show total exports. The port of departure is not specified.
Source: Appendix, table 40.

FIGURE 42 The destination of coffee passing through the Sound, 1784-1856.

According to ST II, around a quarter of the coffee that Russia imported in the period 1831-56 originated in South America and the West Indies, nearly a fifth came via Britain and about a tenth was shipped from the United States. According to the above-mentioned tables, an average of 435,000 lbs was exported from North America to Russia, but according to the U.S. foreign trade statistics only 250,000 lbs.²⁰³ The difference is probably due to the fact that some South American coffee was also registered as North American in Elsinore.

²⁰² ST I, 1803, 1805-07, 1815-17 and 1824-29, DRA.

²⁰³ ST II, 1831-56, DRA; Commerce and Navigation, 1831-56.

TABLE 29 Ports of destination of coffee passing through the Sound, 1803-29.

Ports	1803, 1805-07		1815-17		1824-29	
	1000 lbs	%	1000 lbs	%	1000 lbs	%
St Petersburg	1 315	13.5	2 523	21.9	3 199	28.7
Riga	609	6.2	563	4.9	756	6.8
Copenhagen	2 260	23.1	2 582	22.4	2 566	23.0
Stockholm	546	5.6	892	7.8	1 177	10.6
Danzig	1 058	10.8	1 038	9.0	1 089	9.8
Stettin	1 617	16.5	1 356	11.8	1 073	9.6
Others	2 367	24.2	2 554	22.1	1 292	11.6
Total	9 772	99.9	11 508	99.9	11 152	100.0

Sources: ST I, 1803, 1805-07, 1815-17, 1824-29, ØTA, DRA.

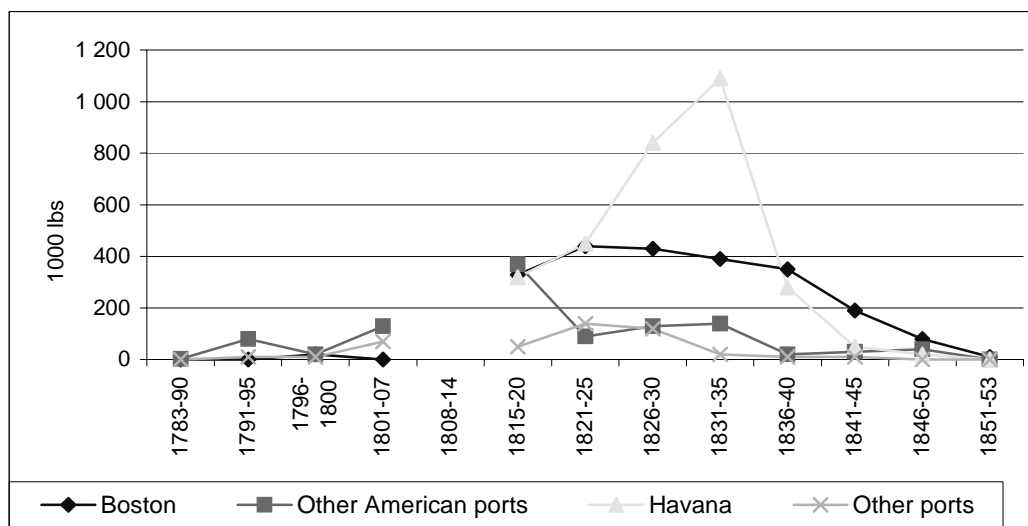
In the period 1783-1807 the coffee carried in American vessels eastward through the Sound mostly remained in Copenhagen; STA records that only a tenth of it ended up in St Petersburg. The situation changed after the wars, and between 1815 and 1850 St Petersburg's share was almost 90 percent if all the coffee registered in Elsinore as being carried to either Copenhagen or St Petersburg is included in the figures. For the 1820s this applies to a significant amount of coffee, 206,000 lbs on average. In the period 1815-50 the Americans carried on average 1.1 million lbs coffee to Russia through the Sound. About half of the total amount came from North America and two fifths from Havana. Three quarters of the coffee sent from the United States to Russia was shipped from Boston.²⁰⁴ The figures for American imports reported by the consuls in St Petersburg are almost the same as those recorded in STA.²⁰⁵

The amounts the Americans carried to Russia were at their highest at the beginning of the 1830s, when coffee arrived both as a re-export from the United States and also along with shipments of sugar from Cuba. For example, in 1832 shipments of coffee were carried alongside sugar from Havana and Matanzas to St Petersburg on 32 occasions. The ship *Duncan*, owned by George Carter of Boston, was one vessel that carried such a cargo. She took 2500 lbs of coffee and 10,000 cigars from Havana to St Petersburg in addition to about a million pounds of sugar.²⁰⁶ According to ST II and STA, the Americans carried a fifth of the coffee that entered the Baltic and half of the coffee that entered Russia in the 1830s. The decline in Cuban coffee production perhaps influenced the fact that

²⁰⁴ In the period 1815-50 an average of 53,000 lbs was carried from New York to Russia, 20,000 lbs from Philadelphia, 14,000 lbs from Salem and 13,000 lbs from Baltimore, the major coffee port of the United States; STA 1815-50.

²⁰⁵ According to the consuls, in 1834-50 an average of only 10,600 lbs more was carried to St Petersburg than according to STA; Appendix, table 41. It was also rather common for the consul in Copenhagen to report higher figures than STA. In 1832 the ship *Coliseum* of Boston carried 404,300 lbs from Havana to Copenhagen, but the Sound accounts recorded only 316,300 lbs; STA 1832 (723); CR 1832, NA T-195/3.

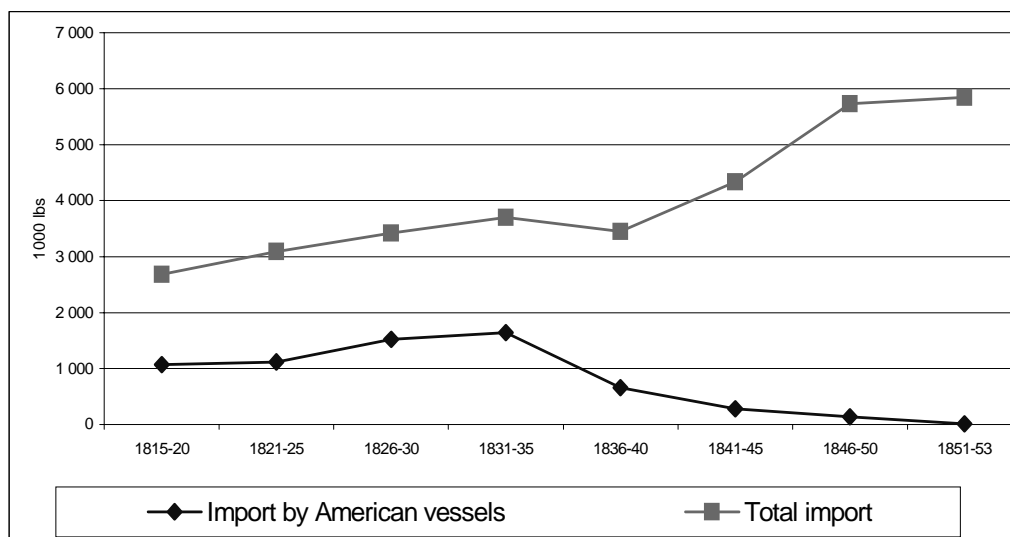
²⁰⁶ STA 1832 (1170); CR 1832, NA T-195/3. According to STA, half of the coffee was left in Elsinore.



Source: Appendix, table 41.

FIGURE 43 Ports of departure of coffee carried by American vessels through the Sound to Russia, 1783-1853.

shipments of coffee on American vessels dwindled. The Americans did not carry much Brazilian coffee to Russia, at least directly, and vessels sailing from Rio de Janeiro and Bahia to St Petersburg carried almost nothing but raw sugar. According to John D. Lewis, Brazilian coffee would, however, have been a rather competitive product, at least on price.²⁰⁷



Sources: Appendix, tables list 1 and table 41.

FIGURE 44 Total imports of coffee and coffee carried on American vessels to St Petersburg, 1815-53.

²⁰⁷ Lewis's circular, 6 November 1825, EI, JHAP, vol. 2/3. American vessels sailing from Brazil to Russia carried only 33,000 lbs of coffee on average in the 1820s.

Over the whole period under discussion, Russian import duties on coffee were very high, with a peak in 1841 when a duty of over six silver roubles per pood was imposed. At this time the average price of Havana coffee was around 45 paper roubles. The import duty fell five years later to 3.70 silver roubles. According John Randolph Clay, the reason for this radical change was an attempt to prevent massive coffee smuggling from Finland. Clay estimated that as much coffee arrived in Russia by that route as went through the custom houses.²⁰⁸

Coffee was considered a risky commodity on the St Petersburg market. For John D. Lewis, it was “the worst article in the world everywhere”.²⁰⁹ Too much of it was easily carried to St Petersburg and besides, Russian buyers of this luxury product were, according to Levett Harris, very particular over the quality.²¹⁰ According to data collected by the consuls, coffee imports to St Petersburg remained at a level of about three million pounds from the 1810s to the end of 1830s, but it had doubled by the 1850s. The American share of imports to St Petersburg varied significantly from year to year, but at its greatest in 1833 it exceeded 70 percent.²¹¹

8.6 Other exports: indigo from America and fruit from Lisbon

“Do not send shells, or minerals, or Bibles, or missionary books, or philosophical works, or inventions of any kind to me or to my care”, as unusual articles caused unreasonable amounts of work in relation to any benefit they brought in. So John D. Lewis warned his brother in Philadelphia in the autumn of 1828.²¹² Such advice may have been necessary in the 1820s when the range of goods the Americans carried was at its most extensive. At that time it was still the rule to sail to St Petersburg via the Mediterranean and the Cuban sugar triangle was only just about to come into existence. It subsequently became much less common to sail via Spanish and Portuguese ports and at the same time the wide range of re-exports from the United States itself tailed off. Raw white sugar from Cuba took over. This meant that in the 1830s and 1840s most vessels sailing to St Petersburg carried little to be registered in STA apart from raw

²⁰⁸ Clay to Buchanan, 15/27 June 1846, NA M-35/15/10; about tariffs, e.g. Todd to Webster, 29/17 November 1841, NA M-35/14/5.

²⁰⁹ John D. Lewis to William D. Lewis, 3 September 1828, HSP, LNP, Letters 1810-41.

²¹⁰ Harris considered West Indian coffee the most suitable, “fresh green color”, “not strong smell without any mixture”; Meyer & Brückner and Harris to Benjamin Shreve, 10 February 1809, PM, BSP, vol. 3; also: Lewis’ circular, 14 November 1823, HSP, LNP, vol. 70.

²¹¹ The amounts imported to St Petersburg were at least three-quarters of imports to the whole country. For example in 1830 import of coffee was 95,200 poods, that of Riga 21,500 poods, that of Odessa 8000 poods and that of Archangel 800 poods; Appendix, list 1; PRO, FO 65/263.

²¹² John D. Lewis to William D. Lewis, 19 September 1828, HSP, LNP, Letters 1810-41.

sugar and ballast, whereas formerly there might often be about twenty different commodities on board.

In 1847 the U.S. Minister to Copenhagen, William Irwin, compiled a report on American trade with the Baltic in the preceding years. In it he listed almost 70 different commodities shipped to Russia, including ten varieties of dyestuffs.²¹³ Indigo, cochineal, annatto, madder and several sorts of bark and dyewood were the most important of these, and they were mainly used to dye linen and cotton textiles. Due to growing textile production, demand for both dyeing and bleaching agents was increasing.²¹⁴

Indigo growing in North America collapsed soon after the British subsidies came to an end. Producers in South Carolina indigo lost ground in the face of competition from Bengal, Ceylon, Central America and Brazil. While in the mid-1790s the U.S. exported about 1.5 million lbs of indigo, at the beginning of the 1820s it exported only a sixth of that amount. Russia was among the most important purchasers of the product, with about 15 percent of exports in the period 1821-60 going there. In the years 1826-30 indigo represented almost a third of U.S. domestic exports to Russia. In fact, however, some of the indigo classified as domestic was actually being re-exported.²¹⁵

Indigo was worth a lot in relation to its weight. In the words of Bostonian Samuel Sanford it was "almost as much like specie as Silver & Gold"²¹⁶, and it was easy to smuggle and to reload. Russia was the major purchaser of the indigo passing through the Sound, and Britain the main supplier. The English got most of their indigo from Bengal. According to Sound Tables, the amounts carried to the Baltic increased steadily in the early 19th century, and they do not support the remark of the British consul in Copenhagen, H.W.W. Wynn, in 1830 that the export of the product through the Sound had "totally ended" and that Russia purchased its indigo from Hamburg via Lübeck.²¹⁷ The Sound dues were not usually considered an impediment to the trade in indigo. Although the price of East Indian indigo quoted in London dropped by a half between

²¹³ Irwin to Buchanan, 3 June 1847, NA M-41/5.

²¹⁴ See Haber 1969, 8, 80.

²¹⁵ Already in 1811 a cargo of 106,000 lbs of indigo was classified as a non-American product (price \$1.75 per lb). In 1821-25 an average of 250,000 lbs (\$1.0 million) of indigo was exported, most of it being re-export. At the end of the 1840s the total exported was only a tenth of this. In the statistical year that ended on 30th September 1823, the value of indigo exports to Russia was \$243,000, or 37 percent of total exports. The average exported in 1826-30 was 123,000 lbs, which was 27 percent of the value of total exports. Commerce and Navigation, 1821-60; Pitkin 1815, 62; see Nettels 1962, 51,183; Bruchey 1967, 46; Adrosco 1971, 7; HMM 1845, vol.13, 228-230; HMM 1853, vol.28, 768; McCulloch 1854, 727. The proportion of different dyestuffs amongst Russian imports was calculated in 1840 at about 8 percent (6.2 million silver roubles); Blackwell 1970, 432.

²¹⁶ Sanford to Collings, 24 April 1823, HUBL, Samuel Sanford Letterbook.

²¹⁷ Consul Wynn's report; 1 June 1830, PRO, BT, Miscellanea 68. The quantities of indigo imported to Hamburg at the beginning of the 1840s were comparable to those transported through the Sound: in 1841-42 an average of 1.8 million lbs; Soetbeer 1842, 144-152.

the beginning of the 1820s and the mid-1840s, the duty imposed on the product in the Sound was set so as to remain below one percent of its value.²¹⁸

TABLE 30 Indigo passing through the Sound, 1784-1853 (1000 lbs).

Years	To Russia from		Total to Russia	To the Baltic Sea from		Total to the Baltic Sea
	United States	Great Britain		United States	Great Britain	
1784-90	..	..	..	..	..	188
1791-95	..	..	..	..	..	262
1824-25	..	..	446	31	..	549
1832-35	47	879	939	61	957	1 039
1836-40	21	1 029	1 162	25	1 090	1 238
1841-45	17	918	1 236	18	505	1 337
1846-50	6	822	1 398	23	940	1 553
1851-53	3	1 491	1 881	31	614	2 017

Note: Year 1848 excluded.

Sources: Johansen 1983b, 175; Johansen 1986, 130; ST I, 1803, 1805-07, 1815-17, 1824-29; ST II, 1831-53; ØTA, DRA.

The price of indigo, which had the reputation of being a rather capricious product, sometimes varied significantly on the world market. In the United States the Baltic countries and Russia were regarded as the best market for indigo, but the Americans kept getting into trouble in St Petersburg when they tried to sell a product of poor quality despite previous warnings. According to John D. Lewis, "the Americans are poor judges of indigo and buy generally off the black people in Calcutta".²¹⁹

Like other goods the Americans took to the Baltic, indigo was generally left in Copenhagen before 1815. Exports to St Petersburg were at their strongest from then on and through the 1820s according to STA I. The American share of imports to St Petersburg increased to 17 percent in the years 1826-30, but by twenty years later it had dropped to a mere half a percent, while total imports to St Petersburg doubled over the same period.²²⁰ Only small consignments of indigo were carried on American vessels as part of general cargoes bound for northern ports. A consignment of 3700 lbs carried by the brig *Azoff* of Boston from her home town in 1845 was more typical than the cargo of 54,400 lbs the brig *Floyd* of Boston carried in 1832.²²¹ The quantities of indigo recorded in STA II and in consular reports are almost the same. Similarly, figures for exports to

²¹⁸ Tooke & Newmarch 1859, 832-833; Sammenliggende Register över de varer, som ere passerede Öresund fra Nordsöen og fra Östersöen med toldens beløb, DRA, ØTA; Hambro to Forsyth, 24 November 1838, NA T-195/4.

²¹⁹ John D. Lewis to William D. Lewis, 20 June 1828, HSP, LNP, Letters 1810-41; see Meyer & Brüxner to Benjamin Shreve in 1809, PM, BSP, vol.3; Henry Lee to Thomas Lee, Jr., 11 December 1811, Stieglitz & Co. to Henry Lee, 1 August 1819, Henry Lee to William Brandt & Co., 31 May 1842, Porter 1937, vol. II, 1005, 1381-85, 1470-75.

²²⁰ Appendix, list 1. The amounts the Americans carried to Copenhagen were at their highest in the 1820s: 7500 lbs on average. In 1826-30 the indigo imported into Russia was worth on average 11.4 million roubles which was seven percent of total imports; PRO, FO 65/236

²²¹ STA 1832 (1621), STA 1845 (104); CR 1832, 1845, NA M-81/4 and T-195/3.

Russia in the Sound Tables are almost equivalent to total imports to St Petersburg.²²²

TABLE 31 Indigo carried on American vessels through the Sound to St Petersburg, 1818-53 (1000 lbs).

Years	From Boston	From Salem	From New York	Total from American ports	Total to St Petersburg
1818-20	59	26	3	91	91
1821-25	24	12	2	40	41
1826-30	52	10	51	113	117
1831-35	52	3	3	58	58
1836-40	17	4	0	21	21
1841-45	26	-	0	26	26
1846-50	6	-	-	6	6
1850-53	9	-	-	9	9

Sources: STA 1818-50, ØTA, DRA; CR 1851-53, NA M-81/5-6.

The dyestuff shipped in the greatest quantity was logwood (in STA: stockfiskholt)²²³, which by itself or together with other wood of a similar sort came under the general term “dyewood”. Colourings extracted from dyewood were significantly cheaper than, for example, indigo, but of inferior quality in that the dyewood colours faded faster. The market prices varied significantly.²²⁴ Dyewood, which is hard and heavy, was marketed in blocks or chopped up and it was used for colouring wool and silk, but especially fibres of vegetable origin. There were several sorts of dyewood/logwood traded internationally, the most important of which were Brazilwood (STA: *Brasholt*),²²⁵ Cam(peche)wood (STA: *Campechetræ*), Limawood, Pernambucowood (STA: *Fernanbucholt*),

²²² According to STA II, an average of 20,200 lbs was carried to St Petersburg on American vessels in 1834-50, and the consuls reported an average of 21,300 lbs received. Differences occur with only a few shipments. For example, in 1836 the cargo of 107 chests of indigo carried from Boston by the brig *Mexican* of Salem was recorded as weighing 26,800 lbs in Elsinore, but 35,200 lbs in St Petersburg. In 1845 a consignment the ship *Manchester* of Bath carried from Boston weighed 23,400 lbs in Elsinore, but 29,800 lbs in St Petersburg; STA 1836 (378), STA 1845 (180); CR 1836,1845, NA M-81/3-4 and T-201/2. According to ST I, an average of 434,000 lbs of indigo was carried to St Petersburg in 1824-25, but according to the customs records of the city 454,000 lbs was imported. In the years 1832-40 an average of 1,065,000 lbs of indigo was exported to Russia, and according to the customs records of St Petersburg, exactly the same amount was imported. In 1849-53 the corresponding figures were 1,654,000 and 1,643,000 lbs; ST II, 1832-50, DRA.

²²³ Logwood is the heartwood of *Haematoxylon campechianum*, a tree which grows in the West Indies and Central America. Haematein, a reddish brown colouring matter, is extracted from it and used to produce purple, blue and lavender. The colouring agent was also used as ink; see Bartholomew 1907; Homans 1858,1273; Adrosco 1971, 45-46.

²²⁴ In 1823 Nicaraguawood cost \$70 per ton in Boston, but Brazilwood only \$40 per ton; Horace Gray to Thomas Howes, 17 May 1823, HUBL, HGP, vol.17.

²²⁵ Brazilwood was often a general name for wood from which a red colouring agent could be extracted. The varieties included Pernambucowood, Peachwood, Queen’s wood, Limawood and Nicaragua wood (“Brazilletto”). Sappanwood, “Sappan” (*Caesalpinia sappan*) was another well-known “Brazilwood”.

Sapanwood, Nicaraguawood and St Domingowood.²²⁶ Fustic, which was mainly used for building and furnishings but which also gave a yellow colour, was another variety often included in logwood and dyewood.²²⁷ At the end of the 18th century, three-quarters of the wood transported eastward through the Sound went by the name of logwood.²²⁸

TABLE 32 Logwood and fustic passing through the Sound, 1784-1853 (tons).

Years	To Russia		To the Baltic Sea	
	From U.S.	Total	From U.S.	Total
1784-90	..	..	..	1 919
1791-95	..	..	..	2 098
1831-35	1 189	5 924	1 904	10 698
1836-40	973	5 422	2 100	10 957
1841-45	1 896	6 825	3 014	12 852
1846-50	1 306	5 813	1 841	12 680
1851-53	1 304	5 173	1 608	8 421

Sources: Johansen 1983b, 174-175; ST II, 1831-53, ØTA, DRA.

Although logwood was mainly used as ballast on vessels crossing the Atlantic, “necessary for dunnage”²²⁹, it could also be the major cargo of vessels sailing to St Petersburg, in the form of hachewood (Rio de la Hache wood) from either North American or West Indian ports. Already in 1785 the product called dyewood/logwood (altogether 148 tons) was the main cargo of three vessels in terms of the value declared to the customs in the Sound, although in those days it was reckoned that “... *nor are these northern countries place for consumption for so*

²²⁶ Consular reports included in logwood/dyewood all types of wood sorts other than mahogany and *lignum vitae*, a guaiacum or pockwood (STA: pokkenholt) which was often used for shipbuilding and tools. Wood was used for example for blocks, pestles and bowls. Other varieties the Americans carried were Jamaicawood, rosewood, Sweetwood and St Martin wood. About twenty different wood varieties carried to the Baltic appear in ST II. Logwood carried as ballast was not always specified in STA, and consular reports often record it in square feet or “in logs”. It is also often the case that even when STA recorded the amounts of logwood, the consuls did not mention it; for example the case of the ship *Argo* of Boston and the ship *Mary Francis* of Boston in 1841; STA 1841 (1033, 2068); CR 1841, NA M-81/4.

²²⁷ Fustic, in other words yellow wood (*Cholophora tinctoria/Morus tictoria*), was used for example for dyeing cotton. The best sorts for dyeing came from Mexico and Cuba. Fustic used as a building material usually originated in North America. Several tropical hardwoods used for building were called ironwood in international trade. On trade names for different wood varieties; see Patterson 1988, 13-15.

²²⁸ Logwood could be any of several different types of wood, but usually it did not include for example Brazilwood, Pernambucowood, Campechewood, or St Martin wood. In 1784-95 through the Sound an average of 4.3 million lbs of all types of wood was carried, and in 1791-95 an average of 4.7 million lbs. Logwood made up 77 percent of the total in 1784-95, and Brazilwood 11 percent. 84 percent of the logwood came from London and it mainly went to the Prussian textile industry, 65 percent going to Stettin, while only 31 percent went to St Petersburg; Johansen 1983b, 174-175, 184.

²²⁹ Pickman et al. to Lander, 2 March 1816, EI, BPP, vol.2.

costly woods".²³⁰ In 1815 four vessels sailed to the Baltic carrying logwood as their main cargo, two of them from Salem, one from Portland and one from New York. In the following year logwood was carried at least from the latter two ports to St Petersburg. In the 1820s shiploads of campechewood went from Campeche in Mexico to St Petersburg. In 1834 the ship *Neva* (361 tons) carried from Boston a small consignment of cotton, 209 tons of fustic and 110 tons of Nicaraguawood and St. Martin wood. In 1848 four full cargoes of dyewood went to the Baltic, two from Boston, one from Laguna in Brazil and one from Tabasco in Mexico.²³¹ The Americans provided a substantial amount of the dyewood St Petersburg purchased. For example, in 1831 imports to St Petersburg averaged 6600 tons, and the Americans imported a quarter of the total.²³²

TABLE 33 Logwood and fustic carried on American vessels through the Sound to St Petersburg, 1783-1860 (tons).

Years	From Boston	From New York	Total from U.S.	From Havana	Total to St Petersburg
1783-90	5	-	25	-	30
1791-1800	1	-	4	-	15
1801-07	4	45	60	-	234
1815-20	233	141	637	51	712
1821-25	357	316	781	95	1 229
1826-30	292	545	908	104	1 084
1831-35	631	614	1 294	238	1 553
1836-40	708	171	901	171	1 099
1841-45	482	271	796	88	943
1846-50	756	213	1 032	21	1 165
1851-53	790	-	849	-	1 022
1856-60	353	207	560	758	1 318

Sources: STA 1783-1806, 1815-50, ØTA, DRA; CR 1807, NA T-201/1; CR 1851-60, M-81/5-6.

Around 400 tons a year of quercitron bark, which had similar dyeing properties to fustic and was used for dyeing wool, cotton and silk yellow, as well as treating skins, was imported to St Petersburg in the 1840s, of which the Americans supplied about a quarter.²³³ Sumach and madder, which yielded a red tanning

²³⁰ Grieg to Buffington, 16 August 1786, EI, DFP, vol. 5; STA 1785 (852,982,983). The opinion was perhaps right, since in 1791-95 logwood formed a part of only three cargoes from western Europe to St Petersburg.

²³¹ STA 1815 (574, 684, 733, 772); STA 1816 (482, 483); STA 1834 (1489); STA 1848 (430, 515, 596, 626); CR 1834, 1848, NA M-81/3,5.

²³² In 1824-25 an average of 5100 tons of dyewood was imported to St Petersburg; the Americans supplied 2000 tons. At the end of the 1840s the American share was about 10 percent, but it increased again at the beginning of the 1850s to a fifth. Logwood accounted for 2.3 million roubles' worth of Russian imports in 1831-35, which was around one percent of total imports; PRO, FO 65/236; ST I and ST II, DRA; Appendix, list 1.

²³³ Only especially large quantities were recorded in STA, and duty was levied on an ad valorem basis, as for example in 1845 on the 64 tons carried by the bark *Independence* of Philadelphia; STA 1845 (500); CR 1845, NA M-81/4; likewise STA 1838 (2802, 3590, 3630). Consular reports often employed the category "bark", which sometimes included valuable Peruvian bark (Jesuits' bark), used medicinally, normal oak bark,

agent, were carried to the Baltic less regularly.²³⁴ The yellow-orange annatto, used for dyeing textiles, butter and cheese, was another of the most common dyestuffs exported to Russia. In the 1840s the Americans supplied about an eighth of St Petersburg's requirements.²³⁵ Cochineal, used for scarlet, purple and crimson, was the most valuable of all dyeing agents. In 1784-95 an average of 20,000 lbs of it was transported annually to the Baltic. In 1836-39 the figure was 180,000 lbs, and the amount going to Russia 175,000 lbs, 1700 lbs of which was loaded on in the United States, and 750 lbs carried in American vessels.²³⁶

TABLE 34 Annatto, cochineal and quercitron bark carried by American vessels through the Sound to St Petersburg, 1821-53.

Years	Annatto (lbs)	Cochineal (lbs)	Quercitron bark (tons)
1821-25	..	3 430	..
1826-30	16 780	9 290	..
1838-40	3 020	2 260	120
1841-45	9 920	750	207
1846-48	19 220	-	55
1851-53	7 200	-	21

Sources: STA 1821-50, ØTA, DRA; CR 1838-53, NA M-81/3-6

At the turn of the century the opening up of American trade with India and the East Indies brought several products to the United States which were tentatively tried out on the St Petersburg market, usually with poor results. In 1808 Brown & Ives of Providence tried to sell nankeens in St Petersburg brought from Bombay on their own vessels.²³⁷ Later Henry Lee of Boston tried to sell

dogwood bark and sumach in addition to the multi-purpose North American Quercitron bark (grey, black and olive green colouring agent). Sumach was twigs and leaves of *Rhus cotinus* and *Rhus cararia*. Black and yellow dyeing agent was extracted from it for tanning; see Adrosco 1971, 33-34.

²³⁴ Madder and cochineal were the most important red dyestuffs in America in the 18th and 19th centuries. Brazilwood and dyewoods only came after them; Adrosco 1971, 21, 25.

²³⁵ CR 1846-50, NA M-81/4-5; Appendix, list 1; Adrosco 1971, 21, 25. An average of 3800 lbs of annatto (orleans) was carried from the Sound to the Baltic in 1784-95. In the 1830s the figure was 116,200 lbs on average, of which 74,200 lbs went to Russia. 3200 lbs of this came from the United States. In the 1840s the corresponding figures were 122,700 lbs, 98,900 lbs and 19,000 lbs; ST II, 1831-50. Annatto was made from the seeds of *Bixa orellana*. Its seed was also used as a spice. Several American vessels also carried small amounts of sassafras, the bark of the roots of *Sassafras officinale*. It was used for medical purposes, as a powerful stimulant, as well as for sassafras oil. American madder was used for red and purple.

²³⁶ STA 1836-39; ST II 1836-39; CR 1836-39, NA M-81/3; Johansen 1983b, 175. Cochineal consists of the bodies of female *Coccus cacti*, which feed on cactus plants. About 70,000 insects are needed to make a pound of cochineal, and they yield 10 percent of pure dye. After 1815 the price of cochineal in St Petersburg was about four times that of indigo. The dye manual of 1831 reported the American prices of the six principal dyestuffs as follows: quercitron, fustic and logwood were 6 cents per lbs, madder 19 cents and indigo \$2.25, while cochineal cost from 31 to 37.5 cents per oz; Adrosco 1971, 8.

²³⁷ Brothers Cramer to Brown & Ives, 9 October 1807 and 14 January 1808, BUJCBL, BIP, P. C68; see Rasch 1965, 48-49.

“Bengal piece good”, “refined saltpetre”, sugar, Indian cotton, ginger and multi-purpose turmeric through Stieglitz.²³⁸ However, St Petersburgers mainly obtained their exotic goods more cheaply overland from the south or by way of the major trade routes from western Europe.

Rum distilled in New England from West Indian molasses was an American export that had its origins in the colonial era. The production of rum, particularly Medford rum, was concentrated mainly in Massachusetts.²³⁹ There were attempts to market rum to the Baltic from the beginning of the 1780s onwards, but the results were poor, except in Copenhagen.²⁴⁰ Aage Rasch attributes this to the fact that re-export arrangements in Denmark were very flexible and rum was a fashionable drink at the turn of the century.²⁴¹ Exports to St Petersburg were a riskier business. Cramer, Smith & Co. reported to Salem in 1804 that importing rum was not profitable because of the smuggling encouraged by prohibitive tariffs, and the same explanation for low import levels was also given later.²⁴² However, American rum exports increased at the end of the 1810s to an average of 41,850 gallons (c. 700 hhds), valued at about \$25,000.²⁴³

Wines were a major commodity carried to the Baltic. They came mainly from France, but to some extent also from the Iberian peninsula and from Italy. In 1785, 49,200 pipes of wine were carried from France through the Sound, making up 90 percent of the total amount. During the wars the proportion of wine from the Mediterranean increased²⁴⁴, but after 1815 French wines regained their position. In 1824-25, three-quarters of over 26,000 pipes carried to the

²³⁸ Henry Lee to Stieglitz & Co., 4 April 1817, 9 December 1817 and 12 September 1818, Porter 1937, vol. II, 1242-1243, 1313-1314, 1342. Turmeric is the rhizome of *Curcuma longa*, a plant of the ginger family from the East Indies. The plant was used as a colouring agent, medical cure and spice.

²³⁹ In 1860 about four million gallons of rum was distilled in the United States: 2.3 million gallons in Massachusetts and 1.3 million gallons in New York; Albion 1961, 180.

²⁴⁰ In 1784-90, 362 pipes of rum passed through the Sound, and in 1791-95 an average of 745 pipes; Johansen 1983b, 174; Johansen 1986, 130. In the exceptional year 1810 124,000 gallons of rum and 436 gallons of grain spirits were exported to Russia; Pitkin 1815, 196.

²⁴¹ According to Rash's calculations based on STA, American rum exports to Copenhagen were at their highest in 1806 at 7160 hhds, but according to the consul in Elsinore the figure was 554,992 gallons, which is 9250 hhds; Rasch 1965, 43; CR 1806, NA T-201/1. American foreign trade statistics record for the first time in 1795 5600 gallons of “American spirits” carried to Russia, and 2843 gallons of rum in the next year; ASPCN 1795, 340; ASPCN 1796, 359.

²⁴² Cramer, Smith & Co. to Benjamin Pickman, 8 November 1804, EI, Benjamin Pickman Papers, vol. 6; Lewis to W. Langdon, 8 March 1821, HSP, LNP, vol. 69. Pitkin (1815, 196) mentions that 124,100 gallons of rum was carried from the United States to Russia in 1810.

²⁴³ According to Pitkin (1815, 196), also 4536 gallons of grain spirits were exported to St Petersburg in 1810. In 1820 the bulk, 171,900 gallons out of 242,000 gallons (4040 hhds), was from New England, but in 1843-44, only 300 hhds of 8500 hhds carried to the Baltic was of North American origin, the rest coming mainly from the West Indies; Gibson to Adams, 26 February 1821, NA M-81/2; Commerce and Navigation, 1821-60; ST II, 1843-44.

²⁴⁴ Johansen 1986, 127. In 1795 18,200 pipes of French wines were carried through the Sound, which was less than 60 percent of the total amount transported via Elsinore.

Baltic came from France and over half from Bordeaux alone. The bulk of it went to St Petersburg and Stettin, with both of them taking about a third of the total in the period under study.²⁴⁵

Some wines were specified as Pico or Fayal wines, port wines or Madeira wine.²⁴⁶ In 1832 the brig *India* of New York (184 tons) carried 407 pipes of Madeira wine from there to St Petersburg, and the schooner/brig *Pocket* (141 tons) of Boston took a cargo of 215 pipes. The latter repeated the voyage at least in 1834. In both instances the brig returned to Madeira under the command of Captain Elijah Howes with a cargo of flax, tallow and manufactures. In 1834 the brig *Rolla* of Boston accompanied her on the same route, carrying a cargo of Madeira wine to Thomson, Bonar & Co. and returning to Bergen in ballast. In 1838 the brig *Montana* of New York probably first took a cargo of cotton from Apalachicola to Le Havre, and then sailed to Madeira to take on 488 pipes of wine for St Petersburg.²⁴⁷

TABLE 35 Rum, wine and olive oil carried by American vessels through the Sound to St Petersburg, 1784-1840.

Years	Rum (gallons)	Wines (pipes)	Olive oil (gallons)
1784-90	2 000	0	450
1791-00	2 010	87	5 150
1801-07	7 700	92	16 900
1816-20	41 850	140	68 680
1821-25	22 680	278	117 460
1826-30	12 900	217	67 240
1831-35	1 550	420	240
1836-40	-	200	830

Sources: STA 1784-1806, 1815-40, ØTA, DRA; CR 1807, NA T-201/1; CR 1834-40, NA M 81/2-4

²⁴⁵ The Madeira wine that the Americans carried, as well as Spanish and Portuguese wine, were measured in the Sound in pipes (c. 450 litres). Rhine wines were usually measured in ahms, and French wines in cask/fad; see Appendix, list 2. STA mentions, for example, in the years 1784-95 about thirty sorts of wine which cannot be specified due to the cargo records stating only "wines". In 1824-25, an average of 10,670 casks of French wine was carried through the Sound, 4450 pipes of Southern European wines and 270 ahms of Rhine wines. The total amount was only half of that carried to the Baltic at the end of the 1780s. By contrast, for example in 1840, 52,600 pipes of French and 9300 of Spanish and Portuguese wines were carried to the Baltic; Johansen 1983a, 105-106, 126-128; ST I, 1824-25; ST II, 1840.

²⁴⁶ The Americans took wine from the French ports of Bordeaux, Brest and La Rochelle to Copenhagen in 1784 (1500 pipes) and in 1795 (1400 pipes). In the latter year 612 pipes of wine were carried from Lisbon to St Petersburg; Johansen 1983a.

²⁴⁷ STA 1832 (880, 2394/2981); STA 1834 (1396/1961, 969/1546); STA 1838 (2639); CR 1832, 1834, 1838, NA M- 81/3 and T-195/3. There were other "wine routes": in 1830, 158 casks of "Bordeaux city wine" was carried from Bordeaux, and the schooner *Yellow Bird* of New York carried 178 pipes and 44 hhds of wine from Benicarlo in Gibraltar to St Petersburg. During the same period the schooner *Howard* belonging to March & Benson of New York transported 24 pipes of wine from Madeira to Riga (according to STA, to "the Baltic Sea") and returned to Madeira with a cargo of grain and flax, according to the consul in Elsinore; STA 1830 (383,783, 1507/2252); CR 1830, NA T-195/3.

The Americans frequently carried olive oil to St Petersburg from the 1790s to the end of the 1820s, but John D. Lewis considered the article highly speculative: it might bring great profits but also severe losses.²⁴⁸ The carrying of both olive oil and rum reached its peak between 1815 and 1830, while the peak of the wine trade occurred at the beginning of the 1830s. Around 1820 the Americans carried about 40 percent of imports to St Petersburg, but a decade later only around 10 percent. Olive oil was originally transported only from southern European ports, but from the 1830s onwards occasionally from the United States. For example, in 1842 STA reports that three vessels carried altogether 35,800 gallons of olive oil from Boston to St Petersburg.²⁴⁹

Only small amounts of North American whale oil (spermaceti) was carried to the Baltic in the 1820s in comparison with the amount taken there from Bergen. Later the situation changed: for example, in 1841-45 7100 of the 16,800 ahms that was carried through the Sound was North American.²⁵⁰ The amounts the Americans supplied to Russia were insignificant when compared with exports to German ports. For example, in 1845 one vessel, the bark *Galileo* of Augusta, carried 2200 gallons from New York to St Petersburg, but four vessels carried a total of 276,000 gallons from Warren, Mystic and New York to Stettin.²⁵¹

Fruit from Lisbon was probably the main commodity the Americans supplied to St Petersburg for about twenty years from the end of the 1780s onwards. STA and the consular reports record oranges, lemons and apples by the box, without further specification. Those sailing the "fruit triangle" often also carried pepper, pimento, wine, raisins, almonds, ginger and figs. Captain Luther Little, who probably sailed for the Bostonian Daniel Sargent, left Lisbon in the spring of 1795 with 12,500 lbs of almonds and 66,900 lbs of figs as well as wine and fruit.²⁵² The Americans carried about a tenth of all the boxes of fruit

²⁴⁸ Uncertainty was further increased by the fact that olive oil began to arrive via Odessa and Taganrog in large quantities; Lewis' circular, 6 November 1825, EI, JHAP, vol. 2/3. According to Lewis, Italian and particularly Gallipoli olive oil was of the best quality. The major broker in St Petersburg was Thomas Wright & Co.; John D. Lewis to William D. Lewis, 9 February 1823, HSP, LNP, vol.70; John D. Lewis to William D. Lewis, 3 September 1829, HSP, LNP, Letters 1810-41. According to Homans (1858, 1471), olive oil transported to England and northern Europe was mainly from the Gulf of Taranto, Gallipoli.

²⁴⁹ The vessels were the brig *Camel* of Boston, the bark *Fame* of Boston and the brig *Caroline & Mary* of Bangor. According to U.S. foreign trade statistics, the amount exported to Russia was only 23,200 gallons in the year in question, but according to the consul in St Petersburg, as much as 214,500 lbs (!) was carried there from the United States. According to ST II, altogether 11,507 pipes were carried to the Baltic, 137 of them from the United States; STA 1842 (1075,1416,1806); CR 1842, NA M- 81/4; ST II, 1842; Commerce and Navigation 1842; Appendix, list 1.

²⁵⁰ ST II, 1841-45. In 1824-25 an average of 6660 ahms was carried to the Baltic, 4560 ahms from Bergen, 300 ahms from Boston and 340 ahms from New York. Most went to Stettin (2750 ahms). The product was not exported to Russia in those years; ST I, 1824-45. According to Bolkhovitinov (1975, 225), 24,100 gallons was imported into Russia in 1805 and 22,500 gallons in 1809.

²⁵¹ STA 1845 (98, 628, 800, 882, 1173); CR 1845, NA M-81/4.

²⁵² Captain Richard Wheatland of Salem fits into the same pattern. He carried 13,000 lbs of raisins and 60,500 lbs of figs with a cargo of salt from Cadiz to Reval; STA 1795 (58,252); CR 1793, NA T-201/1.

taken to the Baltic at the beginning of the 19th century, valued at about \$40,000 – 50,000. The amounts in boxes at the turn of the century were as follows:²⁵³

Years	Boxes	Years	Boxes
1787-90	1 540	1801-04	13 880
1791-95	3 600	1805-07	7 930
1796-00	4 840	1815-16	3 320

Ebenezer Parsons' brig *Byfield* (145 tons) provides a typical example of "the fruit triangle" at the end of the 18th century. In June 1792 under Captain Aaron Parsons she carried about 500 boxes of fruit, 34,000 lbs of sugar, 4300 lbs of raisins and six pipes of wine from Lisbon to St Petersburg. The return cargo to Boston was, as usual, hemp, iron and sailcloth.²⁵⁴ In the same way the Salem ship *Sally* (269 tons), owned by Peabody & Co. and commanded by Captain Moses Endicott, at the beginning of April 1803 carried nearly 2200 boxes of fruit from São Miguel to St Petersburg. The ship returned in late June taking manufactures, hemp, and iron to New York.²⁵⁵ When the sugar triangle strengthened, the proportion of southern European products the Americans sailed to St Petersburg decreased. However, even in 1825, when altogether 57,000 boxes of fruit were carried to the Baltic, 27,500 boxes of them to St Petersburg, the Americans carried 6400 boxes of those taken to St Petersburg.²⁵⁶ - At the end of the 18th century the Americans carried some cargoes of salt from Cadiz or Lisbon to Reval, Stockholm or St Petersburg.²⁵⁷

Spices, almonds, dried raisins and figs commonly made up a part of cargoes from the United States or southern Europe. For example, in 1793 the brig *Elisabeth* (135 tons) owned by Thomas Russell of Boston carried 24,400 lbs of almonds and 61,200 lbs of figs from Lisbon to St Petersburg in addition to 965 boxes of fruit.²⁵⁸ After 1815 cocoa and spices often replaced fruit. The most regularly exported spices were pepper and pimento, 220,800 lbs of which were carried in 1822. However, these amounts were exceptionally large. According to the consular reports, the amounts of cocoa, almonds and raisins and the major spices carried to St Petersburg on American vessels in 1836-40 were as follows:²⁵⁹

²⁵³ A box was about 45 kg. As a measure of capacity 20 boxes was equal to one last In 1791-95 the average export of "fruits" to the Baltic was 33,700 boxes and 216 barrels; Johansen 1983a, microfiches 3-4; Johansen 1986,130; STA 1787-1806, 1815-1816; CR 1807, NA T-201/1; Harris to Monroe, 10/22 December 1811, NA M-81/2.

²⁵⁴ STA 1792 (529/906); CR 1792, NA T-201/1.

²⁵⁵ STA 1803 (81/1408,1447); CR 1803, NA T-201/1.

²⁵⁶ STA 1825; ST I, 1825. 42,400 boxes out of the total exported to the Baltic originated in Messina and 2200 boxes in Boston. 15,800 boxes of the total number remained in Copenhagen. Boston was the major import centre for Mediterranean fruit and wine in the United States until about 1850; Morison 1921,291.

²⁵⁷ Cargoes of salt, e.g. STA 1789 (664); STA 1792 (745); STA 1794(182); STA 195 (252,685).

²⁵⁸ STA 1793 (184/717); CR 1793, NA T-201/T1.

²⁵⁹ CR 1836-40, NA M-81/3-4. These figures accounted for almost a third of total pepper imports to St Petersburg and a quarter of cassia imports. According to the U.S. foreign trade statistics, the share of spices in the country's total exports to Russia was

Pimento and pepper	85 500 lbs	Cocoa	4 200 lbs
Ginger	8 100 lbs	Almonds	2 100 lbs
Cinnamon/cassia	6 300 lbs	Raisins	1 900 lbs
Nutmegs	300 lbs		

There were yet other items of plant origin that the Americans regularly took in small quantities. For example, between 1831 and 1853, an average of 156,000 lbs of sarsaparilla, which was used to treat rheumatism and syphilis, was carried to the Baltic, about half of it, or around 77,000 lbs, from the United States. The amounts carried by American vessels were at their highest in the 1830s, 96,000 lbs on average, valued at around \$25,000.²⁶⁰ The Americans also carried varying amounts of gum shellac, which originated in the East Indies. For 1836-40 the figure, according to consular reports, was around 22,000 lbs on average, or about a tenth of imports to St Petersburg. Other gums and mixtures of resin and gum (aloes, gum arabic, gum elastic, "gum myrrh", gum gobal) were carried in varying amounts. In 1837, for example, a total of 26,200 lbs was carried.²⁶¹ General cargoes also quite often included arrowroot and barilla.²⁶²

Especially in the 1840s, lead was carried to St Petersburg as ballast on cotton vessels – in 1843 as much as 552 tons.²⁶³ Its export, like the export of

at its highest at the beginning of the 1820s when it was worth about \$10,000. This cannot be proved on the basis of STA, as some items are included in "sundries", but even the value of the spices specifically recorded in the customs books must obviously be estimated as higher. Exceptionally large quantities of spices were carried for example in 1810 (1,252,000 lbs of pepper), in 1817 (217,000 lbs of ginger), and in 1821 (55,400 lbs of cinnamon). Pimento was also known as allspice or Jamaican pepper. It was the dried fruit of *Eugenia pimenta*. Oil extracted from pimento was used as an analgesic drug.

²⁶⁰ Sarsaparilla derived from the roots of several *Smilax* plants. In 1784-95 an average of 5900 lbs of it was carried through the Sound. In 1831-56 most of it went to Russia (148,000 lbs) and half of it (74,000 lbs) was from the United States. Sarsaparilla rhizome probably also reached St Petersburg by other routes than through the Sound, as the figure for imports to the city in the years in question was 227,000 lbs. In the 1820s the Americans only carried to St Petersburg a fifth (27,000 lbs) of the city's consumption, whereas in the 1830s about 60 percent and in the 1840's about 40 percent (65,000 lbs); STA 1815-50; ST I, 1824-25; ST II, 1831-50; CR 1834-50, NA M-81/3-5; Johansen 1983b, 175.

²⁶¹ Copal was a common term for resins derived from trees of several kinds. The South American Copals were furnished by especially *Hynenaea Courbaril*. The products of this group are not much mentioned in STA. For example in 1845 the bark *Azoff* of Boston and the brig *Messenger* of Duxbury carried 3390 lbs of gum shellac, 3660 lbs of gum arabic and 7280 lbs of gum copal to St Petersburg, but STA does not recognize the products; STA 1845 (104,501); CR 1836-40, NA M-81/3-4; Appendix, list 1.

²⁶² Barilla was an impure carbonate of soda, usually obtained from *Salsola sativa*. Arrowroot was derived from the rhizomes of various plants, and was obtained from *Maranta arundinacea*.

²⁶³ The ship *Elsinore* of New York (597 tons) and the ship *Ceylon* of Boston (422 tons) together carried 338 tons of lead with a consignment of almost 1.3 million pounds of cotton. The ship *Rajah* of Boston (531 tons) carried the biggest cargo of lead, 123 tons, in 1846 from New Orleans together with almost 860,000 lbs of cotton. The lead was most often taken on in New York and it was mainly a re-export from Borneo. The average quantity exported to St Petersburg in 1842-45 was 489 tons; STA 1840 (279), STA 1843 (1466, 2174); STA 1846 (564); CR 1840-46, NA M-81/4.

dozens of other products, was so irregular and in such small amounts, taking the period as a whole, that it had virtually no commercial significance. In addition to the above-mentioned products, saffron (in 1835 21,000 lbs) and turmeric (in 1837 8900 lbs) appear most often in the consular accounts. Young coffee trees and birds of paradise are among the most exotic articles in the lists of exports.²⁶⁴

One way in which STA is incomplete with regard to U.S. exports to Russia is that for some groups of products, the accounts usually record only the customs value. Thus, for example, the export of American machines and equipment may be recorded by nothing more specific than the general term "machinery". In 1833 the bark *Venice* of Boston carried 433 cases of machinery, valued at 47,800 rigsdaler, and in 1844 the ship *Lucas* of New York carried machinery to the value of 13,611 rigsdaler (\$14,500). In neither case was the consular report more specific. When the brig *Strelna* of Boston arrived in 1853 via London to take on sheet iron and hemp for New York, the cargo offloaded in St Petersburg was recorded as sperm oil, clockworks, nuts, tortoise shells and 2027 lbs of machinery.²⁶⁵

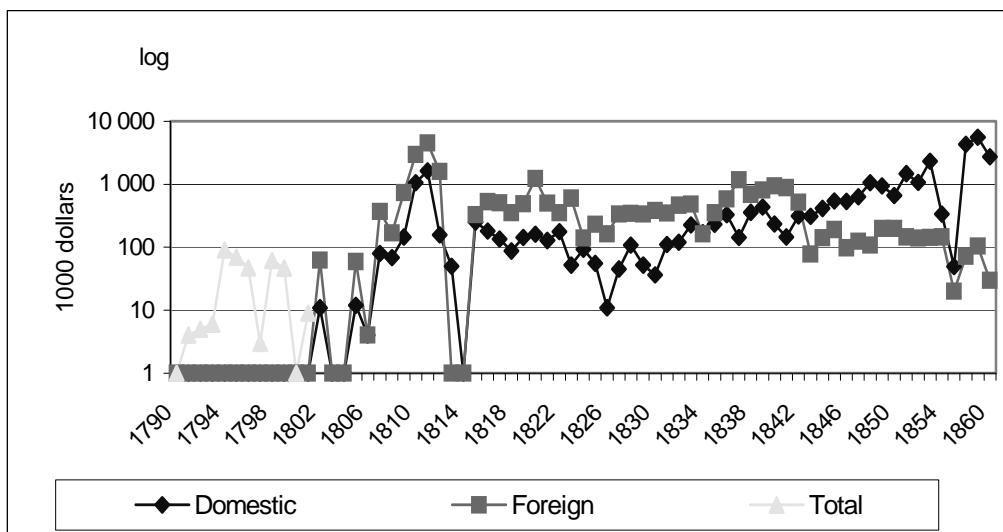
8.7 Total exports

In absolute figures U.S. exports to Russia were at their peak during the Continental System. In 1811 Russia took 10 per cent (\$6.1 million) of the total exports of the U.S. The bulk of this was re-exports, the value of U.S. domestic exports being \$1.6 million, which evidently also included West Indian products. Exports in 1811 were worth as much as the total value of exports in the years 1821-34. U.S. exports to Russia never again reached their 1811 figure before the Civil War.

U.S. re-exports to Russia were worth more than domestic exports until the mid-1840s. After that, direct cotton shipments and a fall in re-exports brought about the situation shown in Figure 45.

²⁶⁴ STA 1838 (1519, ship *Canton Packet* of Boston); STA 1839 (2850, bark *Mary Frazer* of Boston); STA 1840 (2564, ship *Saracen* of Boston); STA 1845 (750, ship *Nathan Hooper* of Marblehead); CR 1838-45, NA M-81/3-4.

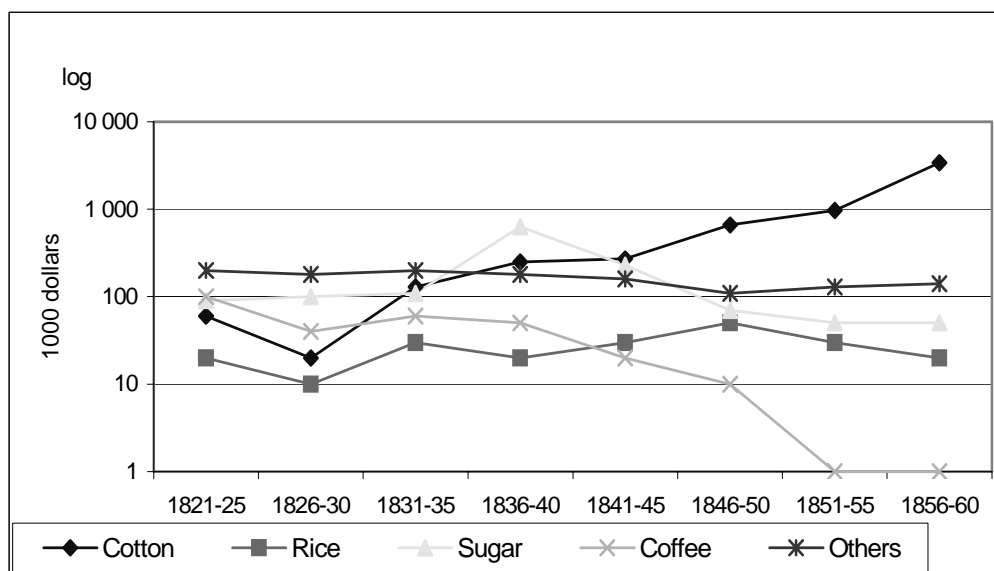
²⁶⁵ Ropes to Marcy, 31 December 1853, NA M-81/3; see Saul 1991,182.



Source: Appendix, table 42.

FIGURE 45 Exports of the United States to Russia, 1821-60.

After the Napoleonic Wars Russia's share of total U.S. exports was usually below 1 percent. It was lowest at the end of the 1820s (0.4 percent) and highest in the years between the Crimean War and the Civil War (1.3 percent). The principal U.S. exports to Russia were raw sugar, coffee, rice and cotton wool. The amounts exported and their value remained almost constant, reckoning in terms of five-year periods from the 1820s to the beginning of the 1850s.



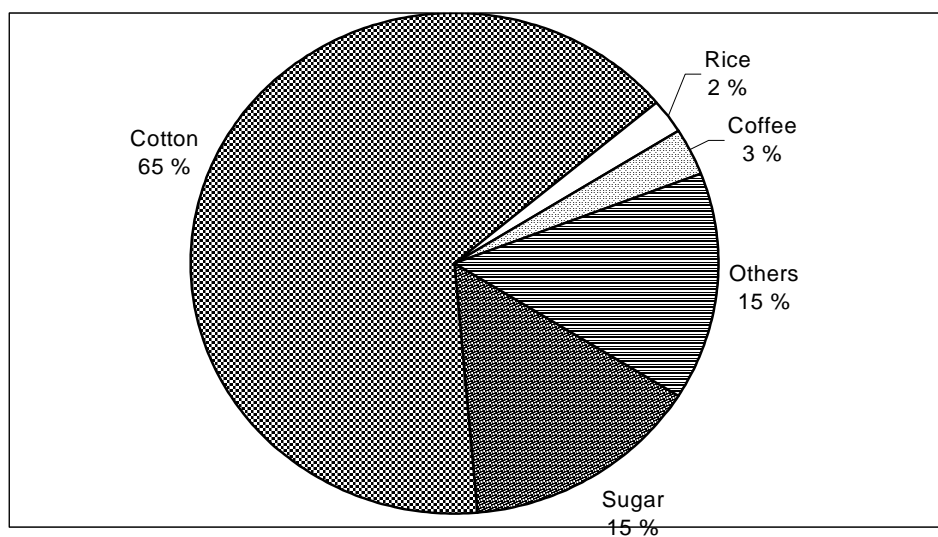
Sources: Appendix, table 42.

FIGURE 46 Exports of principal articles from the United States to Russia, 1821-60.

About 40 percent of exports before the mid-1830s were recorded as "others". This group comprised of ten to twenty commodities carried to St Petersburg on

American vessels. Different sorts of logwood, usually carried as ballast, were perhaps the most important items. As in colonial times, American captains used to carry mixed cargoes in order to avoid risks in the distant Russian market. Exports they carried more or less regularly included indigo and other dyestuffs, a certain amount of rum, wine and many kinds of spices. Increased information as to what was in demand on the St. Petersburg market made this range of expensive goods less important during the last decades of the period discussed. The structure of American exports changed in the 1840s, and after the Crimean War over 98 percent of exports consisted of domestic produce, mainly cotton wool.

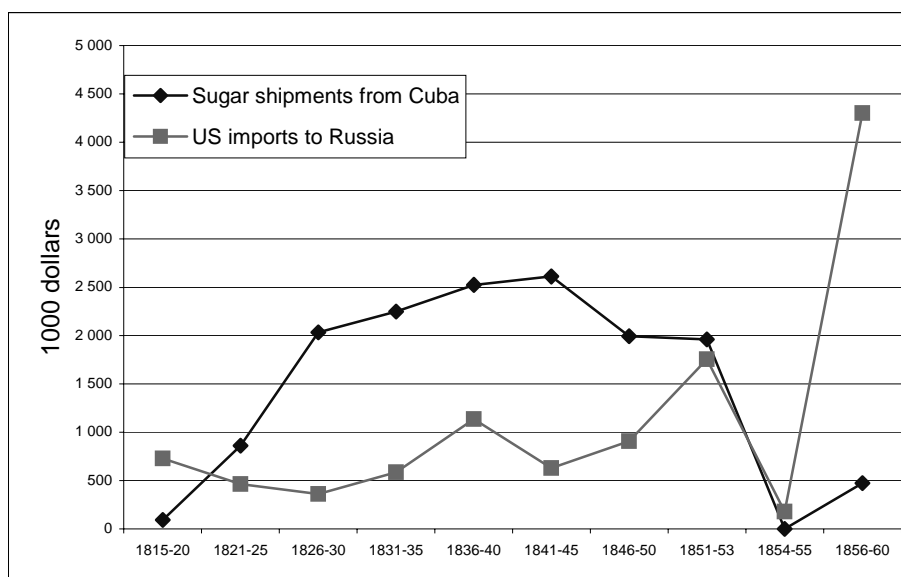
Cotton was "king" of U.S. exports to Russia but only at the end of the 1850s. In the five years after the Crimean War the value of the cotton exported to Russia was equal to that of all exports to Russia put together during the quarter of a century from 1815 to 1840. In 1859 the cotton exported to Russia amounted to 41 million lbs. This was about the same as the amount carried to Baltic Russia on American vessels in the years 1815-46. In the years between the Crimean War and the Civil War 95 percent of U.S. exports to Russia were raw cotton.



Source: Appendix, table 43.

FIGURE 47 A breakdown of U.S. direct exports to Russia by value, 1821-60

Almost one thousand American vessels took part in sugar triangle sailing, which went on for over thirty years, from about 1820 to 1853. According to STA, Americans carried altogether 1024 million lbs of raw sugar through the Sound in the years 1815-60, 895 million lbs from Cuba, 24 million lbs from Brazil and 105 million lbs from the United States.



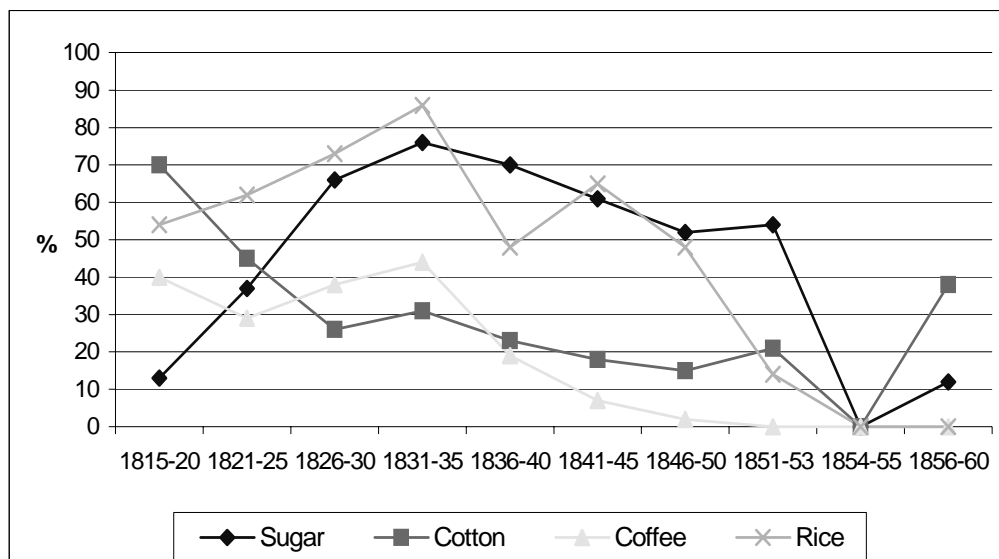
Notes: The Cuban sugar prices are average f.o.b.- prices for each year in Havana, calculated on the basis that one third of shipments were brown sugar and two thirds white sugar. Sugar shipments from Brazil are included.

Sources: CR, NA T-30/3-27; EI, Price Currents; HSP, LNP, Letters 1810-41; PM, JDP; Appendix, tables 42 and 43.

FIGURE 48 Value of the U.S. exports to Russia and value of the sugar carried in American vessels from Cuba to Baltic Russia, 1815-60.

According to the American statistics, sugar exports from the U.S. to Russia in the years 1815-60 amounted to a total of some 86 million lbs, worth \$7 million. According to the prices quoted in Havana, the value of the Cuban sugar carried to Baltic Russia on American vessels in the same years totalled around \$71 million. American sugar triangle shipments from Cuba to Baltic Russia were ten times the "official" U.S. sugar exports to Russia as a whole.

It was a by-product of the sugar triangle that American vessels carried about 13 million lbs of coffee from Havana to Baltic Russia in the years 1821-53. "Official" U.S. coffee exports to Russia were almost the same: some 11 million lbs. The value of the coffee the Americans carried from Havana may be reckoned at \$2 million. In the years 1815-53 U.S. exports to Russia were worth around \$30 million, but the value of the sugar and coffee carried in the sugar triangle from Cuba to Baltic Russia was at least \$73 million, over twice direct U.S. exports to Russia as a whole. Relatively speaking, the greatest differences were in the years 1821-25 and 1840-45. In the former period the value of sugar triangle commodities was nearly six times that of U.S. exports to Russia. In the latter period the value of the sugar and coffee carried from Cuba to Baltic Russia was four times that of direct U.S. exports to Russia.



Sources: Appendix, list 1, tables 32, 35, 37, 41,

FIGURE 49 Raw sugar, cotton, rice and coffee carried on American vessels as a proportion of the total imports of St Petersburg, 1815-60.

As Figure 49 indicates, the sugar and rice brought by American vessels were the most important commodities in the markets of St Petersburg. In the case of rice, the American share rose to nearly 90 percent of all rice imported lawfully to the city. Raw sugar reached its peak in the 1830s, but after that domestic production and Russian tariff policy caused a downturn. Raw cotton was increasingly important in Russia but it seems that American traders realized the situation too late.

9 AMERICAN IMPORTS FROM RUSSIA

9.1 Russian or Swedish iron?

9.1.1 British puddled iron: a threat on the Baltic and in North America

The production and import of iron has been central issues in American trade and tariff policy since colonial times. Before independence the iron production of the mother country and the colonies stood at approximately the same level, in other words at about 30,000 tons a year. The revolutionary improvements in production engineering that were introduced in England at the end of the 18th century and the beginning of the 19th, in terms of coke puddling and rolling, brought about radical changes to both production costs and international trade.¹ Perhaps the most important change was the possibility of producing rolled bar iron in Britain much more cheaply than producing iron in the United States, Russia or Sweden, where forest resources made the use of charcoal possible for a long time.² In about 1840 the production of American pig iron remained below 0.3 million tons, while it was already 1.4 million tons in England. The corresponding figures for 1860 were 0.8 and 3.9 million tons.³ Production of bar and sheet iron started in eastern Pennsylvania in the 1830s with coal, using puddling and rolling methods, but when railway building got under way it created a massive demand for iron, which stimulated both the import of cheap British iron and also the introduction of new production methods in America. Nevertheless changing over to the new production

¹ British output of bar iron was calculated at 32,000 tons in 1788 but had already reached 150,000 tons by 1815; Hyde 1974, 202-203.

² The British innovation of introducing coal and coke into blast furnaces was of course known, but the Americans lacked suitable coal. The Eastern coal was anthracite, the large-scale use of which became possible only rather late; Temin 1964, XV-XVI; Church 1994, XII.

³ In 1830 Britain produced 680,000 tons, the United States 168,000 tons and Russia 187,000 tons. In 1840 and 1860 Russia produced 189,000 tons and 298,000 tons of pig iron, respectively. The corresponding figures for Sweden were 125,000 tons and 185,000 tons; Church 1994, XII; Chandler 1994, 395-435.

technology occurred quite slowly, as around 1840 about 90 percent of pig iron was still produced with charcoal. Some fifteen years later the proportion had fallen to around 45 percent, but the “backward” use of charcoal did not die out for decades. Production of American pig iron was concentrated in Pennsylvania but iron products were manufactured all over the east coast, Massachusetts being the leading state for iron wire and iron forgings.⁴

Regardless of the production method of American iron, it was considered to require tariff protection against European iron. When customs duty on manufactured iron was first introduced it amounted to only five percent, but this figure gradually increased to 17.5 percent by 1804. The tariff distinguished between rolled and hammered bar iron for the first time in 1816. An import levy of \$30 was set on the former, that is, mainly British puddled iron, whereas the levy on the latter was only nine dollars. The English protested strongly against this kind of differentiation, claiming that it contradicted the Reciprocity Act concluded in the previous year. They did not regard the way that iron had been produced as adequate justification for different tariffs. The difference was eliminated in later tariffs, but the fact that the levies on hammered bar iron gradually increased until the beginning of the 1830s inevitably had some influence on the import of Russian and Swedish iron. The tariff set in 1846 radically changed the structure of imports, since it abandoned the distinction between puddled and hammered bar iron: ad valorem duty of 30 percent was set on both of them. In 1857 the tariff was decreased to 24 percent.⁵ The 1840s could be regarded as the turning point for American iron: fundamental changes took place in production engineering and tariffs, with an increase in both imports and production and a fall in the price of imported iron.

⁴ The charcoal iron industry produced mainly pig, cast and bar iron. Blast furnaces gave hard and brittle pig iron, most of which was hammered into bars of wrought iron. Expurgation of coal percentage impurities gave relatively soft and malleable iron which could be used for several purposes. In rolling and slitting mills bar iron was slit into strips called slit iron, or nail rods. One possibility was that bar iron was hammered into thin sheets. Approximately 1.5 tons of pig iron was needed to produce one ton of bars. Iron drawn into bars by watermills or hand forges was introduced onto the market in various sizes. Russian bars were generally three inches wide, 1-2 inches thick and 8-12 feet long. A ton was calculated as containing 33-44 bars. On production and production engineering; see Hyde 1974, *passim*; Hyde 1977, 7, 128; North 1966, 164-165; Douglass 1971, 265-267; Hedges 1968, vol. I, 125-126; Kirchner 1975, 152-153; Stanwood 1903, vol. II, 35; Joseph J. Bacon, 116, PM; Crosby 1965, 31; Mokyr 1990, 92-94; Rosenberg 1972, 25 - 26; Chandler 1978, 87; Temin 1964, 82; Temin 1971, 116-121; Attman 1986b, 11; Engerman 1971, 13-14, 29 (note 2); Church 1994, XIII-XIV.

⁵ In 1816 the import levy on hammered bar iron was calculated at about 20 percent of the product's value at the port of departure on the Baltic Sea. In 1818 the tariff was increased to \$15 per ton, in 1824 to \$18 per ton and in 1828 to \$22.40 per ton. In 1832 it was reduced to \$18. The tariff of \$30 on rolled bar iron in 1832 was calculated on an ad valorem duty of as much as 95-100 percent. After the Compromise Tariff in 1833 the duty on hammered bar iron was gradually lowered, reaching 20 percent by 1842. Late in 1842 the levy was set at \$17 per ton. The specific duty on sheet iron (which in 1842, for example, was \$56 per ton) was usually double or triple that of hammered bar iron; Tariff Acts, 49-50, 60, 74, 85, 105-108, 123; Taussig 1914, 50-52, 111-112, 123-125; Homans 1858, 1809-1818; Stanwood 1903, vol. I, 176-177; Adamson 1969, 94-95; Clark 1929, 252; Setser 1937, 253-254; Engerman 1971, 14; Chandler 1994, 404; see NWR 1822, vol. 22, 235.

Despite the high tariffs, iron and iron products were major American import articles in the early 19th century. The proportion of British iron, the dollar value of which increased many times over, was going up all the time: at the beginning of the 1820s it was a quarter, but in the antebellum years already four-fifths. Between 1842 and 1858 the import of British iron increased by an average of almost 12 percent per year, due largely to its low price. Changes in the proportion of hammered iron imported from the Baltic and puddled English rolled bar iron also started in the 1830s, when the products of Sheffield and Birmingham, reduced in price and improved in quality, conquered the American market. Sweden had earlier been a major source of iron imports for America, but its significance dropped between the beginning of the 1820s and the end of the 1850s from 50 percent to below five percent, while Russia's share also fell, from 20 percent to only a few percent.⁶

TABLE 36 American import of Russian iron, 1817-1860.

Years	Hammered bar iron		Rolled bar iron		Iron total	
	tons	%	tons	%	\$1000	%
1817-19	4 912	28	20	1	..	..
1821-25	5 106	19	4	0	331	17
1826-30	7 317	26	-	-	480	19
1831-35	8 939	28	-	-	541	16
1836-38	4 650	16	31	0	503	10
1844-46	2 008	12	132	0	335	10
1848-50	251	2	839	1	223	2
1851-52	71	0	94	0	246	1
1858-60	-	-	46	0	205	2

Note: The percentages in the first two columns show the proportion of Russian bar iron in total imports of bar iron. The figures in the third column (Iron total) indicate the proportion of all iron sorts in the value of total U.S. iron imports.

Sources: ASPNC 1817-19; Commerce and Navigation, 1821-60.

For some considerable time between one third and a half of the iron imported into America was partly-finished iron, bar, pig and sheet iron and steel. Daniel Webster estimated that at the beginning of the 1820s the consumption of iron in the U.S. was about 50,000 tons, but that its domestic production remained at substantially less than 20,000 tons. Import values of bar iron were about two million dollars at the beginning of the 1820s and about ten million dollars around 1850. After the tariff agreement of 1846 the amount of other imported iron increased to such a degree that the proportion of bar iron was only 30 percent in a few last antebellum years, when it had been above 80 percent four decades earlier. Iron in its different forms remained the major article of import after dry goods, although it was valued at only a sixth of the value of textiles. In

⁶ The value of iron and steel imports in 1821 was \$3.0 million, but had already reached \$17.5 million by 1850. The amount of bar iron imported is recorded in foreign trade statistics only from 1816. The United States was Britain's major export market. In the 1820s 30 percent of exported bar iron and in the 1830s 33 percent went to the United States, the proportion increasing to over 60 percent at the beginning of the 1850s; Fremdling 1994, 365-373.

the 1850s about 60 percent of the demand for iron was still met by foreign imports.⁷

From the European perspective, the tariff wall aimed at protecting American iron remained high. Russia did not criticize the tariffs on hammered bar iron, at least officially, but Swedish iron exporters protested against them repeatedly.⁸ The causal connections between protective customs duties, major domestic production and cheap imported iron are quite complex, as for example Stanley Engerman has shown,⁹ but the duties were regarded as almost the key to the economy in American tariff debates. British puddled iron was considered the most severe threat, but barriers were also demanded against Russian and Swedish iron. The low level of wages in the countries in question was considered to be adequate justification for them.¹⁰ Another argument was that Russia and Sweden purchased only very small quantities of American products. The disproportion

“certainly induce us to attempt the whole manufacture of hammered bar iron for should ourselves, and not to remain dependent on those nations for so large a quantity of an indispensable article, seeing that they take so little from us in return.”¹¹

Russian and Swedish hammered bar iron were used for several specific purposes, for which the domestic product was not deemed equally suitable. St Petersburg iron was used for shipbuilding, for example for the fastenings of frames and rigging and for anchors. It was also used for making agricultural tools and nails. Whalers in New Bedford considered Baltic iron to be the best material for their harpoons, and the armaments industry also used some northern European iron. Opinions about the superiority of Russian and Swedish iron varied, however, depending on both the user and the purpose. Most Baltic iron probably ended up with local smiths and cottage nail makers.¹²

Russia was one of the major suppliers of iron to the United States from the end of the 18th century until the 1840s, and conversely the Americans were

⁷ The import of hammered bar iron remained at about 30,000 tons a year, but the import of rolled iron increased from 6600 tons in 1826-30 to above 62,000 tons in 1841-42, and reached almost 300,000 tons in 1851-53; Commerce and Navigation, 1821-53. Around 1850 the price of puddled iron was only half of the price of hammered bar iron; Temin 1971, 30; see Attman 1986b, 14; Albion 1961, 66.

⁸ E.g. Christian Hughes to Forsyth, 7 March 1837 with enclosures, NA M-45/7.

⁹ Engerman 1971, 13-28.

¹⁰ In 1824 Daniel Webster claimed that the level of wages in the American iron industry was 5-6 times higher than in Sweden and Russia. Thus, low tariffs on iron from the Baltic would be unfair to American workers; Annals of Congress, 18th Congress, 1st Session, 2065. – On tariff debate, see e.g. HMM 1842, vol. 6, 583; HMM 1851, vol. 25, 298-305; NWR 1818, vol. 14, 24.

¹¹ NWR 1927, vol. 33, 191.

¹² E.g. Simon Burbank & Co. to Jeffrey Richardson, 12 December 1819, HUBL, Richardson Papers, vol. II; Christian Hughes to Forsyth, 7 March 1837, NA M-45/7; see Hyde 1977, 19; Chandler 1978, 79, 81; Adamson 1969, 529; Attman 1986b, 13-14; Hutchins 1941, 121-122; Price 1988, 344. The British used Swedish hammered bar iron for their famous Sheffield steel, although the price of Swedish iron was double or triple that of ordinary charcoal iron; Söderlund 1994, 316.

Russia's major export market for iron.¹³ The proportion of Russian rolled bar iron amounted to more than a quarter of America's total import of the product until the mid-1830s. Although this proportion plummeted at the end of the 1840s, the total value of iron imports remained at about \$200,000 thanks to sheet iron, which replaced rolled bar iron. Iron accounted for about 20 percent of all U.S. imports from Russia until the 1840s, and in the 1850s for about 15 percent.¹⁴

Russia and Sweden dominated international iron markets at the end of the 18th century. Russia was the major iron producer in the world from the 1740s until the end of the century; in 1780 it produced 110,000 tons of pig iron, one third of world production and one third more than the British. From the 1730s onwards Russian iron was the most popular sort on the British market, and at the end of the century between three quarters and four fifths of the iron exported from Russia went to Britain, having by then replaced Sweden as Britain's major supplier of iron. Around 1800 the Russian and British production figures were still almost equal, but by the middle of the 19th century the situation had changed radically: Russian technology and organization was left far behind western Europe, and Russia had fallen back to eighth place on the list of major iron producers. Its production figures had shown no significant increase for half a century, while British production had shown a tenfold increase. It was significant for international trade that already at the beginning of the 19th century prices of Russian iron were a third higher than those of puddled British iron, and the difference was further emphasised when the production costs of the former remained quite as they were whereas the price of the latter decreased in 1825-50 by about 60 percent.¹⁵ It was little consolation that Swedish iron also suffered from high prices on the British

¹³ According to Bolkhovitinov (1975, 102), Russia exported 85 percent of its iron to Britain and 9.5 percent to the United States in 1797-98. In the period 1801-07 Britain's share had dropped to 71.5 percent while that of the United States had risen to 21.5 percent. According to the data Niles Weekly Register presented for 1816-18, an average of 16,800 tons of bar iron was imported into the United States, slightly less than 10 percent of it being rolled bar iron. Russia's share in the total amount was 25 percent, that of Sweden 46 percent and that of Britain 20 percent; NWR 1819, vol. 15, 21 November 1818; NWR 1819, vol. 16, 19; NWR 1820, vol. 19, 14 October 1820.

¹⁴ Commerce and Navigation, 1821-60. Sweden's share of hammered bar iron imports was significantly higher until the end of the 1840s: 60-70 percent. Iron totally dominated U.S. imports from Sweden: in the years 1826-60, it fluctuated between 96 and 99 percent.

¹⁵ See Blackwell 1970, 19-20, 42, 56-57, 146; McKay 1974, 338, note 8; Davis 1962, 19; Attman, 1986b, 67; Trebilcock 1981, 207; Adamson 1969, 48; Kirchner 1975, 52; Pintner, 1967, 3-4; Aer 1995, 60-61; Owen 1991, 2. Around 1800 both Russian and British production was about 160,000 tons. In 1825 Russian production was 155,000 tons, in 1845 184,000 tons and in 1855 247,000 tons. Russia's share of world production was still 12 percent in 1830, but in 1858 it amounted to only four percent. Around 1860, however, half of the iron was produced by the puddling method, but employing charcoal instead of coal, thus losing many of its advantages. Church (1994, XII) estimates the production of British pig iron in 1800 at about 180,000 tons and Russian production at 160,000 tons. In 1830 the corresponding figures were 680,000 tons and 187,000 tons, but in 1860 they were 3,888,000 tons and 298,000 tons. According to Falkus (1972, 27, 41), the use of coke and steam power were, in practice, unknown in Russia prior to the Emancipation. Only tariff protection saved production from total collapse faced with British iron.

market.¹⁶ Russian iron had an additional burden to overcome: at the beginning of the 19th century three-quarters of its production was still in the Urals region, and although production costs were low it took at least half a year, and often as much as two years, to transport the iron to St Petersburg. This led to substantially higher prices, with the price in St Petersburg 35 percent higher than that in the Urals.¹⁷

9.1.2 Bar iron passing through the Sound

At the end of the 18th century Russia and Sweden exported fairly similar amounts of iron through the Sound.¹⁸ At that time Britain was by far the major purchaser of Baltic iron, and at best America purchased only one tenth of the amounts that the English purchased. St Petersburg and Stockholm were basically only loading ports: in the period 1784-95 the share of the former was about 50 percent and of the latter something above 40 percent. The major receiving ports were London and Hull.¹⁹ Export and import ports changed after the Napoleonic Wars, but Stockholm and St Petersburg on the one hand and London and Hull on the other kept their position at least until the 1820s.²⁰

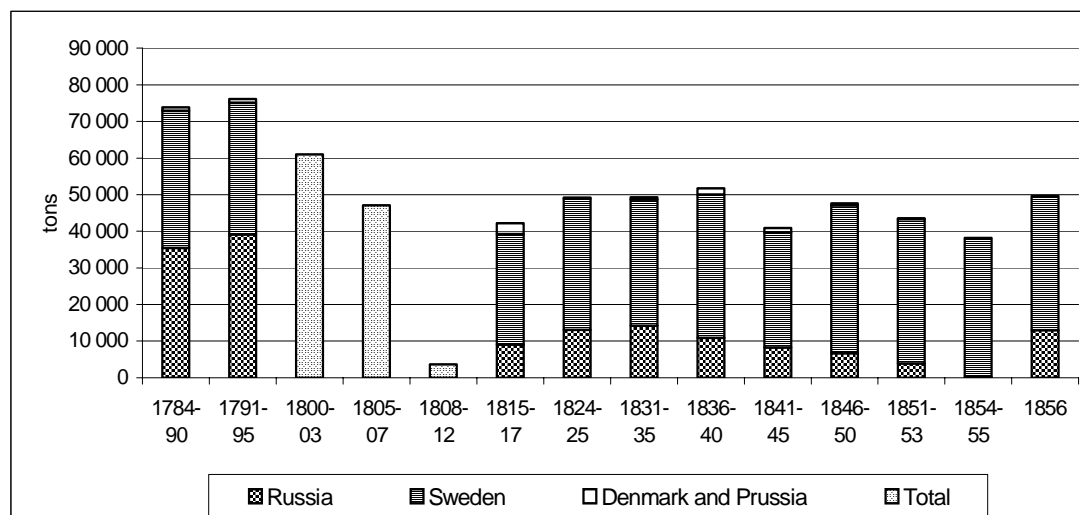
¹⁶ In 1840 Swedish iron (duty not paid, i.e. in bond of London), was about 50 per cent more expensive than puddled British bar iron; Adamson 1968, 71; HMM (1844, vol. 11, 96) published price information that indicates that the price quotes of English rolled bar iron in New York were on average \$61 ½ per ton in January 1840-44, but of Swedish hammered bar iron \$82 per ton.

¹⁷ See Crosby 1965, 33; Blackwell 1970, 57, 81; McCulloch 1854, 983; Buist 1974, 604, note 1; Yatsunsky 1974a, 103. British technology was employed extensively in Russia only in the 1880s; Church 1994, XX; Goldman 1994, 376-377.

¹⁸ The amounts carried from St Petersburg and Stockholm are converted into tons on the basis of 1 ton = 6.3 sklbs, as weights in poods are written down into STA directly in the proportion 1 sklb = 10 poods, and usually 63 poods was calculated as a ton; see Adamson 1969, 78 and Appendix, list 2.

¹⁹ Johansen 1983a, 107. In 1800-1803 an average of 60,000 tons of bar iron was carried from the Baltic Sea, and in 1805-1806 an average of 51,300 tons. Of the latter amount, 22,900 tons were from St Petersburg and 23,600 tons from Stockholm. The next export ports in terms of importance, Gefle (650 tons) and Copenhagen (1300 tons), were left far behind them; ST I, ØTA, DRA.

²⁰ In 1805-06 an average of 7460 tons (unspecified 860 tons) was carried to a total of 21 American ports, according to ST I, and in 1824-25 an average of 15,130 tons (unspecified 95 tons) to eleven ports. In the latter years rolled bar iron was exported from altogether 29 ports on the Baltic Sea to 63 different ports west of the Sound; e.g. an average of 365 tons was exported from nine Finnish ports, mostly from Uusikaarlepyy (Sw. Nykarleby), ST I, ØTA, DRA; Appendix, table 44.



Note: The amounts for 1800-1812 show the figures for total transport from the Baltic Sea, country unspecified.

Source: Appendix, table 44.

FIGURE 50 Countries of departure of bar iron passing through the Sound, 1784-1856.

TABLE 37 Ports of departure of bar iron passing through the Sound, 1805-25.

Port of departure	1805-07		1815-17		1824-25	
	tons	%	tons	%	tons	%
St Petersburg	20 810	44.1	9 800	23.2	12 730	25.9
Riga	30	0.1	10	0.0	70	0.1
Stockholm	21 680	46.0	28 500	67.6	31 770	64.6
Gefle	1 600	3.4	2 560	6.1	2 790	5.7
Copenhagen	1 360	2.9	240	0.6	190	0.4
Others	1 660	3.5	1 070	2.5	1 640	3.3
Total	47 140	100.0	42 180	100.0	49 190	100.0

Sources: ST I, 1805-07, 1815-17, 1824-25, ØTA, DRA.

The abrupt decline in iron exports from the Baltic Sea (see figures 50 and 51) after the Napoleonic Wars was primarily the result of a fall in British demand, which was particularly significant for Russian iron. Only a quarter of the amounts transported a quarter of a century earlier were carried westwards after the Napoleonic Wars.²¹ A survey commissioned by the British Russia Company

²¹ At the turn of the century Britain sharply increased its import levies on Russian and Swedish iron, which was one reason why British rolled bar iron became cheaper than Russian iron on the domestic market. In the period 1782-95 the import tariff was £2.81/ton but in 1813 it was £6.49/ton. In 1790-99, 26,300 tons (58 percent) of British imported iron (45,500 tons) was Russian and 18,200 tons (40 percent) Swedish. By 1815-19 the amount of imported iron had dropped to 14,100 tons, Russian iron accounting for 3400 tons of it (26 percent) and Swedish iron 11,000 tons (72 percent). At the same time Britain's domestic production had tripled; Hyde 1974, 204-206; Hyde 1977, 106; see Attman 1986b, 11; Attman 1988, 44. According to Söderlund's calculations (1994, 314-315), in the last quarter of the 18th century Britain's import of wrought iron was about 50,000 tons, but in 1816-30 only 15,000 tons. British imports from Russia shrank to one fifth of what they had been, but the change was almost equally fatal

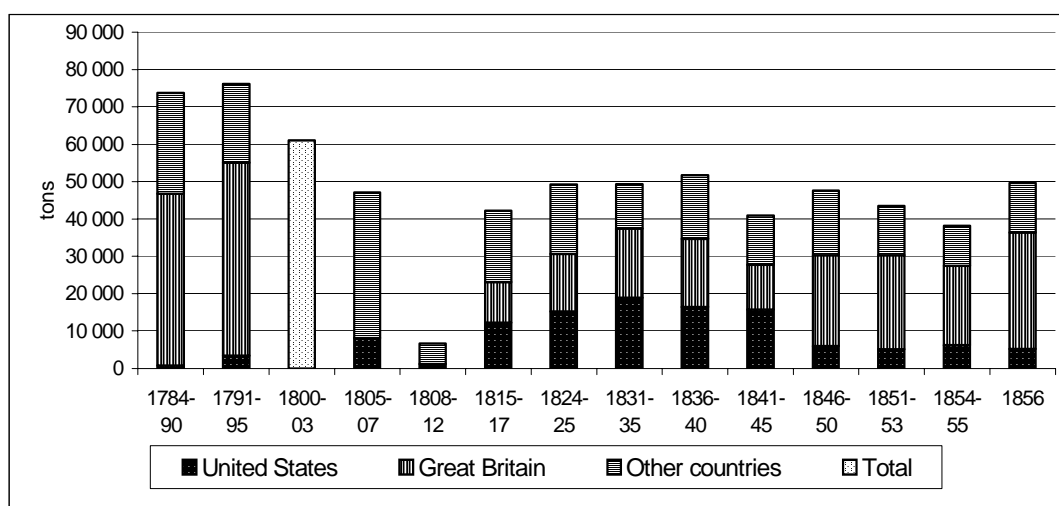
clearly showed the extent of the change: iron exports from St Petersburg to England dropped to a fifth from the years preceding the Continental System, and total exports from the city to a third.²²

TABLE 38 The export of bar iron (tons) from St Petersburg, 1798-1844.

Years	"America"	Britain	Others	Total
1798-1807	4 825	19 349	1 698	25 872
1813-22	3 937	3 394	889	8 720
1823-32	7 095	5 159	1 143	13 397
1833-42	3 571	4 127	873	8 571
1843-44	2 016	2 127	937	5 080

Source: PRO, FO 65/368.

Meyer & Brüxner, a firm that supplied iron to the American market, realized during the war that exports from St Petersburg had significantly declined. This was attributed not to blockades or trade restrictions but simply to the fall in British iron prices. St Petersburg's loss was America's gain: the fall in demand did not anyway lead to higher prices.²³



Notes: The figure for 1800-1803 is unspecified total exports from the Baltic Sea. Britain is included in "Other countries" in the columns for 1805 to 1812.

Source: Appendix, table 44.

FIGURE 51 Countries of destination of bar iron carried through the Sound, 1784-1856.

to Swedish iron. Britain's share in Sweden's iron exports had been 40 percent before the wars, but shrank to 15-20 percent after 1815.

²² The total export figures for St Petersburg that are indicated in Table 38 for 1823-32 are almost the same as those reported by the consuls (13,030 tons), but after that both total exports and the proportion of "America" remained significantly lower. Also ST I gives markedly higher figures than presented in the table; Appendix, list 1 and table 44.

²³ Meyer & Brüxner to Benjamin Shreve, 1809, PM, BSP, vol. 3.

TABLE 39 Ports of destination of bar iron carried through the Sound, 1807-25.

Ports	1807		1815-17		1824-25	
	tons	%	tons	%	tons	%
Boston	2 300	6.2	3 820	9.0	5 420	11.0
New York	1 600	4.3	3 420	8.1	5 260	10.7
London	6 150	16.6	3 970	9.4	5 900	12.0
Hull	2 490	6.7	8 080	19.2	7 230	14.7
Lisbon	2 700	7.3	3 230	7.7	2 020	4.1
Amsterdam	..	..	2 070	4.9	1 130	2.3
Others	21 860	58.9	17 590	41.7	22 230	45.2
Total	37 100	100.0	42 180	100.0	49 190	100.0

Sources: ST I, 1807, 1815-17, 1824-25, ØTA, DRA.

One of the most significant changes after 1815 was that the United States became the major purchaser of Russian iron. However, according to Russian foreign trade statistics the value of the iron exported to Britain and America was more or less the same.

TABLE 40 Export of iron from Russia, 1827-60 (1000 roubles).

Years	"America"	Britain	Others	Total
1827-33	2 044	1 897	2 012	5 593
1836-40	1 247	1 263	2 564	5 074
1841-45	243	184	402	829
1846-50	237	265	298	800
1851-53	343	270	269	882
1856-60	276	..	..	962

Note: From 1840 on, the roubles are silver instead of assignat roubles. 1846 on, the figures on export refer to the United States only (first column.)

Source: Kirchner 1975, 144-145, 153-154

After ST II, almost 30 percent of the total amount of Baltic Sea iron went to the United States in the 1830s and 1840s, and 40 percent to the Great Britain. One-fifth of iron transported through the Sound at this point was from Russia and the rest from Sweden. According to the British calculations, iron constituted only three percent of Russian export at the end of the 1820s, and in the mid-1840s only about one percent.²⁴

The U.S. share of Russian iron export was at its highest at the beginning of the 1840s (70 percent) according to ST II, but it went through a thorough change late in the same decade. At that time bar iron transport through the Sound to the American market almost totally collapsed. The U.S. tariff in 1846 speeded up the change, which put the Russian hammered bar iron to the same position as British iron. As, however, Swedish bar iron cleared the situation with

²⁴ Iron contributed to only 5.8 million roubles of Russia's total export in 1826-30, which is about three percent. The respective figures in the next five years were 4.5 million roubles and about two percent. Iron covered almost one-tenth of the export from Russian ports on the Baltic Sea, but after that it shrank fast. In 1827 the value of export from St Petersburg was 5.4 million paper roubles and in 1848 it was 821,000 silver roubles; PRO, FO 65/ 174, 194, 230, 236, 313, 368

considerably smaller losses, there must be also other reasons for the collapse of Russian iron export. The end of sugar transport from Cuba to St Petersburg at the same time was one rather central factor, and Russian iron was not taken on as semi-compulsory return cargo in the same quantities as before.

Export of Russian iron to the United States did not end with hammered bar iron. Sheet iron became a compensatory product after both the Sound statistics and consular reports. The Americans had purchased it regularly in St Petersburg already from the beginning of the century.²⁵ Statistics cannot be easily compiled on the change from bar iron to sheet iron as the records of St Petersburg and Elsinore do not always distinguish between different sorts of iron. Russian sheet iron was considered excellent; it was “the aristocrat of sheet irons”²⁶ and John D. Lewis characterized it “of an excellent quality, well polished and perfectly free of rust”.²⁷ Hunt’s *Merchants’ Magazine* claimed at the beginning of the 1840s that the Americans had managed to copy the Russian sheet iron they highly respected and cut the production costs by a third.²⁸ However, the piece of information was probably premature, as Minister Neil S. Brown undertook himself to find out why the Russian sheet iron was of markedly better quality than the American. He was obviously contented to report that the superiority of the product was based on iron ore of only one privately owned mine in Siberia; “no secret or peculiar art in the process of manufacture”, as the principals had feared.²⁹ Almost all sheet iron carried through the Sound originated from St Petersburg and it was almost exclusively carried to the United States. The increasing sheet iron shipping in the 1840s guaranteed that the Americans kept their leading position of exporters of Russian iron up to the Crimean War.³⁰

²⁵ Statistics by John D. Lewis indicates that an average of 70 tons of sheet iron was carried on American vessels from St Petersburg to the United States in 1815-20, and the Brothers Cramers calculated that in 1821-25, 150 tons of it was imported per year; EI, HJAP, vol. 1/10; PM, JDB, vol. 12.

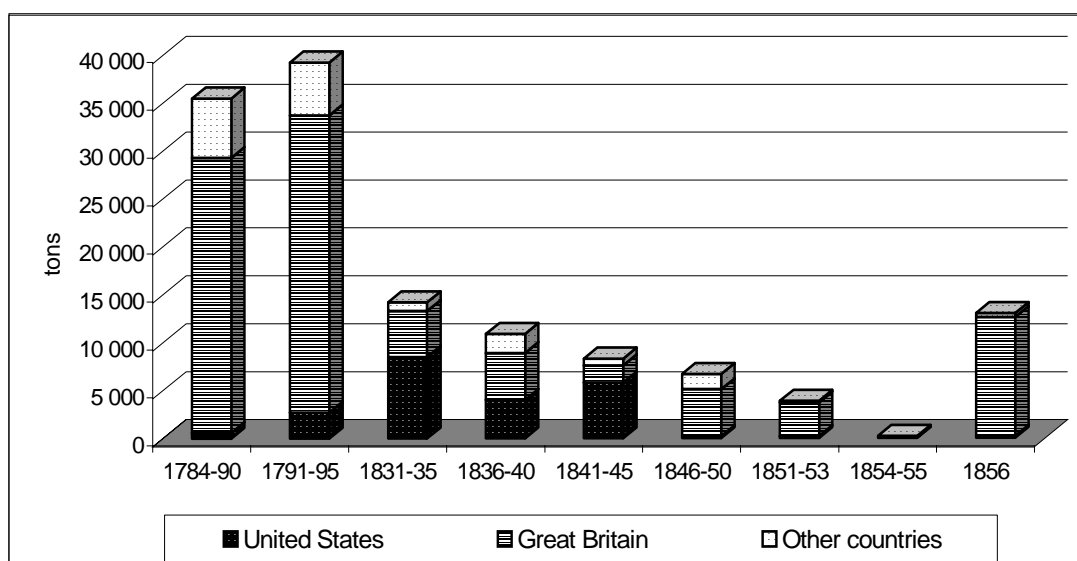
²⁶ Tooker 1955, 70; see Kirchner 1975, 153. Russian sheet iron was usually sold as sheets of 28 x 56 inches in size that weighted 10-12 pounds per sheet. In 1847 the price of “Russian iron” varied between 9-12 ½ cents a pound cash; Lowitt 1954, 23.

²⁷ Lewis to Nathan Trotter & Co., January 26, 1828, HUBL, NTC, TA-5. Also Trotter joined the praisers, as sheets were “so beautifully enamelled that it almost had an effect like a mirror”. However, careless sheet iron shipping sometimes rusted the sheets and thus reclamations were usual; Nathan Trotter & Co. to Thomas Wright & Co., 24 January 1839, John Wright to Nathan Trotter & Co., 8/20 January 1841, and 18 November 1941, HUBL, NTC, T-5, and TA-9; Josiah Birch to Phelps, James & Co., 2 November 1849, NYHL, PDCP, vol. 11.

²⁸ HMM 1844, vol. 10, 581; see Kirchner 1975, 154.

²⁹ Brown to Webster, 12 December 1850, NA M-35/15/5. Minister to Sweden, Christopher Hughes, had been requested already at the turn of the 1830s by New York iron producers to find out the secret production methods of Russian sheet iron; Hughes to Van Buren, 18 March 1831, NA M-45/7.

³⁰ After consular reports in 1836-40, an average of 10,900 tons bar iron and 1100 tons sheet iron was exported from St Petersburg. According to ST II, in 1841-45 an average of 1030 tons sheet iron was exported from Russia to the United States and 790 tons in the next five years. In 1853 the amount was 2780 tons and in 1856 2080 tons. Only quite little of other but bar and sheet irons ST II recognizes were exported from the



Source: Appendix, table 44.

FIGURE 52 Countries of destination of bar iron from Russia passing through the Sound, 1784-1856.

It is quite difficult to estimate to what extent the iron export figures between Russia and the United States are distorted by the fact that much iron from St Petersburg was transported over the Atlantic via English ports and Hamburg and Amsterdam.³¹ For example Captain Charles Sears of Boston took in summer 1840 from St Petersburg 3780 poods iron ballast on his brig *Old Colony* (244 tons). According to STA and consul of Elsinore it went to Newcastle, but after consul in St Petersburg to Boston via Newcastle.³² William Ropes, for his part, arranged in fall 1835 export of Russian iron from London to Boston since he considered the moment too late for sending anything from St Petersburg.³³ Henry Gray of Boston, who was long and actively involved in trade to Russia, also often bought iron from London. An English affiliated St Petersburg firm of Thomson, Bonar & Co. provided it for him.³⁴ Nathan Trotter and Co. of Philadelphia usually purchased Russian sheet iron from brokers in Boston or New York, but also from Pieschell & Brogden and John Wright from London. The latter directed the American orders to Thomas Wright & Co. in St Petersburg only when the firm itself did not have any iron in stock. Trotter sometimes also bought directly, usually on London credits, from the firms John

Baltic Sea; in 1831-56 from Russia to the United States only an average of 400 tons, ST II, ØTA, DRA; CR 1836-40, NA M-81/3-4.

³¹ Amsterdam: e.g. John Hodshon & Son to John D. Bates, 15 January 1826, PM, JDB, vol. 1. Hamburg: e.g. Pitcairn, Brodis & Co. to John H. Andrews, 21 June 1816, EI, JHAP, vol.1/4; see Kirchner 1975, 127; Söderlund 1994, 58. - After NWR (1818/1516, 1819/19, 1820/14 October 1820) 890 tons bar iron per year was imported via Hamburg and Bremen and 690 tons via Denmark in 1817.

³² STA 1840 (2197/2978); CR 1840, NA 81/4, and T-201/2.

³³ William Ropes to Hardy Ropes, 27 February 1836, HUBL, RFP.

³⁴ Journal of Henry Gray, 1829-1836, HUBL, HGP, vol. 4.

D. Lewis and William Ropes & Co. in St Petersburg.³⁵ Sometimes Trotter proceeded as the iron dealer Jeffrey Richardson of Boston: he made his order by the way of the firm Jevon & Sons in Liverpool.³⁶ The firm Phelps, Dodge & Co. of New York purchased regularly iron by the way of Phelps & James from Liverpool, to where it was mostly provided by Hill & Whishaw of St Petersburg. Josiah Birch served as the mutual iron agent of the New York–Liverpool firm in Russia at least since 1845.³⁷

The British firms would have been apparently satisfied to see themselves as providers of the Russian and Swedish iron crossing the Atlantic, and even more preferably the iron being replaced by the British product. As the above-mentioned Jevons & Sons informed his American customers about the prices of Russia iron, he also used to offer British iron for reduced price with the report.³⁸ In winter 1828 the firm was surprised at the American desire to buy Swedish and Russian iron although British iron could be purchased at much lower price in Liverpool. Of course the customs on the latter were considerably higher, but the firm believed that the cheapness of the initial price and difference between the freight costs still made the British iron cheaper than that of the Baltic Sea. However, Jevons & Sons did not question the superior quality of the latter product.³⁹

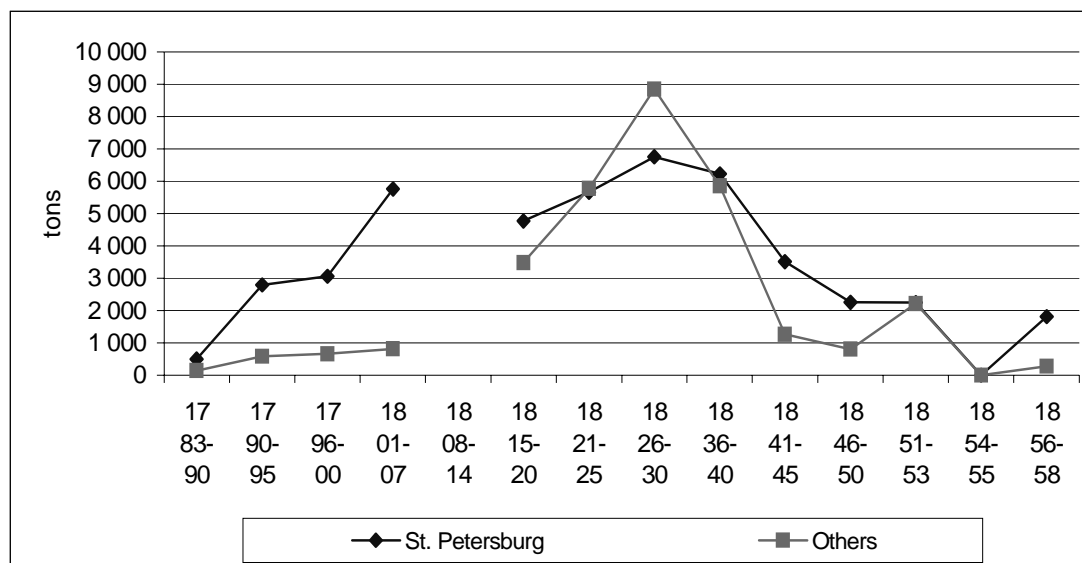
³⁵ E.g. Nathan Trotter & Co. to John Wright & Co., 15 November 1839; Wright & Co. (St Petersburg) to Nathan Trotter & Co., 8/20 January 1841, and Wright & Co. (London) to Nathan Trotter & Co., 30 August 1841, HUBL, TC, T-5 and TA 9; see Tooker 1955, 77, 96, 244. In addition to the above-mentioned ones, also at least Brown, Danson, Willis & Co. and Timothy Wiggins served as the iron brokers of the firm in London; e.g. Nathan Trotter & Co. to Thomas Wright, 29 May 1838, HUBL, NTC; John D. Lewis to Nathan Trotter & Co., 19 July 1832, HUBL, NTC, TA 7; Foreign Invoices 1827-37, K-4.

³⁶ Richardsons used also at least Timothy Wiggins as the broker of Swedish iron; HUBL, Richardson Papers, vol. V-VI. (Jevons & Sons appears also under the name Jevons, Sons & Co. until 1848 and after that under G.H. Jevons.)

³⁷ E.g. Hill & Whishaw to Phelps, Dodge & Co., 19 July 1837, NYPL, PDCP, vol. 1; Lowitt 1954, 22, 65-66.

³⁸ E.g. Jevons & Sons to J. Richardson & Brothers, 1 March 1831, HUBL, Richardson Papers, vol. 5.

³⁹ Jevons & Sons to J. & J.B. Richardson, 19 January 1828, HUBL, Richardson Papers, vol. 5. The firm reported the prices of \$15.5 per ton on Stockholm iron and £12 per ton on English iron. In the previous summer it had offered Swedish iron at £14:10 per ton (f.o.b.) and cheaper than Archangel iron; Jevons & Sons to J. & J.B. Richardson, 28 May 1827, HUBL, Richardson Papers, vol. 5. In 1829 Henry Gray paid four dollars per ton for iron freight from St Petersburg to Boston and two dollars per ton from London; Henry Gray Journal 1829-36, HUBL, HGP. - The freight costs of iron that was transported as ballast from England was often calculated at about 15 percent of delivered prices; Engerman 1971, 36 (Discussion I).



Source: Appendix, table 45.

FIGURE 53 Ports of departure of bar iron carried by the American vessels through the Sound, 1783-1858.

The Swedish had acquainted themselves with Swedish iron already early in the 18th century and connections to Gothenburg were established in the mid-1780s.⁴⁰ The ship *Astrea* of E.H. Derby was probably the first American vessel to bring a cargo from Stockholm in 1788.⁴¹ Major freight to North America started really during the Napoleonic Wars as one consequence of the embargo year was a breakthrough of Swedish iron to the American markets. Despite the war between Russia and Sweden the import of Swedish iron to the United States increased by four times. Maybe the year 1810 marked the peak: about 180 American vessels arrived to Gothenburg, and over 100 of them loaded on iron there. The export amount was above 16,000 tons, that is two-thirds of the bar iron the U.S. industry censuses reported, imported in the year in question.⁴²

The Swedish kept an eye on their own iron export with help of the trade arrangement that they agreed upon with the United States after the treaty of 1783. For example from 1798 on, the Americans had the right to import West Indian products to Gothenburg only at 10 percent higher prices than the Swedish. In 1816 additional levies in direct trade were removed from both sides. The arrangement proved very profitable to the American shipping, and

⁴⁰ A brother of Carl Söderström, who was a trade partner of Champlins in Gothenburg, was in the United States in spring 1784 primarily to study the possibilities of selling mainly Swedish iron but also Russian products; Carl Söderström to Christian Champlin, 14 April 1784, MHS, WCRIC.

⁴¹ The cargo the ship took to Salem was 240 tons and was calculated as being valued \$2700. Two vessels brought iron from Stockholm in 1789 as well as in 1790. According to STA, the cargos were taken to Boston, Lisbon and to "the Mediterranean"; STA 1788 (705); STA 1789 (1344, 1503); STA 1790 (755, 1125); see McKey 1961, 220-221; Rasch 1965, 50; Adamson 1969, 60, note 5.

⁴² Adamson 1969, 69-70; Fleisher 1953, 178-192; Söderlund 1994, 314.

very successful when an advance of Swedish iron export is used as a measure.⁴³ In fact, Sweden proposed full reciprocity prior to Washington, and could agree with it despite its principal declaration. In any case, Americans were allowed to carry products from the West Indies under the same conditions as the domestic vessels from 1824 on, but the official reciprocity with respect to so-called third countries was realized only in trade agreement concluded on 4 July 1827.⁴⁴

Most iron exported from the east coast of Sweden (east of the Sound) in the 1830s and 1840s went to Britain and not quite a quarter to the United States. Swedish iron overcame the market revolution caused by puddled iron markedly better than Russian iron: the amounts carried through the Sound were in the mid-1820s on the same scale as at the beginning of the 1790s. Minister to Stockholm, Jonathan Russell, who was well informed about the economics of his standing, estimated that the Swedish had managed to compensate their losses in Britain on the American market.⁴⁵ British representatives in Sweden followed carefully this development. For example Consul Geo. Foy of Stockholm reported in 1823 being somewhat surprised at the fact that the Americans purchased most of the Swedish iron. However, he considered it “a matter arising from commercial speculations” which, thus, did not require further attention.⁴⁶

Some Russian – and also Swedish and Norwegian – iron was carried via Copenhagen to the United States.⁴⁷ Ryberg & Co. supplied Russian iron to the Americans at the turn of the century, and later at least Rainals & Co. Before the embargo about 15 percent of iron the Americans transported from the Baltic Sea

⁴³ Minister Christopher Hughes calculated that 61 American vessels and only six Swedish vessels carried iron from Sweden in 1822. The United States bought three-fifths, that is 18,000 tons, of iron exported from Sweden; Hughes to Adams, 8 December 1820, and 14 April 1823, NA M-45/3-4.

⁴⁴ Russell to Adams, 26 January 1818, and 18 May 1820, NA M-45/2,4; Appleton to Clay 11 July 1827, NA M-45/6; Miller 1942, vol. III, 283-308; Setser 1937, 56, 194 -195, 214 -17.

⁴⁵ Russell to Adams, 26 January 1818, and 18 May 1820, NA M-45/2,4; Appleton to Clay 11 July 1827, NA M-45/6; Miller 1933, vol. III, 283-308; Setser 1937, 56, 194 -195, 214 -17. Russell estimated the Swedish bar iron production in 1815 being about 40,000 tons. As direct export to the United States, Copenhagen and Hamburg were added to export via Netherlands, the Minister calculated that a little less than a half, that is 24,000 tons, of Sweden's iron production ended up on the American market. A similar calculation Minister Ellsworth made showed that 11,700 tons of Sweden's iron production (54,700 tons) ended up on the markets of the United States in one way or another. – According to Söderlund (1994, 315) about 20,000 tons of Swedish iron was directly exported to the United States in the 1820s every year. In the following decade the export usually varied between 20,000 tons and 30,000 tons. The latter figures also signified that export to the United States was greater than export to Britain at the end of the 18th century.

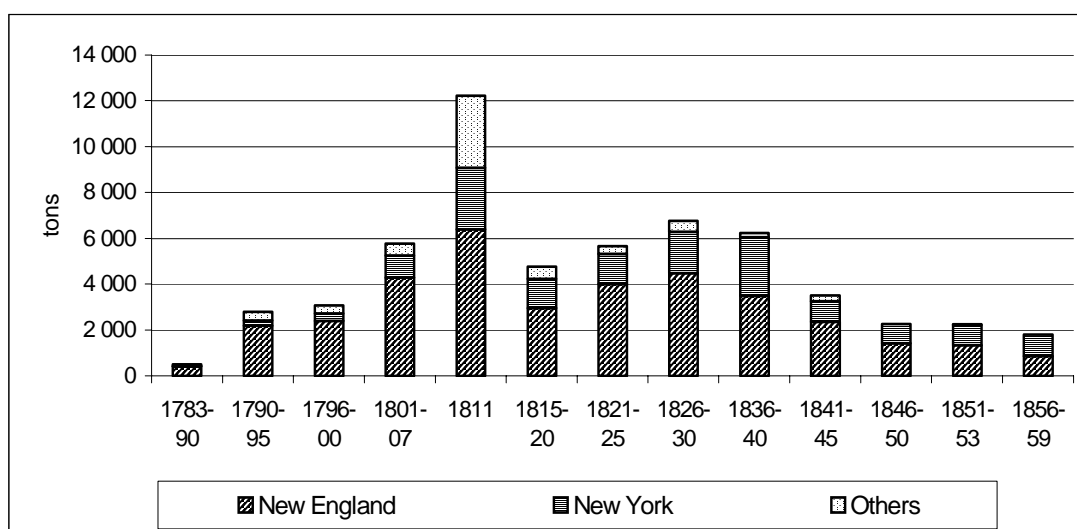
⁴⁶ Foy to Canning, 6 August 1823, PRO, BT 6/248; Foy to Castlereagh, 16 April 1821, PRO, BT 6/68.

⁴⁷ Norwegian iron exported from Copenhagen was duty-free at the end of the 18th century. It can be estimated on the basis of the consular records in 1792 that two-thirds of iron carried from Copenhagen to the United States was of Russian or Swedish origin; CR 1792, NA T-201/1.

was loaded on in Copenhagen. Export continued, yet in considerably lower amounts, also after 1815.⁴⁸

9.1.3 American iron purchases from St Petersburg

Almost all of vessels that returned from St Petersburg to North America in the period 1783-1860 carried iron, mostly as part of a general cargo. For example, in August 1830 the ship *Trescott* (340 tons), owned by Bostonian Nathan Goddard, passed Elsinore under the command of Captain Symes Potter, carrying a cargo of sugar and coffee purchased in Cuba to St Petersburg. The vessel returned to Elsinore two months later with a cargo belonging to six Boston merchants. Her main cargo was 200 tons of bar iron, but in addition to that she also carried 92 tons of hemp, 46 tons of cordage, four tons of feathers and about 1000 pieces of manufactures.⁴⁹



Source: Appendix, table 45.

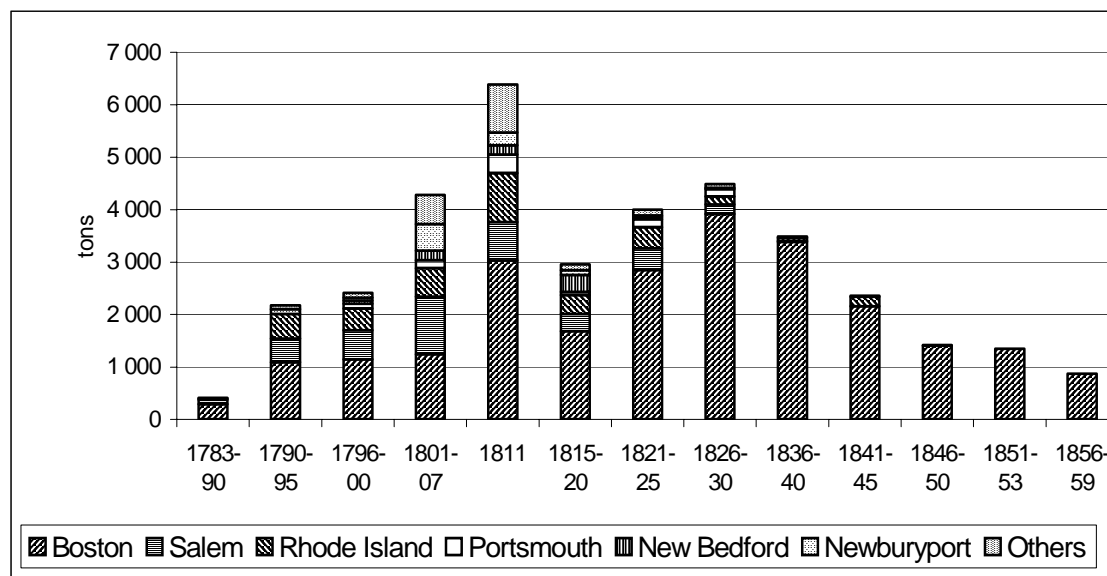
FIGURE 54 The American ports of destination of bar iron carried by American vessels from St Petersburg through the Sound, 1783-1859.

About 85 percent of the iron carried by American vessels from the Baltic to the United States between 1783 and 1807 was from St Petersburg, the rest being

⁴⁸ For example in spring 1801 Captain Josiah Orne shipped Swedish iron, Russian cordage and sheeting, sailduck and ravenduck of either German or Russian origin from Ryberg & Co. in the brig *Exchange* (185 tons) owned by Salem merchants. The vessel carried Swedish iron from Ryberg to Lisbon also in the next year; STA 1801 (296); STA 1802 (50); CR 1801-02, NA T-201/1; EI, OFF, "Brig Exchange"; EI, JHAP, vol.1, folder 2. – On indirect export of Swedish iron, see Adamson 1969 105-106; Scott 1953, 410. – Probably also the iron the Americans loaded on in Copenhagen was of Swedish origin. Only three percent of the iron the Americans carried from the Baltic Sea originated from Copenhagen in 1831-35.

⁴⁹ STA 1830 (2608/3543); CR 1830, NA, T-195/3.

from Copenhagen.⁵⁰ Practically all the iron the Americans took from Russia and Denmark was actually carried to the United States. In the period under discussion, three quarters of Russian iron went to New England, one tenth to New York and the rest mainly to Philadelphia and Baltimore. Before the Embargo, Boston and Salem were clearly the most important arrival ports for Russian iron, although Newburyport and New Bedford in Massachusetts, Portsmouth in New Hampshire and Providence and Newport in Rhode Island also regularly imported iron from St Petersburg. The two last-named had a relatively strong position, operating on the same scale as New York.⁵¹



Source: Appendix, table 45.

FIGURE 55 Ports of destination in New England of bar iron carried on American vessels from St Petersburg, 1783-1859.

It was a basic feature of iron imports at the end of the 18th century and beginning of the 19th that the imports were distributed between quite a few ports, mostly in New England.⁵² This applied to both Russian and Swedish iron and was true until the 1820s. The vessels usually returned from the Baltic Sea to their home ports and the iron was mostly carried for the vessels' owners. For example, in 1823, when 37 American vessels departed from Stockholm carrying only iron, they were transporting the iron for at least 28 different firms to nine different cities. STA and consular reports generally agree about the total

⁵⁰ According to Oddy (1805, 126) and Adamson (1969, 61), who cites him, altogether 50,876 tons of bar iron was carried from St Petersburg to the United States in the period 1783-1804. According to STA, the amount was 53,242 tons, including 41 tons from Riga; Pitkin (1816, 236-237) presents quite the same figures; Appendix, table 45.

⁵¹ Appendix, table 45. According to Rasch (1965, 50), altogether 73,370 tons of iron was carried from the Baltic on American vessels, with 62,460 tons of it from St Petersburg and 10,830 tons from Copenhagen.

⁵² According to STA, the Americans carried Russian iron to a total of 22 ports in the United States before the Embargo.

amounts of iron carried from the Baltic, but they are not so consistent as far as its distribution between different ports is concerned.⁵³

The amount of Russian iron carried by the Americans was clearly higher in the decade after the Napoleonic Wars than in the first years of the century.⁵⁴ The amount of Swedish iron increased at the same time: at the end of the 1820s the amounts carried through the Sound were higher than ever before or after. As a proportion of U.S. imports, the figures show that a third of the country's imported iron came from the Baltic Sea in American vessels.⁵⁵ According to STA, 98 percent of the iron the Americans carried from the Baltic Sea between 1815 and 1850 was destined for the United States. Of the total amount, 60 percent was from St Petersburg and 38 percent from Stockholm. The iron exported from Russia was, in practice, transported entirely in American vessels.⁵⁶ By contrast, iron exports from Stockholm were almost entirely taken over by the Swedes.⁵⁷

⁵³ David Erskine to the Secretary of State, 26 April 1824, NA T-230/2; Adamson 1969, 82. STA and consular reports give different amounts for six of the 71 cargoes of iron that, according to STA, sailed from St Petersburg to North America in 1806, and in two cases different destination ports (the brig *Thomas* of Duxbury and the brig *Industry* of New York). The differences presented in Table 41 are caused by the fact that the consular reports did not recognize the following vessels and their cargoes: 1) the schooner *Martha Washington* owned by Jacob Parker of New York (35 tons of iron to Nantucket) 2) a ship owned by Israël Thorndike of Beverly (140 tons of iron to Beverly) 3) the ship *Mandarin* owned by Derby & Co. of Boston (190 tons of iron to Boston). By contrast, STA does not recognize the brig *Catharine* owned by Peabody & Tucker of Salem, which carried 50 tons of iron to Salem according to the consul. Export lists for St Petersburg and ST I only report total amounts per port. 1350 tons was recorded as being carried "to North America" probably ended up in England; STA 1806 (225,558,644,651,658); CR 1806, NA T-201/1; Appendix, table 45.

⁵⁴ The export figures for bar iron and sheet iron from St Petersburg (in American vessels) from 1815-21 presented in figure 55 and Appendix (table 45), based on STA, are almost the same as the figures John D. Lewis gives for the corresponding years; EI, JHAP, vol. 1, no. 1.

⁵⁵ Appendix, tables 45 and 66. According to consul David Erskine, in the years 1818-33 an average of 4770 tons was carried from Stockholm to the United States in American vessels. This was four fifths of Stockholm's total exports to North America. According to STA, the corresponding figure in the years in question was 4676 tons. In 1815-17 the export was 3646 tons on average; STA 1815-33; CR 1818-33, NA T-230/1; Adamson 1969, 82-83.

⁵⁶ Appendix, tables 44 and 45. According to ST II the average export of bar iron from Russia to the United States in the period was 1831-50 was 5075 tons and an average of 5165 tons was carried in American vessels when all types of iron are included.

⁵⁷ According to consular reports for the years 1846-50, only eight American vessels took iron from Stockholm, six of them on the way back from St Petersburg. However, the total number of vessels departing from Stockholm for the United States was 85. Iron carried on American vessels amounted to only 4050 tons according to both STA and the consul in Stockholm, i.e. about 15 percent of exports to North America; CR 1846-50, NA T230/2; see Adamson 1969, 105; Attman 1986, 12-14; Müller 2004, 204ff.

TABLE 41 American ports of destination for bar iron carried on American vessels from St Petersburg in 1806 (tons).

Ports	Sound Toll Accounts	Sound Tables	Consular Returns	
			St Petersburg	Elsinore
Boston	1 760	2 000	2 160	1 600
New York	1 310	1 120	1 220	1 120
Salem	1 010	1 250	1 180	1 010
Providence	510	510	560	510
Newburyport	480	580	540	570
Philadelphia	380	400	320	380
New Bedford	200	200	200	200
Beverly	140	140	140	-
Portland	130	130	130	130
Kennebunk	120	-	-	120
Gloucester	100	100	160	190
Newport	90	90	-	90
Duxbury	70	70	70	70
Bath	70	70	-	70
New Haven	60	60	60	60
Baltimore	50	50	50	50
Nantucket	40	-	40	-
Marblehead	-	-	20	-
"North America"	-	1 370	-	-
Total	6 520	8 140	6 850	6 170

Note: Sound Tables do not distinguish between iron transported on American and other vessels.

Sources: ST I, 1806 and STA 1806, ØTA, DRA; CR 1806, NA M-81/1, and T-201/1.

Iron imports from the Baltic Sea gradually concentrated most clearly on Boston and New York. Between the Napoleonic Wars and the Civil War Boston received a half and New York almost a quarter of Russian iron. Imports to Salem and Portsmouth ended at the beginning of the 1830s, but small consignments were carried to Rhode Island until the 1840s. Imports to Philadelphia and Baltimore, which had received quite large quantities of iron at the beginning of the 19th century, also ended. Most of the iron from Stockholm was carried to New York, while exports from Gothenburg were directed to Boston.⁵⁸

⁵⁸ Iron was carried from the Swedish east coast to 17 different ports between 1819 and 1833. Half of the iron went to New England (about 70 percent of Russian iron). In 1838-40 only four percent of iron sent from Stockholm to the United States went to New England, but three-quarters went to New York; Adamson 1969, 83-88; CR 1819-33, NA T-230/1. In 1860 New York, the leading import port in the United States, received over 80 percent of textile imports, but only about a half of iron imports; Albion 1961, 66-68.

TABLE 42 The export of bar iron from Baltic Russia according to different sources, 1815-53 (tons).

Years	Total from St Petersburg	On U.S. vessels from Baltic Russia		From Baltic Russia	Total from Baltic Russia
	(A)	(B)	(C)	to U.S. (D)	(E)
1815-16	10 200	6 500	6 900	..	10 600
1818-20	8 300	4 000	4 000	..	..
1821-25	11 500	5 700	5 600	..	..
1826-30	13 400	6 800	7 100	..	..
1831-35	13 600	8 700	8 600	8 500	14 200
1836-40	12 800	6 300	6 400	5 400	10 900
1841-45	7 500	3 500	3 300	5 800	8 300
1846-50	6 200	2 300	2 300	500	6 700
1851-53	4 900	..	2 300	200	3 900

Notes and sources:

A: Consular Returns from St Petersburg; Appendix, list 1.

B: Sound Toll Accounts, Appendix; table 45.

C: Consular Returns from Elsinore and Copenhagen; NA T-201/1-6 and T-195/ 1-5.

D and E: Sound Tables I-II, Appendix, table 44.

Probably part of the iron that ended up in North America was carried as ballast to avoid high import duties, and it is recorded in the import statistics in an illogical way. Ballast was duty-free also in the Sound. Invoices or bills of lading give no hint of the true amount of iron that passed through customs: usually the quantities reported in them are the same as those used as the basis of the Sound dues in Elsinore.⁵⁹ The amounts cannot be very significant as the Sound statistics, consular reports and U.S. import statistics give quite compatible export/import figures.⁶⁰ Since mercantile shipping between the United States and Russia was almost exclusively carried on American vessels and since, with the exception of some small purchases from Archangel, all the iron was purchased in St Petersburg, STA's figures cover almost all of the peacetime trade.

The American market was crucial to St Petersburg iron exporters, at least after 1815. Between 1798 and 1807 a quarter of bar iron exports went to the United States, but after the Napoleonic Wars almost 70 percent.⁶¹ Annual

⁵⁹ E.g. "Ship Thames", NYHS, IHP; "Ship Hamilton", JCBL, BIP, V-G34; "Brig Washington", PM, BSP, vol. 20; STA 1803 (2017); STA 1804 (1016); STA 1830 (2685); see Saul 1991, 111; Stanwood 1903, vol. II, 89.

⁶⁰ For example, average exports from Russia to the United States in the comparable years of the period 1831-56 were 3882 tons according to ST II and according to Commerce and Navigation imports from Russia were 3836 tons, Appendix, tables 44 and 66. Also export statistics for St Petersburg and the information ST I provide agree with respect to bar iron. According to printed export lists for 1824-25, exports from St Petersburg amounted to 12,200 tons and according to ST I 12,700 tons. In 1831-40 the corresponding figures were 13,200 tons and 12,900 tons (the latter includes the whole Russian Baltic Sea); Appendix, list 1; ST I 1824-25; ST II 1831-40; ØTA, DRA; CR 1824-40, NA M-81/3-4.

⁶¹ PRO, FO 65/368. According to ST I, an average of 23,000 tons of iron was carried from St Petersburg through the Sound. The amount carried from the Baltic Sea to the United States in those years was 7700 tons on average, and according to STA the Americans carried an average of 5510 tons of iron from St Petersburg to the United

variations in exports from St Petersburg were sometimes significant. After 1815 they were mainly influenced by the number of American vessels that arrived in the city, which was not necessarily related in any way to the price of Russian iron. There was not always enough iron available to meet American demand. In the autumn of 1825 John D. Lewis gave warning about a shortage predicted for the following summer on account of the late arrival of barks from inland owing to low water levels on the river routes.⁶² A shortage of iron in the summer of 1851 was explained in the same way: some factories even had to close down their operations because of the shortage of water.⁶³

The different types of Russian iron were mainly known on the American and West European markets by their producers. "Old Sable PSI", produced by the biggest Demidov mines of the Urals, was the most expensive and the kind most commonly exported to America. "Young Sable NS" from Javkolev was somewhat cheaper and was most commonly considered to be a competitor to Swedish iron.⁶⁴

As for the price of Russian iron, this clearly increased from the mid-1780s to the mid-1790s, but in the following decade remained stable.⁶⁵ The fall of the rouble after 1805 led to a considerable increase in prices, but in practice the sterling/dollar prices actually decreased owing to the decline in British orders. After 1815 the price of Old Sable PSI fluctuated at around five roubles a pood and at least in terms of American prices did not fall significantly during the next three decades. In the 1820s and 1830s the purchase prices of sheet iron in St Petersburg were almost twice as much per pood as those of bar iron, and selling prices were more than double, according to New York quotations.⁶⁶

Nevertheless, iron prices that remained relatively steady still sometimes underwent abrupt but short-lived alterations.⁶⁷ Sometimes it is clear that they were subject to speculation, since the amount and price of shipping at the beginning of the summer was defined on the basis of the iron that had arrived from inland during the previous autumn. Charles Cramer claimed that John D.

States. According to Rasch (1965, 63) the Americans accounted for 1.7 percent of the total exports of St Petersburg in 1785, 8.8 percent in 1795 and 8.8 percent in 1801.

⁶² Lewis' circular 6 November 1825, EI, JHAP, vol. 2/3. Barks were of several different sizes, but an ordinary fully loaded bark was able to carry a cargo of 90 tons of iron by water routes that were very shallow and narrow in places; see Jones 1984, 413-433.

⁶³ Phelps, James & Co. to Phelps, Dodge & Co., 17 January 1851, and Josiah Birch to Phelps, James & Co., 25 July 1851, NYHL, PDCP, vol. 12 (Letters 1851).

⁶⁴ Blackwell 1970, 59; Adamson 1969, 93; Wright & Co. to Nathan Trotter, 8/20 January 1841, HUBL, NTC, TA 9; Hutton to Marcy 17/29 November 1856, NA M-81/5.

⁶⁵ The f.o.b.- price of New Sable in St Petersburg in 1796 was two roubles per pood and that of Old Sable 10-20 kopecks more. Ten years earlier the price had been about one rouble per pood in each case. Export duties on iron were about a third of the price of the product in Russia at the end of the 18th century; EI, Price Currents, St Petersburg.

⁶⁶ At the end of 1850 PSI iron was sold in St Petersburg at 1.25 silver roubles per pood and the most expensive sheet iron cost three silver roubles; see Kirchner 1975, 50.

⁶⁷ For example in the navigation season of 1820 the Americans had to pay nine assignate roubles per pood for the best qualities, but in 1828 they were sold at less than four roubles; Kirchner 1975, 153; William Brandt & Co.'s circular, 29 November 1840, EI, Price Currents, St Petersburg.

Lewis had taken advantage of just such a situation when in 1826 he purchased a consignment of 100,000 poods of iron, i.e. 1600 tons.⁶⁸ The amount was not very significant compared to subsequent speculative purchases of a similar nature. When in the winter of 1831 the demand for iron in North America was estimated to be about to increase, owing to the fact that little had been exported in the previous year, Stieglitz & Co. purchased almost 20,000 tons of bar iron with the support of Barings.⁶⁹ In 1832 more bar iron than ever was carried from St Petersburg to the United States (over 13,000 tons on American vessels), perhaps influenced by the changes in customs tariffs that took place at that time. Whatever the reason, there were some sudden changes in prices on the American markets. In August 1831 Grays of Boston sold Old Sable iron to Boston Manufacturing Co. at \$87 per ton at twelve months' credit, but by April of the following year the price had increased to \$95 and the term of payment was only half what it had been before.⁷⁰

Speculation in iron continued. In 1836 John D. Lewis had to report to Nathan Trotter & Co. that the "Gurieff NS iron" that had been on the market had fallen into the possession of one single firm (Stieglitz?) and it was shipping the product only on its own account. Old Sable iron was available but its price had, for the reasons discussed above, radically increased. Also sheet iron had vanished from the markets: the available consignments had already been purchased early in the winter by an American purchaser.⁷¹

As the price of iron in St Petersburg was easily double or triple that in Liverpool it is clear that the competitive capacity of Russian iron was based on its high quality, even allowing for the effect of American customs duties on prices. Freight costs were not significant.⁷² Freight costs between St Petersburg and North America depended essentially on the number of vessels that arrived in St Petersburg. The captains who hurried short loaded cross the Atlantic sometimes carried bar iron as ballast quite cheaply. Ordinary freight prices were usually \$4-6 per ton for bar iron and a few dollars higher for sheet iron.⁷³

⁶⁸ Cramer to John D. Bates, 1 April 1827, PM, BSP, vol. 1

⁶⁹ Kirchner 1975, 187-188. According to statistics drawn up by Jevons & Sons of Liverpool for Richardsons, in 1829 and 1830, 17,245 tons and 11,055 tons of iron were exported from St Petersburg, respectively. Shipping to the United States was 11,285 tons and 6625 tons. At the end of 1830, 25,000 tons of export iron was left unsold in St Petersburg, and Stieglitz & Co. probably purchased part of this stock; Jevons & Sons to J. Richardson & Brothers, 14 January 1831, HUBL, Richardson Papers, vol. 8.

⁷⁰ Henry Gray Journal 1829-36, HUBL, HGP, vol. 4.

⁷¹ John D. Lewis to Nathan Trotter & Co., 19 June, 3 July and 24 July 1836, HUBL, NTC, TA-8.

⁷² In 1820 it was estimated that carrying iron along the Hudson River up to Albany, 160 miles from New York, increased the price by \$15 per ton. Freight from St Petersburg to New York cost half of that at its highest. In the tariff debate of 1842 Daniel Webster, Secretary of State, estimated that the carrying costs of iron from the Baltic Sea to Philadelphia were \$8 per ton, which was equal to 50 miles of transport by land. In other words, it was possible to claim that the ports of the Baltic Sea were "closer" to the centres on the east coast than the inland production areas of domestic iron; Scott 1953, 409, 412; Clark 1929, vol. 1, 294-295; Crosby 1965, 19.

⁷³ In 1829 Henry Gray paid \$4 for freight between St Petersburg and Boston, but \$6 two years later and in 1834, when according to William Ropes "half the vessels will go in

On the basis of Henry and Horace Gray's account books and correspondence, it can be concluded that Russian iron carried to the United States was sold in small consignments over a very wide area along the east coast. Already by the mid-1820s iron was transported inland as far as St Louis. The house also sold and brokered large amounts of Russian iron to the Boston Iron Co. and carried nails the company produced to southern ports. Small amounts of iron that the brothers purchased from Sweden and Russia were also carried to Batavia and Canton.⁷⁴ Nathan Bridge of Boston exported nails made of Russian iron to Cuba, and Richardson & Co. of Boston did the same sort of thing. This latter firm had dealings with Meyer & Brückner of St Petersburg after 1812 and in the 1820s specialized in Swedish and Russian iron. It can be concluded from Richardson's correspondence that he had quite a large circle of customers from Bangor to Philadelphia: he supplied bar iron to manufacturers and carried the iron products they produced to southern ports.⁷⁵

Brown & Ives was one of the most important purchasers of Russian iron at the turn of the century. The firm supplied Russian and Swedish iron to Taunton, a centre of the New England iron industry. Together with some Boston merchants the firm founded the Taunton Manufacturing Company; Israël Thorndike of Beverly, another merchant actively involved in trade with Russia, was another partner. The firm also traded experimentally with India, trying to establish India as a possible market for Russian bar iron and manufactures.⁷⁶

Russian and Swedish iron were to some degree competitors on the American markets. Early in the period there were no obvious differences between the two in terms of price or quality. In the first years of the 19th century the decline in the value of the rouble benefited Russian iron,⁷⁷ but later a similar decline in the Swedish currency evened out the difference.⁷⁸ Around 1820 it was sometimes claimed that Russian so-called sable iron was displacing Swedish "at all trading places", but this did not come about, if only for the reason that around 1840 Russian Old Sable iron was quoted on the American

ballast" back to the United States, only \$3 per ton. Two years later the prices rose to as much as \$8 per ton; Journal of Henry Gray 1829-36, HUBL, HGP; William Ropes to Hardy Ropes, 11 August 1834, HUBL, RFP; John D. Lewis to Nathan Trotter Co., 19 June and 3 June 1836, HUBL, NTC, TA-8; Lowitt 1954, 66.

⁷⁴ Henry Gray Journal 1829-36, HUBL, HGP, vol.4; Horace Gray to Henry Oxnard, 19 June 1823, and Horace Gray to Thomas Hewes, 14 October 1824, HUBL, HGP, vol. 17, Shipbook (Horace Gray).

⁷⁵ John D. Bates to Nathan Bridge, 20 March 1830, PM, JDP, vol.1; HUBL, RP, vol. 2-3, 4-8.

⁷⁶ Hedges 1968, vol. II, 63, 119.

⁷⁷ In 1799 Joseph Lee, Jr., sold both Swedish and Russian iron "on the Wharf" in Boston at £30-31 per ton. In November 1806 Swedish iron was sold at \$114-122 per ton, Russian New Sable iron at \$103-105 and Old Sable iron at \$105-110; Lee to George Crowningshield & Sons, 17 January and 19 June 1799; EI, CFP, vol. 2; PM, BSP, vol. 2. According to correspondence of the New York firm A. P. Gibson & Co., the prices of Swedish and Russian iron were quite similar, around \$90 per ton, by 1820; A.P.Gibson & Co., Letterbook 1816-18; HUBL.

⁷⁸ David Erskine to Adams, 23 March 1820, and 28 March 1822, NA T-203/1.

market at \$15 more than Swedish.⁷⁹ However, at the beginning of the 1830s at least Grays of Boston still sold Russian iron to their own clients at a slightly lower price than Swedish iron.⁸⁰ Studying the prices quoted for iron suggests that the lower volume of Russian bar iron exports was due to the fact that their price did not decrease at anything like the same rate as competitors' prices.

Those dealing in iron in Stockholm were far more active in their attempts to export their wares than their colleagues in St Petersburg, but it is difficult to say whether they were any more successful with the Americans. The main iron exporter in Stockholm, Kanzov & Biel, was unhappy with the fact that dealers in Gothenburg sold iron more cheaply, and the Americans also seemed to prefer Gothenburg because it saved them time and avoided the Sound Dues. The fact that Stockholm offered poorer markets than did St Petersburg for the products the Americans had to sell also reduced the attraction of Stockholm.⁸¹ The usual pattern for an American sailing to Sweden in the 1820s was still to sail from some other Baltic port to Stockholm and to purchase iron there with bills of exchange. The practice was considered very advantageous to the Swedes.⁸² When the custom of sailing in ballast from the Baltic Sea started to die out, the city's second most important iron exporter, David Erskine & Co., tried to attract the Americans to bring sugar, rice and cotton to the city by offering advantageous terms of payment. This was not very successful, since at the end of the 1830s only a quarter of the Swedish iron that was exported to the United States went from Stockholm, and it was not generally carried by Americans.⁸³

In spite of the considerable amounts of Russian iron that were imported into the United States, the trade in bar iron was often considered to be "marginal business". Benjamin Pickman of Boston, for example, made such a claim in the autumn of 1816 when he announced that he was having to sell iron at a clear loss: the c.i.f.-price (\$85 per ton) produced a loss of two dollars per ton. However, the overall loss was still smaller than returning from St Petersburg to Boston totally empty or randomly searching for a return cargo in

⁷⁹ Scott 1953, 409-410; HMM 1842, vol. 6, 527. Alterations in prices were also considerable in the 1840s. In January 1840 Swedish hammered bar iron cost \$90-92 per ton, but in July of the same year only \$80-82. Variations in the next year were almost equally great. The price of English rolled bar iron fell from the beginning of 1840 to the beginning of 1842 from \$75 to \$50. There were similar falls in the price of American iron.

⁸⁰ Henry Gray Journal 1829-36, HUBL, HGP, vol. 4. At the same time Jevons & Sons of Liverpool offered their American customers "ordinary" Swedish iron clearly cheaper than comparable Russian iron; HUBL, NTC, TA7. In December 1828 the prices of the most important European iron qualities were as follows: Russian Old Sable PSI iron \$105 per ton, Russian New Sable iron \$95-97 ½, Swedish iron \$97 1/2 – 100 and English rolled iron \$80; Adams 1969, 93, note 7.

⁸¹ Kanzov & Biel to Jeffrey Richardson, 16 December 1817, HUBL. Richardson Papers, vol. 2; Adamson 1968, 75, note 35. Kanzov & Biel shipped about 60 percent of the iron carried from Stockholm to the United States between 1816 and 1846; Adamson 1969, 77. Tottie & Arfvedson was the major iron exporter in the city at the end of the 18th century and beginning of the 19th century; see Müller 1998, 121.

⁸² Hughes to de Wetterstedt, 28 March 1831, NA M-45/7.

⁸³ Erskine & Co. to J. Richardson & Brothers, 14 December 1832, HUBL, Richardson Papers, vol.7; Adamson 1969, 88.

western Europe.⁸⁴ When Nathan Bridge of Boston sold iron belonging to Brothers Cramer at the same price ten years later, his trading partners in St Petersburg considered it a "most miserable price" which did not even cover their costs and charges.⁸⁵

Most of the iron the Americans carried from the Baltic was transported by the owners of the vessels on their own account and at their own risk. This practice prevailed with Stockholm iron until the 1830s. According to information provided by Consul David Erskine, about 130 of the 219 vessels that departed from Stockholm for the United States carried their cargo of iron on these terms. In fact, the only firm that departed from this custom and carried iron as freight was Boorman & Johnston of New York. As the freighting of Stockholm iron was later undertaken by Swedish vessels, the risks of the financing also fell upon the shoulders of Swedish merchants.⁸⁶ Although only fragmentary information is available about the ownership of cargoes from St Petersburg, around 1830 carrying freight for third parties seems to have been more usual from Russia than from Sweden. In 1832 iron was carried from St Petersburg to the United States on 65 vessels, and the name of the owner of the vessel appears also in the list of owners for altogether 32 cargoes.⁸⁷

Several American merchants that imported iron purchased both Russian and Swedish iron. According to the records of the consuls in Stockholm and Copenhagen, at least Nathan Goddard, Israël Thorndike and Horace, William and Samuel Gray did so. Nathan Bridge & Co., John Brown and Goodhue & Co. ordered only Russian iron in Boston. The Boston firms Austin & Lewis, Samuel Austin and Thomas and William Parsons concentrated mainly on Swedish iron. Boorman & Johnston of New York accepted only the Swedish product, but John H. Howland (also G.G. and S. Howland) and Samuel Hicks & Son either carried

⁸⁴ Pickman to Peter Lander, 5 November 1816, EI, BPP, vol. 2. In 1816 too much Russian iron entered the American market after it had reached a peak of \$110 per ton in the previous autumn in Boston; HUBL, RP, vol. 2.

⁸⁵ Brothers Cramer to Bridge, 3/15 December and 4/16 December 1826, PM, JDB, vol. 1. John D. Lewis calculated in 1820 that he had suffered losses in the iron business. He gave an example of a consignment of 34 ½ tons (2168 poods) of Guriev's New Sable bar iron which had cost 5.35 roubles per pood, i.e. \$67.41 per ton, in St Petersburg. Although his agent John Langdon sold the iron in Boston at the top price of \$95 per ton, Lewis calculated that after deducting the customs, freight, commission and other costs, he had suffered a loss of over two dollars per ton; HSP, LNP, vol. 69. On the other hand Captain Samuel Endicott calculated in 1823 that importing iron was moderately profitable as the product could be purchased "on board" at \$55 per ton and the pro forma price of a consignment that was sold in Baltimore was \$87 per ton; PM, EP, vol. 1, "Brig Jeremiah".

⁸⁶ CR 1818-33, NA T-230/1-2; Adamson 1969, 87, 90 Boorman & Johnston was by far the most important purchaser of iron from Stockholm. In 1823-33 a total of 44 vessels carried an average of 1100 tons of iron per year for the firm. They were later overtaken by Naylor & Co., which operated in Boston and New York. In the mid-1850s this company was reckoned to handle about four fifths of Sweden's iron trade; Schroeder to Marcy, 28 December 1855, NA M-45/9; Adamson 1969, 113-114.

⁸⁷ CR 1830, NA M-81/2. The fact that iron from St Petersburg was always a part of a general cargo and the names of the owners of each item did not appear on the consular records also had some influence on the distribution. On the other hand vessels departing from Stockholm carried only iron and usually only one firm was the owner of the cargo.

themselves or ordered iron that had been carried by someone else from both St Petersburg and Stockholm. Peabody & Son of Salem also traded in both Swedish and Russian iron, but Nathan West, Jr. and George Nichols of Salem concentrated mainly on Swedish iron.⁸⁸

9.2 Hemp and flax

“The hemp, iron and duck brought from Russia, have been to our fisheries and navigation like seed to a crop”.⁸⁹ These words put into the mouth of one of the most prominent Boston merchants trading with Russia, George Cabot, at least contain the truth that Russian shipbuilding products were highly appreciated in American dockyards. During colonial times flax growing and its export to the mother country had been protected because of the needs of shipbuilding. The results of this policy were unsatisfactory, and hemp often travelled in the opposite direction, with the rope makers of New England purchasing expensive but good quality raw materials from Europe. Measures taken to protect hemp tried out in Massachusetts after Independence were no more successful. A basic pattern established itself as early as the 1780s and continued for several decades: the hemp growers in the west wanted protective tariffs for their product set at as high a rate as possible, whereas the manufacturers and shipbuilders in the north, and later also cotton growers in the south, wanted to be able to purchase imported hemp as cheaply as possible. Russian hemp, which was considered much better than the domestic product, was at the centre of the dispute. American hemp was used for rigging, but cables made of Russian hemp were considered much more durable and better suited to meet the needs of the Navy. In the 1820s a Congressional inquiry produced a depressing result: the hemp of Kentucky was good enough for southern plantation owners to protect their cotton bales and clothe their slaves, but it was not good enough for the shipbuilders of New England, who were proud of their craftsmanship.⁹⁰

Hemp had already been the subject of some of the most heated debates during discussions about the Federal tariff of 1789. The compromise worked out at that point was favourable to the shipbuilders, as the tariff was set at \$12 per ton. In response to the demands of the hemp growers in Kentucky and Pennsylvania, the tariff was raised to \$20 at the first opportunity (1792), and this

⁸⁸ CR 1819-33, NA T-203/1-2, and T-195/3. In addition to the above-mentioned, other long-term purchasers of Swedish (and also Russian) iron were Phineas Jenney of Alexandria, R. Robinson of Newport and Asa Clapp of Portland.

⁸⁹ Hill 1884, 6.

⁹⁰ In 1850 the hemp production of the United States was 89,000 tons, 25,000 tons of which was “water retted”. Kentucky contributed 56,000 tons of total production; see De Bow 1853, vol. I, 80, 124; Cole 1928, 60-61; Clark 1929, vol. I, 34, 289, 326; Crosby 1965, 18-22; Hutchins 1941, 125; Kirchner 1975, 150; Nettels 1962, 197-199; Stanwood 1903, vol. I, 231-232; NWR 1825, vol. 27, 346-347.

was about one fifth of the price of hemp in America.⁹¹ Hemp was a topic of never-ending discussion, and it comes as no surprise that one of the first tasks assigned to Minister John Quincy Adams in St Petersburg was to find out about the growing and processing methods of Russian hemp for the Secretary of War. The Americans wanted to know how they could produce hemp of the same quality as Russian hemp. Adams's report repeated the well-known facts: American hemp and flax were dew-retted and thus not as suitable as a raw material for the better grade of manufactures as the water-retted fibre from Russia. The plants were the same, but the Russian processing method meant that the fibres stayed more durable and elastic. The competitive capacity of Russian hemp was based on both lower production costs and better quality. Hemp processing in the Russian way was out of the question in the United States because it required a much larger labour force. Cheap labour was readily available in Russia. American hemp was of poorer quality because it entered the market "slovenly and unsorted".⁹² By contrast, Russian exported hemp was sorted and of uniform quality, as it had to pass official examination, so-called bracking, before it could be shipped. Brothers Blandow in St Petersburg considered this sorting and quality control, which was set up in the 1790s and applied to almost all major export products, to be an excellent way of maintaining competitive standards, particularly in the American market.⁹³

The superior quality of Russian hemp was a constant point of discussion. As late as 1850 the Minister to St Petersburg, Neil S. Brown, made a report on the subject, but in fact he could do little more than echo what Adams had stated 40 years earlier: the differences of quality between Russian and American hemp were not the result of different growing methods or different kinds of soil, but

⁹¹ Nettels 1962, 110; Hutchins 1941, 125. There were attempts to grow hemp with slave labour, but the results fell short of expectations. However, there were four ropewalks in Kentucky around 1800 and in 1810 there were already 38 establishments. In 1840 there were altogether 51 hemp-making establishments in the country; Nettels 1962, 198; Morison 1950, 51.

⁹² The survey was probably made by Alexander Hill Everett, and it was still cited in discussions concerning hemp in Congress in the 1820s; see McCulloch 1854, 684-685; Crosby 1965, 19-20; Hutchins 1941, 125. Hemp was usually divided into three commercial qualities: clean, out-shot and half-clean. The Americans shipped mainly the best and most expensive clean hemp. Sometimes the much cheaper codilla was counted as hemp. The export of hemp was reported in bundles which contained 55-65 poods of clean hemp and 40-45 poods of half clean; see McCulloch 1854, 684; HMM 1842, vol. 7, 214; Morison 1950, 18-19. Russian hemp prices sometimes fluctuated greatly from year to year. At the end of 1837 clean hemp cost 80 roubles per berkovic in St Petersburg, outshot 72 roubles, halfclean 65 roubles and hemp codilla 45 roubles. Three years later the prices of the products were 110 roubles, 98 roubles, 85 roubles and 40-45 roubles respectively; EI, Price Currents, St Petersburg [John D. Lewis, 11 December 1837 (O.S.), and William Brandt & Co., 29 November/ 11 December 1840].

⁹³ Brothers Blandow to Derby, 19/30 January 1795, and 9/20 July 1796, EI, DFP, vol. 3, 11. Bracking, which aimed at quality standardization and classification, was applied later in the 18th century to altogether 15 export products (in addition to hemp and flax, also to tallow, bristles, isinglass and linseed oil), and the examination was carried out by specialists selected by Russian and foreign merchants; Clarew Hunt to Palmerston, 24 June/ 6 July 1836, PRO, FO 65/227; Oddy 1805, vol. I, 81-82, 193; Clark 1841, 54-55; HMM 1842, vol. 7, 212.

of the different retting process. Russian hemp growers ret the fibers in running water while the Americans did not. However, Brown added that he regarded the hard Russian winter as the decisive factor. The much paler colour of Russian hemp was the consequence of keeping hemp in intense cold for 4-6 months of the year.⁹⁴

Russian hemp imported into America was considerably more expensive than the domestic product.⁹⁵ Its high price and then interruptions in supplies at the beginning of the 19th century made the use of iron cables more usual and, besides, gave impetus to the development of American domestic production. Already in about 1810 it was predicted that the United States would soon be independent of Russian hemp.⁹⁶ However, this did not happen, and the needs of shipbuilding kept the question of customs duties alive in round after round of tariff negotiations.⁹⁷ In the 1820s it was calculated that the building and maintenance of a 500-ton vessel required an average of 12 tons of hemp of a standard which American production could not meet. As rigging was replaced every three years on average, and as a duty of \$60 was collected on every ton of hemp (according to the 1828 tariff), shipbuilders claimed that the hemp tariffs constituted such great additional costs that they weakened the international competitive capacity of the American mercantile marine. It was also considered a consequence of the import levies that American ship owners and captains preferred to replace the rigging of their vessels at foreign ports, where labour and materials were cheaper than in the United States. In the Walker Act of 1846 unmanufactured hemp was classified as "schedule C"; in other words, an ad valorem duty of 30 percent was payable on it. Even that was considered too high.⁹⁸ Hemp tariffs were also considered one of the major obstacles to improving trade relations between Russia and the United States. Still around the time of the Crimean War, Minister Seymour criticized the tariffs: the interests of hemp growers in one or two states had kept duties on a disastrous

⁹⁴ Brown to Webster, 3 December 1850, NA M-35/15/5.

⁹⁵ According to figures presented by Daniel Webster to Congress, the initial cost of one ton of hemp in Russia was \$89. With freightage and customs duties both at \$30 per ton, and when handling costs, commission and insurance were added to the price, the American consumer paid a price that was clearly more than double the production costs; NWR, 27 March 1824.

⁹⁶ Pitkin 1815, 198. NWR (1814, vol 6, 242) expressed American wartime wishes quite clearly: "We look to Kentucky for a full supply of such sail cloths, sheetings, and linens as were before received from Russia."

⁹⁷ Changes in Russian hemp prices on the American market were sometimes still considerable. Plymouth Cordage Company purchased some hemp in November 1824 from the Bostonian Caleb Loring for \$165 per ton. A year later the price was \$205; Morison 1950, 19. In the summer of 1827 Russian hemp cost \$300 per ton in New York whereas the American drew-retted hemp cost only \$180. Similar price differences were also seen later, since in 1843-45 clean Russian hemp was sold at \$180-200 per ton whereas American hemp could be bought at less than \$100 per ton; NWR, vol. 32, 267; HMM 1845, vol. 12, 468-470.

⁹⁸ In the 1816 tariff the duty on raw hemp was \$30 per ton and in 1828 it was \$45. After July 1829 the duty was raised by \$5 per year until 1832, when it was reduced to \$45 per ton; Tariff Acts, 50, 68, 104, 128; Hutchins 1941, 125; Clark 1929, vol. I, 289; Crosby 1965, 21; Taussig 1914, 72, 90-91, 105; Morison 1921, 254.

level. He claimed that even a small reduction could have doubled trade between the two countries.⁹⁹

TABLE 43 The import of hemp into the United States from Russia, 1816-60.

Years	Tons	\$1000	Share of U.S. hemp imports (%)
1816-18	3 430	..	82
1821-25	5 183	585	93
1826-30	3 853	494	79
1831-35	4 283	441	82
1836-40	4 158	493	79
1841-45	1 796	239	82
1846-50	1 211	162	54
1851-53	1 358	169	58
1857-60	1 868	274	74

Sources: Appendix, table 66; Commerce and Navigation, 1821-60.

In spite of all the attention paid to hemp, it was not one of the major articles of U.S. foreign trade except as far as trade with Russia was concerned. Its import was at its highest in the 1820s (excluding 1811), at an average of 6500 tons a year, less than one percent of the country's total imports. Nevertheless the product played a central role in trade between Russia and the United States; the hemp shipped from Russia accounted for 80-90 percent of total U.S. hemp imports until the 1840s. At its peak, hemp constituted a quarter of U.S. imports from Russia.¹⁰⁰

Russian hemp was commonly used all over the West until the 1860s, and it was for a long time one of Russia's major exports. At the end of the 18th century hemp and flax together constituted about 40 percent of the country's exports, approximately two thirds of which was exported to Britain. Still in the 1830s raw hemp contributed around eight percent of Russia's total exports, and in the 1850s about five percent. The volume of hemp and flax exported remained fairly constant at around 50,000 tons from the end of the 18th century until the outbreak of the Crimean War.¹⁰¹ According to Russian export statistics, in 1831-35, for example, hemp was exported to an average value of 18.8 million roubles. The "American" share was 1.5 million roubles (8 percent).¹⁰²

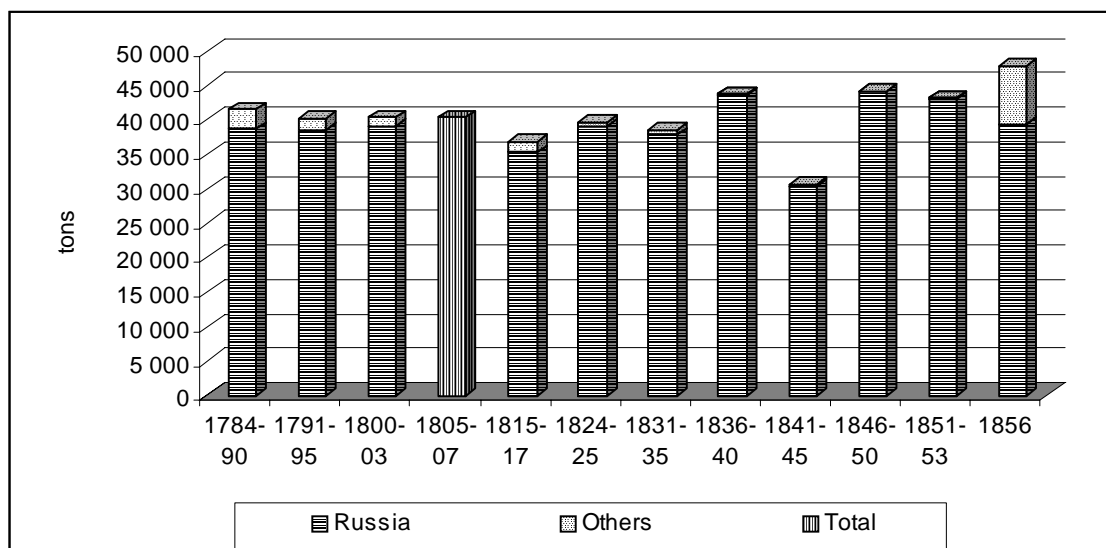
⁹⁹ Seymour to Marcy, 23 January / 4 February 1856, NA M-35/16/65.

¹⁰⁰ Commerce and Navigation, 1821-60; HMM 1861, vol. 45, 624; Clark 1929, 326; Homans 1858, 1809-1818; Morison 1950, 8. In 1842 a duty of \$40 per ton was set on Russian hemp, but hemp from Manila was allowed to enter the country at \$25. The difference was levelled out in later tariffs. The greatest benefit of Manila abaca compared to hemp was its clariness and durability. Moreover, unlike hemp rope it did not require further processing, e.g. tarring, and it was also suitable for whaling ships. Somewhat later Central American henequen, which was called sisal hemp according to its loading port, was launched on the market; Morison 1950, 35.

¹⁰¹ Attman 1981, 187; Kirchner 1975, 53, 59, 150. According to Attman (1981, 194) Russian hemp exports in 1802 amounted to 50,000 tons, in 1842-46 45,900 tons and in 1856-61 51,800 tons, for example.

¹⁰² At the end of the 1840s the United States' share dropped to below three percent. In the five years following the Crimean War, hemp was exported from Russia to the value of 8.1 million silver roubles, of which the United States' share was 327,000 silver roubles; Kirchner 1975, 144 -145, cf. p. 59. In 1827 hemp was exported from St

Most Russian hemp was shipped to western markets from St Petersburg, this city having overtaken Riga as the major export port of Baltic hemp during the 18th century. Two thirds of the hemp transported from the Baltic Sea through the Sound in 1784-85 was from St Petersburg and about one quarter from Riga. St Petersburg's share increased later: 30,000 tons of the 40,000 tons transported through the Sound in 1825 were from St Petersburg and barely 9000 tons from Riga.¹⁰³



Note: The years 1805-07 show the total amount transported from the Baltic Sea. The ports of departure are not specified.

Source: Appendix, table 46.

FIGURE 56 Countries of departure of the hemp passing through the Sound, 1784-1856.

Practically all the hemp carried westward through the Sound originated in Russia. Britain, the leading country of shipbuilding and navigation, was by far the major purchaser; at the end of the 18th century more than a half of Baltic hemp exports were taken there and three quarters in the period 1831-56.¹⁰⁴ The price of hemp in Russia followed quite closely changes in British demand.¹⁰⁵

Petersburg to the value of 16.5 million roubles and flax 7.8 million roubles. Together they constituted a fifth of all exports. The export value of manufactures of hemp and flax was 10.2 million roubles. At the end of the 1820s and beginning of the 1830s flax was only slightly more important than hemp. In the years 1826-35 the export of hemp and flax averaged 22 percent of Russia's total exports; Bayley's report 6/18 December, 1828, PRO, FO 65/174, and PRO, FO 65/236.

¹⁰³ Attman 1981, 186-187; Johansen 1983a, 113; ST I 1825, ØTA, DRA. Hemp shipped in 1793 from St Petersburg was worth 3.7 million roubles and from Riga 2.3 million roubles; Pitkin 1817, 81. On units of measure for hemp and flax (sklb, pood, berkovic, cwt, ton), see Appendix, list 2.

¹⁰⁴ Johansen 1983a, microfiches 1-4; ST II, 1831-56, ØTA, DRA. Similarly, 97-98 percent of the hemp England imported in the period 1786-99 was of Russian origin. In 1843-47 an average of 42,000 tons of hemp was imported into Great Britain, 67.5 percent of which originated in Russia. The corresponding figures in 1848-52 were 52,000 tons and 56 percent; Attman 1981, 185, 195.

¹⁰⁵ E.g. Brothers Blandow to Derby, 7 November 1794, EI, DFP, vol. 5.

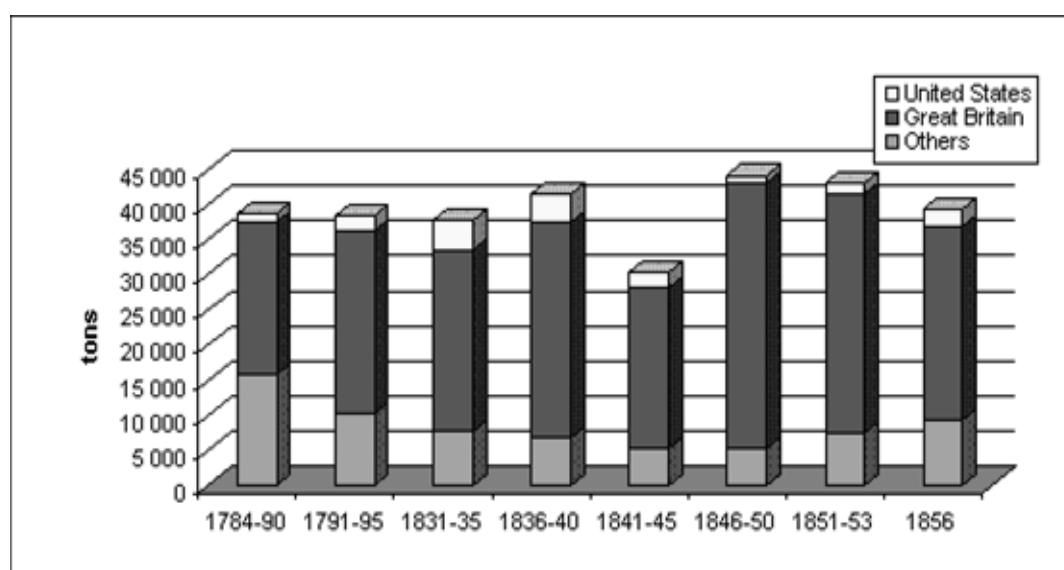
From the 18th century onwards hemp freight was most usually carried from St Petersburg and Riga to London, Liverpool and Hull. According to ST I, in the mid-1820s Boston was the biggest port of destination of Baltic hemp after London.¹⁰⁶

TABLE 44 Ports of destination of hemp passing through the Sound, 1805-25.

Ports	1805-07		1815-17		1824-25	
	tons	%	tons	%	tons	%
Boston	910	2.3	1 140	3.1	2 160	5.4
New York	1 280	3.2	1 210	3.3	950	2.4
Salem	920	2.3	360	1.0	330	0.8
Philadelphia	410	1.0	490	1.3	560	1.4
Other U.S. ports	6 000	14.9	1 340	3.6	500	1.3
London	12 910	32.0	8 370	22.8	9 390	23.7
Others	17 920	44.4	23 870	64.9	25 780	65.0
Total	45 350	100.0	36 780	100.0	39 670	100.0

Sources: ST I, 1805-07, 1815-17, 1824-25, ØTA, DRA.

Already in the early 1790s the United States had become the second largest purchaser of Baltic hemp, that is to say, of Russian hemp, although its purchases were less than a tenth of those of the British. The situation did not change in the early years of the 19th century: about seven percent of the hemp from the Baltic Sea was carried to North America between 1831 and 1856.¹⁰⁷



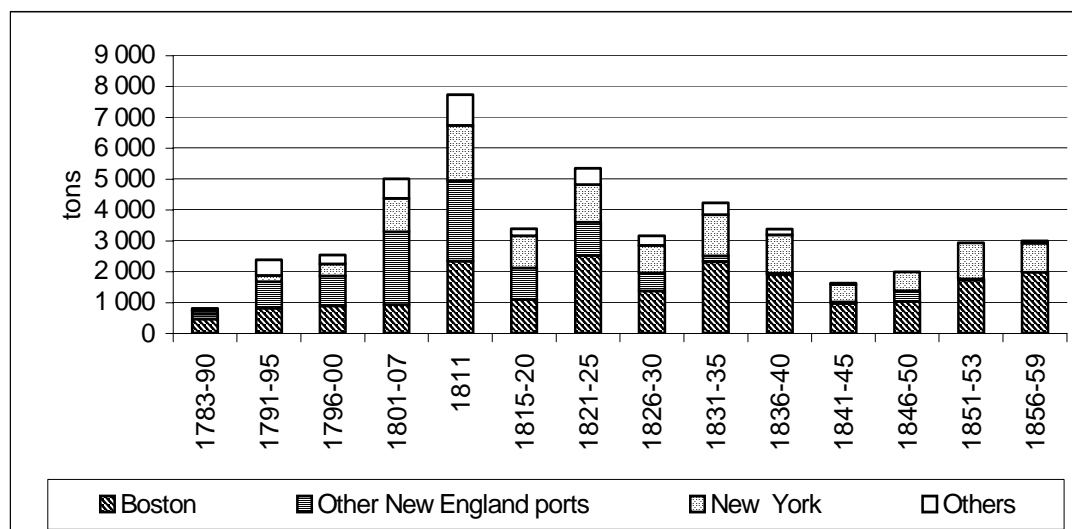
Source: Appendix, table 46.

FIGURE 57 Destination of Russian hemp passing through the Sound, 1784-1856.

¹⁰⁶ Johansen 1983; ST I, 1824-25, ØTA, DRA.

¹⁰⁷ According to ST II, an average of 2859 tons of hemp was carried from Russia to the United States in 1831-50; according to STA, American vessels alone carried 2811 tons. The figure in U.S. import statistics for these years is almost the same: 2862 tons; Appendix, table 66.

In practice, any cargoes of hemp in American vessels passing through the Sound would have originated in Russia. The customs books record that early in the period smallish amounts of hemp were also taken on in Copenhagen, but they were probably also of Russian origin.¹⁰⁸ About 90 percent of the hemp transported on American vessels was loaded on in St Petersburg and carried to North America. In exceptional cases the Americans also purchased or freighted hemp, for example, from Riga to Boston or from St Petersburg to Bordeaux. The statistics show that almost all the hemp carried from the Baltic to the United States was carried in American vessels.¹⁰⁹



Source: Appendix, table 47.

FIGURE 58 The U.S. ports of destination of hemp carried on American vessels from Russia through the Sound, 1783-1859.

Until the 1840s the cargo of almost all American vessels returning from Russia across the Atlantic included hemp. In the 18th century and at the beginning of the 19th century it was Russian raw hemp, apart from iron and manufactures, that attracted Americans from the ports of the North Sea and from Copenhagen to the eastern end of the Gulf of Finland. For example, in the spring of 1806 the 190-ton ship/brig *Neptunus*, owned by S. Butler & Son of Providence, carried sugar, coffee, tobacco and rum from her home port to Copenhagen, and then took manufactures, iron, tallow and 68 tons of hemp home from St Petersburg.¹¹⁰ Hemp was also generally carried as a return cargo by ships bringing raw sugar to St Petersburg. In the summer of 1830 the brig *Congress*

¹⁰⁸ For example in 1806 the brig *Neutrality* (107 tons), owned by John Kennedy of Boston, carried sugar, rice and rum from Boston to Copenhagen and took a return cargo of iron, cordage and 1430 poods (sic) of hemp to Boston; STA 1806 (176/237); CR 1806, NA T-201/1.

¹⁰⁹ For example in the period 1784-95 an average of 1609 tons was carried from Russia to the United States, 1539 tons of this in American vessels; Appendix, tables 46 and 47.

¹¹⁰ STA 1806 (289/467); CR 1806, NA T-201/1.

(273 tons), owned by William Goddard of Salem, exchanged her cargo of sugar in St Petersburg for iron, sheetings, diaper and 66 tons of hemp.¹¹¹

There were established practices governing the dealings between the British purchasers and the Russian sellers in the hemp market of St Petersburg. The British merchants followed the rule of making their purchases already early in winter or even in the previous autumn for shipping the following summer. The practice did not suit the American merchants, who were more concerned with the sales prospects for the cargoes they brought with them and only decided about the return cargo then and there.¹¹² According to Hunt's Merchants Magazine, hemp sales in St Petersburg were in the hands of 25 dealers, "very wealthy and respectable people". The American John D. Lewis belonged to that group in the first and second decades of the 19th century.¹¹³

TABLE 45 Exports of hemp from St Petersburg in 1818 and 1825.

Firms	1818		1825	
	poods	%	poods	%
Thornton, Cayley & Co.	284 360	12.4	195 740	9.6
Meyer, Brückner & Co.	..	..	221 780	10.9
Paris, Warre, Harvey	167 370	7.3	..	..
Thomson, Bonar & Co.	164 890	7.2	159 910	7.8
Brothers Cramer & Co.	..	..	71 470	3.5
Stiegliz & Co.	68 280	3.0	111 890	5.5
John D. Lewis	64 040	2.8	102 720	5.0
Other houses	1 542 760	67.3	1 178 490	57.7
Total	2 291 700	100.0	2 042 000	100.0

Sources: HSP, LNP, Letters 1808-28; PRO, FO 65/160

About four percent of the hemp the Americans carried from Russia to the United States came from Riga. Already in the 1780s Riga hemp was known in New York for its superiority to "Russian" hemp.¹¹⁴ It was mainly grown in the Ukraine but also in Belorussia and according to William D. Lewis it was as much as 25 percent more expensive than that sold in St Petersburg, but "perhaps that much better". The only difficulty was that the New England rope makers would not agree to pay the difference, and so it was "down right folly" to import Riga hemp into the United States.¹¹⁵ It was mainly purchased by the

¹¹¹ STA 1830 (2793/3576); CR 1830, NA T-195/3.

¹¹² For example in 1789 the firm Gazalet, Hill & Co. tried to get E. H. Derby to commit himself to winter purchases of hemp, as they were, according to the firm, up to 40 percent cheaper than summer purchases; Hill, Gazalet & Co. to Derby, 25 September 1789, EI, DFP, vol. 11. On the hemp trade in St Petersburg and Riga, e.g. William D. Lewis to John H. Andrews, 9 February 1822, EI, JHAP, vol. 1/1; HMM 1842, vol. 7, 215; Clark 1841, 57-58; Homans 1858, 1636.

¹¹³ HMM 1842, vol. 7, 215. Lewis's was the 13th largest of 84 hemp exporters in 1818, but in 1825 only four trading houses had dealings on a larger scale; HSP, LP, Letters 1808-28; PRO, FO 65/160.

¹¹⁴ E.g. Edward Gould to Derby, 9 October 1786, EI, DFP, vol. 11.

¹¹⁵ William D. Lewis to John D. Lewis, 25 February 1821, HSP, LNP, Letters 1810-41. According to Consul Alexander Schwartz, the difference in price in the 1840s was about 10 percent; Schwartz to the Secretary of State, 6 March 1846, NA, M-485/1.

British,¹¹⁶ and the Americans visited Riga only occasionally, generally because of raw sugar. However, Consul John G. Schepeler reported that in 1840 as many as six American vessels visited Riga, three of them coming from St Petersburg to take on hemp as a return cargo, one arriving from Havana carrying sugar and two arriving in ballast from London.¹¹⁷ Two years later four sugar vessels arrived from Havana. According to STA, the ship *Hamburg* of Bath and the bark *Nautilus* of Portland took on a return cargo of hemp, but the bark *Turbo* of Kingston and the ship *Cabinet* of Boston had to return to Boston in ballast.¹¹⁸

TABLE 46 The U.S. ports of destination for hemp carried by American vessels from St Petersburg in 1803.

Ports	According to		
	STA	Consular Returns	
	(skbls)	St Petersburg (poods)	Elsinore (poods)
Boston	4 616	63 737	59 415
New York	8 546	94 796	95 939
Salem	6 708	62 102	54 409
Providence	2 961	32 618	26 388
Philadelphia	2 406	26 815	23 220
Portland	2 306	2 773	26 758
Gloucester	2 176	9 436	14 774
Newburyport	1 603	18 519	23 597
Baltimore	1 350	11 611	11 610
New Bedford	837	8 377	-
Portsmouth	462	-	4 625
Marblehead	399	3 973	4 220
Alexandria	315	3 149	3 149
Norfolk	247	1 514	2 474
Plymouth	198	1 583	1 583
Rhode Island	169	1 694	-
Duxbury	167	1 673	1 672
Newport	-	-	7 312
"North America"	249	-	2 490
Total	35 712	362 370	363 635

Notes: According to STA, 22,000 poods (350 tons) hemp was carried by American vessels from Copenhagen to the United States. Pitkin (1815) reports 262,100 poods (4160 tons) exported from St Petersburg.

Sources: STA 1803; CR 1803, NA M-81/1, and T-201/1.

¹¹⁶ For example, in 1849-50 an average of 14,400 tons was exported from the city, 8,200 tons of it to Britain; Clinton Wunyard to Palmerston, 20 July 1850, and 18 February 1851, PRO, FO 65/282, 397.

¹¹⁷ In 1840, for example, the brig *Czarina* returning from St Petersburg to her home port of Boston on her first journey of the year took on extra hemp from Riga. The brig *George Ryan* of Boston did the same, as did the bark *Byron* of Newburyport on her way to Boston. The ship *Forum* of Boston probably left part of her cargo of sugar in Riga, sailed to St Petersburg and took an ordinary general cargo from there to Boston. The vessels sailing from London to Riga in ballast were the ship *Helen Mar* of Philadelphia and the brig *Alice* of Newburyport. The former carried hemp to Baltimore and the latter lumber to Madeira; STA 1840 (650/1811, 1347/2676, 1283/2710, 2022/3441, 1067/1963, 2038/2835); CR 1840, NA M-485/1, T-201/2, and M-81/4.

¹¹⁸ STA 1842 (665/1585, 664/1976, 1546/2115, 1452/2193); CR 1842, NA T-201/2, and M-485/1.

Irrespective of where in northern Europe hemp arrived from, its major buyers and users were in New England. During the period presented in figure 59, it took two-thirds of the Russian hemp imported. William "Billy" Gray of Salem, who had most of his fleet built in Maine, sent Russian hemp to Portland to be spun at his large ropewalk. Henry Gray of Boston dealt in hemp from both Kentucky and Russia, supplying them to the Plymouth Cordage Co. and Boston Hemp Manufacturing Co.¹¹⁹ At the turn of the century Boston's share of the Russian hemp imported was by far the greatest, two-fifths of the total amount. However, there were some individual years when larger amounts went to Salem and New York.

Quite a few North American ports took hemp (for instance Newburyport, Portsmouth, Marblehead and New Bedford) before the embargo, but the shift of focus to Boston and New York was obvious from the 1830s onwards. The cities of Rhode Island, Providence, Newport and Bristol, which had had a central role before 1808, still occasionally imported hemp from St Petersburg until the 1850s. Hemp yarn became as important as raw hemp in the 1850s and St Petersburg export statistics show that in some years it was exported only to the United States.¹²⁰

Flax was another commodity with a comparable role in trade between the United States and Russia, with the most essential difference being that at most American vessels carried only 420 tons of flax from the Russian Baltic, in 1828, whereas in 1822 a peak of over 9000 tons of hemp was carried. It was more common to grow flax than hemp for household consumption in North America. The price differential between Russian and American flax was almost the same as in the case of hemp.¹²¹ Although linen was to give way to cotton goods over the course of time, it kept its position in foreign trade for quite a long period. Between 1821 and 1860 linen and flax cloth made up 3-5 percent of imports for American domestic consumption.¹²² Labour costs, which American observers often emphasized, were reckoned to be even higher for flax than for hemp, and so attempts were made to separate flax fibres with chemicals, for example. There were equally strenuous attempts to combine cotton and flax fibres into one cloth. However, in the early 19th century the results were poor.¹²³ The import duty on raw flax was about five percent in 1812, but after that the rate gradually increased. Though it was actually even duty-free for some time in the 1830s, in 1846 ad valorem duty of 15 percent was imposed on it.¹²⁴

¹¹⁹ Rowe 1948, 67; Henry Gray Journal 1829-36, e.g. 169, 172, 173, 179-180, 192, HUBL, HGP, vol. 4.

¹²⁰ The export figures for hemp in St Petersburg consular reports appear a four percent higher total amount than the STA figures.

¹²¹ The average price of Russian flax in New York at the beginning of the 1840s was about \$250 per ton and that of American about \$200 per ton; HMM 1845, vol. 12, 468-469.

¹²² In the 1830s goods made of hemp were imported to the value of \$2 million on average and manufactures made of flax to the value of \$5.4 million; Taylor 1951, 449; Pitkin 1835, 509; Clark 1929, 35, 82.

¹²³ See HMM 1851, vol. 24, 509. U.S. domestic production in 1850 was reckoned at 13.4 million lbs, more than half of which was grown in Kentucky; De Bow 1853, vol. I, 80.

¹²⁴ Tariff Acts 74, 89, 126; Clark 1929, vol. I, 289, 362.

Flax, including twist and tow, constituted at the most about five percent of U.S. imports from Russia. From the Russian perspective flax going to the United States represented only a fraction of the country's total exports, in 1828-33, for example, about half a percent, while Britain took over 80 percent.¹²⁵ Flax was traditionally one of Russia's main exports, and demand for it in western markets was still increasing in the early 19th century, despite the fact that cotton was becoming more important.¹²⁶ This can also be seen in the Sound statistics: the amounts carried westwards in the mid-19th century were double the amounts taken half a century earlier.

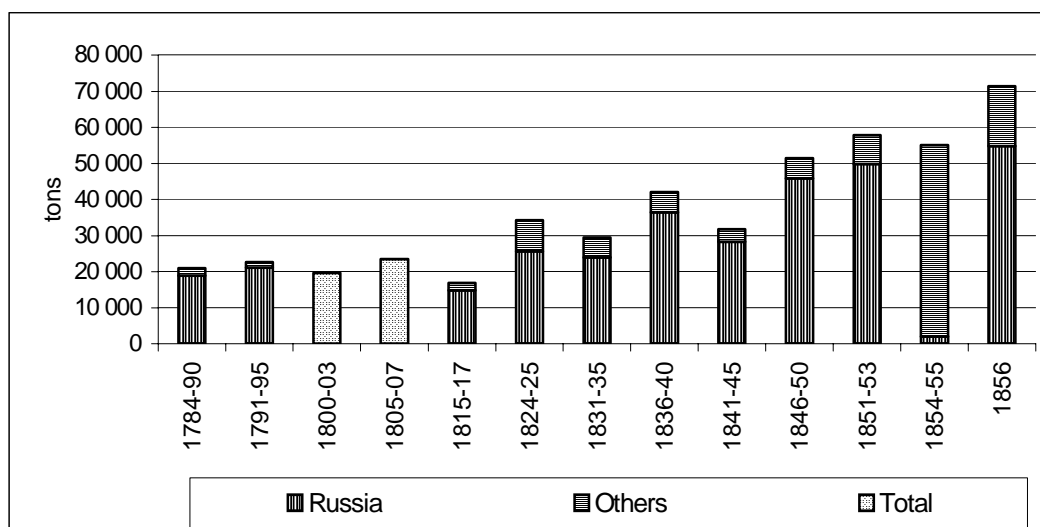
Over 90 percent of the flax carried through the Sound at the end of the 18th century was of Russian origin, and the proportion remained constant through the 1830s and 1840s. The best flax in the Baltic was reputed to come from Riga, since it was from there that the long-fibred white flax of Belorussia and Kurland was shipped.¹²⁷ At the end of the 18th century Riga was the major port of export for flax, and in the mid-1820s about half of the amount that passed through the Sound was still shipped from there. In 1825 the principal destinations amongst the almost 50 ports mentioned in ST I were Dundee, Hull, Porto and London.¹²⁸

¹²⁵ Commerce and Navigation 1821-60; Kirchner 1975, 144. In 1827 according to Russian statistics North America's share was one-tenth of exported flax (2.4 million roubles). In 1828-33 the quantity exported was worth only 121,000 roubles on average. According to Russian statistics the distribution of flax exports remained more or less constant; in 1851-53 total exports were worth 10.5 million silver roubles on average, Britain's share of it worth 7.1 million and that of the United States 25,000 silver roubles.

¹²⁶ Over 70 percent of the 75,000 tons of flax Britain imported on average in 1842-52 was of Russian origin; Attman 1981, 194.

¹²⁷ On Russian flax qualities see: Clark 1841, 59-61; Homans 1858, 1635; McCulloh 1854, 600-601, 685; HMM 1842, vol. 7, 217; HMM 186, vol. 45, 340; Oddy 1805, 80-84; Crosby 1965, 30. The best flax the Americans mainly purchased was made up for shipment in bobbins containing 12 heads each and weighing about 3 ½ poods per bobbin. Second-class flax was shipped in bobbins containing 9 heads each and weighing 2 pood/bobbin. In 1846-50 about 50 percent of exported flax (879,000 poods on average) was flax of 9 heads, just under 20 percent codilla, tow and yarn and the rest 30 percent flax of 12 and 6 heads; Appendix, list 1. The price of flax was defined on the basis of its quality. In 1840, 12 head flax cost 140-145 rbls per pood, 9 head 110-115 rbls, 6 head 90-100 rbls, flax tow 70 rbls and flax codilla 40 rbls; EI, Price Currents, St Petersburg (William Brandt & Co. 29 November/11 December 1840).

¹²⁸ 7600 tons of the 21,300 tons transported through the Sound in 1784-95 was from Riga, 730 tons from St Petersburg and the rest mainly from Pernau, Narva, Memel and Libau; Johansen, 1983a, 113. In 1791-1800 1000 tons was exported from Riga and in 1824-25 18,800 tons. The corresponding figures for St Petersburg were 8170 tons and 6170 tons. In 1825 Dundee received 8480 tons, Hull 6360 tons, Porto 4250 tons and London 3570 tons. The average exported from Russia in 1841-42 was 27,900 tons, of which Britain purchased 23,300 tons. A British consul estimated that "Flax Markets will chiefly depend on the Accounts received from the British Manufacturing Districts"; PRO, FO 65/293.



Note: The amounts for 1800-07 refer to the total amount passing through the Sound; the area of departure is not specified. Source: Appendix, table 48.

FIGURE 59 Areas of departure of flax passing through the Sound, 1784-1856.

TABLE 47 The destination of flax passing through the Sound from Russia, 1784-1856 (tons).

Years	United States	Britain	Others	Total from Russia
1784-90	6	6 452	12 400	18 850
1791-95	57	8 290	12 800	21 090
1815-17	1	..	..	14 780
1824-25	34	..	..	25 520
1831-35	100	20 850	2 530	23 380
1836-40	111	32 470	3 910	36 380
1841-45	247	24 400	3 790	28 190
1846-50	68	38 030	7 680	45 710
1851-53	124	35 760	14 030	49 790
1856	230	42 090	12 680	54 770

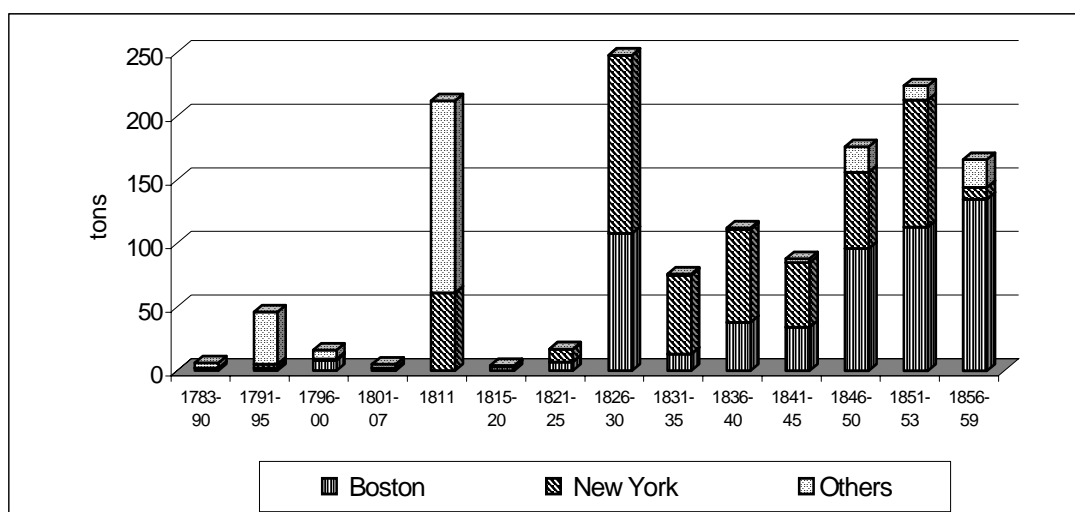
Note: The figures presenting the proportion going to the United States before 1831 refer to amounts carried by American vessels.

Source: Appendix, tables 48 and 49.

A third of the flax from the Baltic went to Britain at the end of the 18th century, and four-fifths in the 1830s and 1840s.¹²⁹ Almost all the flax the Americans carried from the Baltic came from St Petersburg, only some small amounts, according to STA, being taken on in Riga or Pillau. Four-fifths of all the flax the

¹²⁹ According to a calculation commissioned by The Russia Company, an average of 5890 tons of flax was exported from St Petersburg in 1798-1807, with 5480 tons of it going to Britain and 52 tons to the United States. The average exported from St Petersburg in 1813-44 was put at 6290 tons, with Britain's share 5690 tons and that of the United States 92 tons; PRO, FO 65/368. According to John D. Lewis, flax exports from St Petersburg amounted to 10,400 tons in 1827, and the major brokers were John Thomas & Co. (2000 tons) and Thomson, Bonar and Co. (1300 tons). Lewis' own dealings covered just under 80 tons; HSP, LNP, Letters 1808-1828.

Americans carried west went from Russia to North America. The rest ended up chiefly in São Miguel, Le Havre and British ports.



Source: Appendix, table 49.

FIGURE 60 American ports of destination for flax carried by American vessels from St Petersburg through the Sound, 1783-1859.

The flax carried to the United States was almost evenly distributed between Boston and New York. Early in the period some flax was carried to small towns in Massachusetts and Baltimore and Philadelphia. The import peak was, in addition to the year 1811, late in the 1820s, when double the amounts carried during the preceding 40 years together was imported to the United States.

9.3 Manufactured goods of hemp and flax

One of the most difficult problems for U.S. trade policy was the import of finished textile products. Particularly after 1815 British cotton textiles flooded the American market and they were superior to the products of the American domestic textile industry with respect to both quality and production costs.¹³⁰ As well as cotton textiles, large quantities of hemp cloth and linen were traditionally imported into the country, also mostly of British origin. In the years 1826-30 imported hemp cloth and linen accounted for five percent of total imports, of which the British share was worth \$2 million, that is, just over half. The proportion of "Russian manufactures", that is, flax and hemp textiles from Russia, was 23 percent.¹³¹ Textiles and textile products were the main British

¹³⁰ The share of textiles in manufacturing output increased from 13.2 percent in 1809 to 31.2 percent in 1839. In the latter year cotton accounted for 63 percent of textiles; Engerman & Gallman 1983, 38, note 19.

¹³¹ The term "Russian manufactures" most often referred to sailcloth (sailduck, ordinary duck, heavy duck, Russia duck) and raveduck (ravens), which was principally used

exports and the main American imports. In the first half of the 19th century textiles constituted almost 60 percent of Britain's domestic exports and a third of the total imports of the United States. Linen gradually lost its position to cheaper cotton products but even in 1860 flax manufactures worth over \$11 million were imported into the United States, a third of the value of imported cotton manufactures. At the same time the American domestic output of cotton goods amounted to three times imports.¹³²

Hemp and flax manufactures were among Russia's principal exports. In 1793, for example, a total of 11.3 million arshines was exported,¹³³ worth 3.8 million roubles.¹³⁴ Linen production was the largest sector of the Russian textile industry, worth more than cotton and wool combined until the 1850s. In the long term flax cloth and linen production proved a declining industry, but at the turn of the century it still employed 3-4 million people.¹³⁵ M.S. de Tegoborski considered the cotton industry created under the protection of tariff

for working clothes. Other Russian textiles were sometimes also included in "Russias". One of the most common was flems or "Flemish" linen (STA: *flemsk* or *flemsk lærred*, often also *ord. lærred*), which was also called (Russia) sheeting. It was stout linen cloth used, for example, for sheets. Diaper (in STA usually: *drejl*) was fine ornamented linen, commonly used for table cloths, napkins etc. Often drillings (drills) went by the same name, although the latter was a more coarse textile that was often used for working clothes. Crash, that is, "Russia linen" (STA:*blaarlærred*), was coloured textile that was used, for instance, for furnishings, linen and cheaper qualities for wrapping. The quite liberally used term "linens", as well as "lærred" in STA could refer to any flax or hemp textile except sailduck. Halfduck, comparable in price to the poorest quality sailcloth, and coarse huckaback used for toweling also occur occasionally. Sometimes canvas is equal to sailduck, duck to ravenduck, drill to dreil/diaper, and linen to hemplærred/flamsklærred and *ord. lærred*; see Hans Chr. Johansen 1983a.

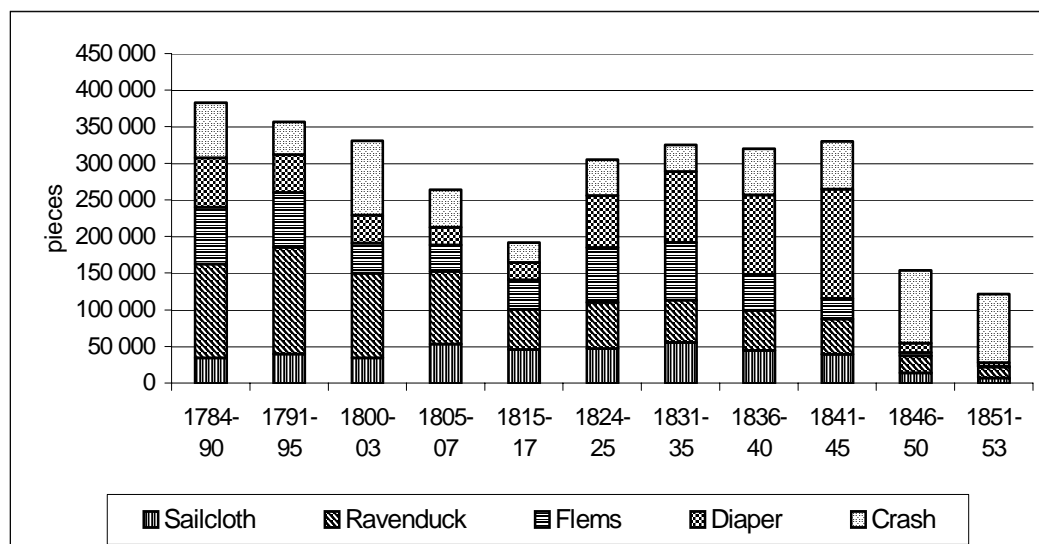
¹³² The import value of linens and manufactures was \$3.3 million in the 1820s and in the following decade \$5.4 million. Manufactures of hemp were imported in the same decades worth \$1.7 million and \$2.0. Of the principal hemp products, the figures for sailduck were \$809,000 and \$691,000 and for sheeting \$387,000 and \$405,000. The import values of raw hemp and cordage were \$628,000 and \$579,000. Cordage accounted for about \$100,000 worth of imports per year in the 1820s and 1830s. Cotton textiles imports in the 1820s were worth \$9.3 million and in the 1830s about \$11.7 million; Commerce and Navigation 1821-40; Albion 1961, 57-63; HMM 1844, vol.10, 181-185.

¹³³ The amounts of sailduck, ravenduck and flems were usually registered as pieces, each of 50 arshines. The amounts were also sometimes recorded as bales, when for example one bale of ravenduck equalled 20 or 25 pieces, that is, 1000 or 1250 arshines. 1000 arshines (778 yards) was usually used as a measure of diaper and crash. Diaper is in pieces of 25 arshines, but crash, like other manufactures discussed here, of 50 arshines per piece. The width of the pieces also influenced the price of different textile qualities. There was, for example, ravenduck of three widths on the market, from 28 inches to 36 inches. The ordinary width of sailduck was 24 inches. The size of a "piece" in units of textile varied according to the country and the quality of textile; see Appendix, list 2 and e.g. Mokyr 1976, 15.

¹³⁴ Most exports (3.7 million roubles) went through St Petersburg. Flax and linen were exported from Russia to the value of 10.6 million roubles altogether in 1793. In 1802 the export of St Petersburg manufactures was 3.5 million roubles, of which sailcloth represented 0.7 million roubles, ravenduck 1.6 million roubles and flems 0.7 million roubles. In 1827 manufactures exported from St Petersburg were worth 10.2 million roubles, barely a tenth of total exports from St Petersburg; Pitkin 1835, 81, 84-85; Gibson to Clay, 27 October 1827, NA M-81/2.

¹³⁵ See Blackwell 1970, 51; Crosby 1965, 30; Pintner 1967, 108-109; Oddy 1805, 80-84.

walls the main reason for the decline of the linen industry, and his claim was obviously justified. Another reason, related to the first, was that linen production was difficult to mechanize. The value of Russian exported flens and ravenduck in the middle of the century was about 500,000 roubles,¹³⁶ and around 1860 there were only a hundred manufacturers producing for export, when in 1804 there are thought to have been about three hundred. William L. Blackwell considers the decline in the American demand for ravenduck to be a major reason for the shrinking market for flax products.¹³⁷



Note: The figures for 1815-17 and 1824-25 refer only to the amounts carried from Russia through the Sound.

Source: Appendix, tables 50-53.

FIGURE 61 Manufactured goods passing through the Sound westwards, 1783-1853.

Most manufactures exported from the Baltic to western markets were probably transported through the Sound. Including all types, an average of 326,000 pieces passed Elsinore in 1800-1803.¹³⁸ The figure for the 1820s to the mid-1840s was about 300,000 pieces. After that the figures plummeted, and in the years preceding the Crimean War only a third of the amount was exported.¹³⁹ Almost all the hemp cloth and linen passing through the Sound westward was of Russian origin. The Russian share was 95-99 percent of the sailcloth, ravenduck,

¹³⁶ de Tegoborski 1856, vol. I, 452-453.

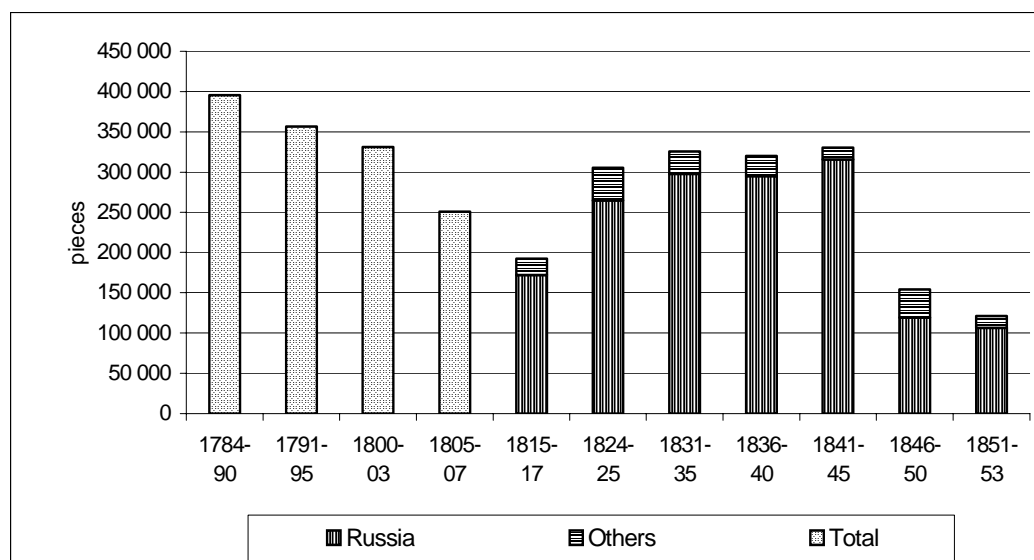
¹³⁷ Blackwell 1970, 52; see Appendix, table 12; Saul 1991, 182.

¹³⁸ In 1800-03 the ravenduck (115,000 pieces) and diaper (38,000 pieces) carried was double the amount after 1815. An average of 35,000 pieces of sailduck and 36,000 pieces of flens was exported. In 1805-07 an average of 264,000 pieces of manufactured goods was carried through the Sound, 99,600 pieces of it ravenduck; ST I, 1800-03, 1805-07, 1815-17, 1824-25, ØTA, DRA.

¹³⁹ The amounts in ST II reach their peak early in the 1840s (from Russia 315,400 pieces, with 268,000 pieces going to the United States), but British and American consular reports, STA and the U.S. import statistics record an abrupt decline already in 1842-43; see Appendix tables 52-58 and 66.

flems and diaper carried in the period 1831-53, and 70 percent of the crash and bagging.¹⁴⁰

Ravenduck was the principal manufactured textile from the Baltic until it gave way to diaper in the 1830s. The abrupt decline in exports in the 1840s applied to all textiles other than crash. According to ST II, the proportions of the different varieties carried through the Sound in 1851-53 were such that nearly a third of the total amount was diaper, about a quarter crash, and about 15 percent each sailcloth, ravenduck and flems.



Notes: The figures for 1784-1807 refer to unspecified total amounts. The figures for 1815-53 also include sailcloth, ravenduck, flems, diaper and crash.
Source: Appendix, tables 50-53.

FIGURE 62 Areas of departure of manufactured goods passing through the Sound, 1784-1853.

The United States became a major purchaser of Russian manufactured textiles at the turn of the century. Already in 1795 the firm of Brothers Blandow in St Petersburg recorded that the Americans were the main exporters at least of sailcloth, and according to ST I, of the 260,900 pieces of manufactured textiles that passed through the Sound in 1806 at least 71,400 pieces went to American

¹⁴⁰ Different types of textile, even ravenduck and flems, are specified in the statistics in a very inconsistent way. STA sometimes includes flems and ravenduck in the same category (e.g. STA 1792:866). The printed export lists of St Petersburg in 1803 record several different sorts of manufactures that appear as ravenduck in STA and as flems in the lists of the consul in Elsinore. According to the printed export list of St Petersburg American vessels carried 13,200 pieces of flems, but according to STA only 2800 pieces passed through the Sound. Similarly, according to the consul 10,700 pieces of ravenduck were exported, but according to STA 27,400 pieces. For 1805, STA has 2800 pieces of flems, but the printed export list of St Petersburg 29,200 pieces and the consul in Elsinore 26,700 pieces. Generally speaking, the consular reports of Elsinore in the early 19th century are almost useless with respect to textiles, as any sorts of textile could be put together and recorded in the category "sailduck & linens"; e.g. STA 1803 (2244); CR 1803, NA T-201/1 (ship *Mount Vernon* of Salem).

ports.¹⁴¹ The Russia Company calculated that in the pre-embargo years almost half of the sailcloth that left St Petersburg went to the United States, 15 percent of the ravenduck and 35 percent of the flems. In the mid-1820s already more than a half of the manufactured goods that passed through the Sound were going to Boston.¹⁴²

TABLE 48 Destination of manufactured goods passing through the Sound, 1824-25 (pieces/year).

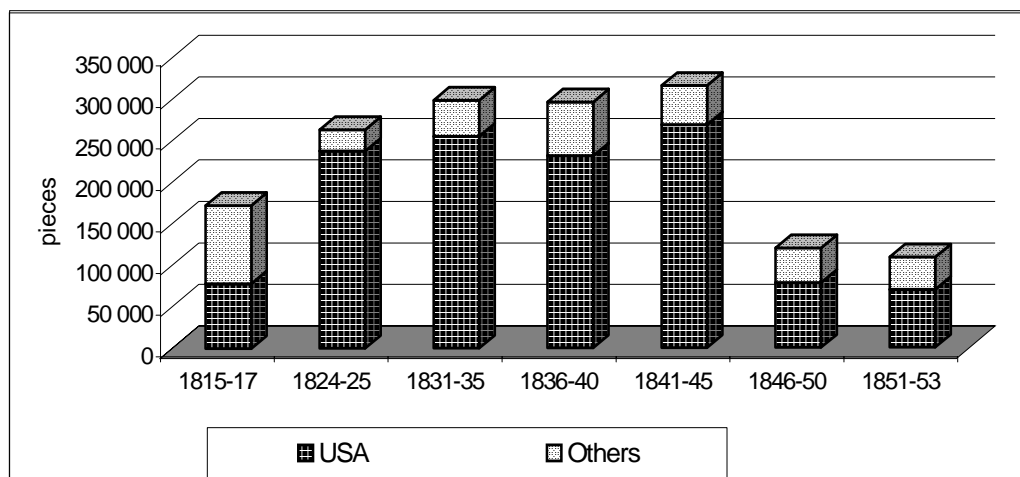
Ports	Sailcloth	Ravenduck	Flems	Diaper	Crash	Total
Boston	26 100	40 000	51 400	42 900	3 400	163 800
New York	5 400	6 700	7 400	4 500	2 700	26 700
Salem	2 200	2 500	6 900	1 600	-	13 200
Newburyport	3 100	1 400	1 500	2 800	-	8 800
Philadelphia	1 400	900	2 900	1 100	500	6 800
London	-	1 600	700	4 600	11 200	18 100
Amsterdam	900	1 000	600	2 000	9 000	13 500
Lisbon	3 000	1 500	300	100	1 100	6 000
Others	5 200	6 400	3 100	4 900	22 700	42 300
Total	47 300	62 000	74 800	64 500	50 600	299 200
(From St Peterburg.)	47 300	61 300	74 800	64 500	31 500	279 400

Source: ST I, 1824-25; ST I. 1824-25, ØTA, DRA

In 1851-53 the United States' share of the hemp cloth and linen exported from the Baltic was about 70 percent, according to ST II. It was highest in the case of flems, at 78 percent, and lowest in the case of crash, at 50 percent. From the 1820s onwards trade between St Petersburg and the United States dominated the entire sector. Of the hemp cloth and flax carried through the Sound to North America 99 percent originated from Russia.

¹⁴¹ The firm estimated that total Russian production in 1794 was 80,000 pieces, of which 25,000 pieces were exported to the United States; Brothers Blandow to Derby, 19/30 January 1795, EI, DFP, vol. 11; ST I, 1806, ØTA, DRA.

¹⁴² The proportions in the calculation by the Russia Company in 1823-32 were already markedly higher: 70 percent, 65 percent and 90 percent, respectively. However, during the same period the export of these three articles from St Petersburg had decreased from 241,000 pieces to 172,000 pieces; PRO, FO 65/368; Appendix, list 1.



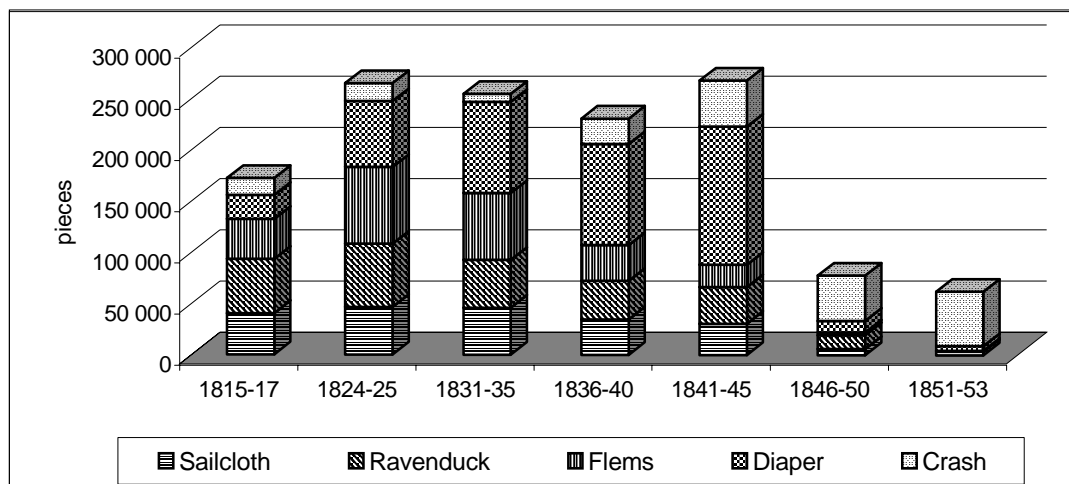
Notes: The proportions of the United States in 1815-17 and 1824-25 are calculated from manufactures loaded from all ports on the Baltic Sea.
Source: Appendix, tables 51-53.

FIGURE 63 Destination of Russian manufactured goods passing through the Sound, 1815-53.

The situation was almost the same as far as Russian exports were concerned: 80 percent of manufactures transported through the Sound went to the United States.¹⁴³ In 1826–1835 sailcloth accounted for about three percent of Russian exports and was worth 12.5 million roubles, according to British calculations. This was slightly more than the average iron exports in the period under discussion.¹⁴⁴

¹⁴³ According to ST II, 92 percent of the diaper exported from Russia went to the United States. The proportion of flems was 79 percent, of ravenduck 73 percent and of crash 67 percent. The figures of ST II for the United States were usually similar to those provided by STA and the consuls. However, clear differences exist in some years. For example in 1831-35 ST II reported average exports to the United States as being 250,000 pieces manufactures, but according to STA, American vessels carried 266,000 pieces and according to the consuls 254,000 pieces. On the other hand, in 1841-45 ST II reported 268,000 pieces whereas STA only reported 124,000 pieces and the consuls in St Petersburg 135,000 pieces; Appendix, tables 52-59; CR 1831-45, NA M-81/3-4.

¹⁴⁴ PRO, FO 65/236.



Notes: The figures in 1815-17 and 1824-25 only refer to total amounts carried from Russia.
Source: Appendix, tables 52 and 53.

FIGURE 64 Russian manufactured goods passing through the Sound to the United States, 1815-1853.

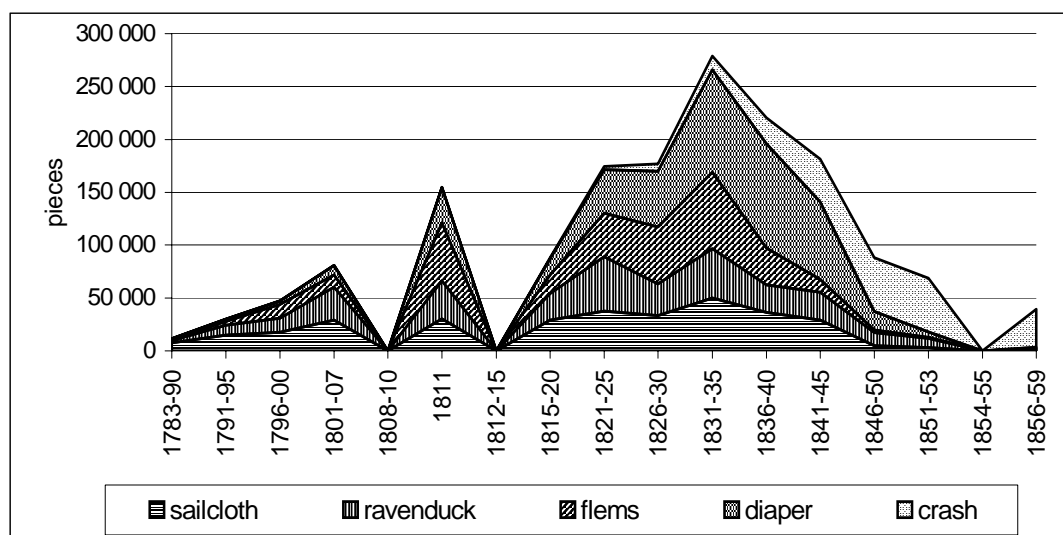
Amongst Russian manufactures the Americans paid most attention to sailcloth. Although New England supported its production to the mid-1790s, the results were poor.¹⁴⁵ Although according to Alexander Hamilton the production of sailcloth was “intimately connected with navigation and defence”,¹⁴⁶ its tariffs could not be increased to exorbitant rates. Generally speaking, the import levies on hemp cloth and linen varied between 15 and 25 percent, depending on the quality.¹⁴⁷ It is understandable that attempts to produce cotton sailcloth were made in the United States, but the results did not in reality live up to the claims made for it. *Niles’ Weekly Register* declared already in 1823 that “*American canvas made by American hands, out of American cotton ... esteemed much superior to*

¹⁴⁵ Clark (1929, vol. I, 530-531) mentions that the greatest sailcloth factory was a mill founded in Boston in 1788 that employed 250 people and had an annual output of 120,000 yards. As well as in New England, similar mills were also founded in, for example, Philadelphia. In 1827 it was calculated that there were seven flax mills in the United States, with altogether 2620 spindles. They were relatively small enterprises that mainly used imported flax, and they closed down after the tariff increases of 1828; see Homans 1858, 680; Chandler 1978, 79.

¹⁴⁶ Cole 1928, 308. *Niles’ Weekly Register* in 1827 (29 September) used exactly the same words to support American canvas when it wrote about the “crisis” of the earlier war when the price of a bolt had been \$40, that is, a dollar per yard. It advertised: “Phoenix Mill Company duck markedly better than the Russian”. The magazine argued that the American canvas cost only a third of the Russian product, “possessing twice the durability”.

¹⁴⁷ For example, the tariff of 1824 imposed a duty of 15 percent on sailcloth and ravenduck and an import levy of 25 percent on crash (Russia linen), diaper, drills, flems and linen flax. The levies on some products reached over 30 percent when converted to ad valorem duties in the 1828 and 1832 tariffs. In 1842 a duty of 7 cents per square yard was imposed on sailcloth and ravenduck; as ad valorem duty, it constituted an import levy of 30 percent on the former and almost 50 percent on the latter. In 1846 a duty of 20 percent was imposed on all hemp cloth and linen. In the tariff of 1857 the duty was 15 percent; Tariff Acts 49, 74, 88-89, 124-126, 162-163; Taussig 1914, 30; Clark 1929, vol. I, 289, 326.

Russia".¹⁴⁸ The aim was to develop a product more durable and cheaper than the Russian, but at least the first objective had not yet been achieved by the 1840s. Cotton canvas had, however, gained some foothold in the war years of the beginning of the 19th century, and in the 1830s it probably became more commonly used by the mercantile marine than flaxen duck.¹⁴⁹ At that time Henry Gray of Boston calculated that Russian "imperial sailcloth" was around the same price (\$20 per piece) as the corresponding American product "to which this article (Russian cloth) is considered very superior".¹⁵⁰ Its quality sustained the popularity of the Russian product for a long time, and probably also the continuing fall in the price of cotton made cotton canvas markedly cheaper than that made of flax. Production of cotton duck, which had benefited from protective tariffs and was concentrated in New England, reached an annual output of 13 million yards in the mid-1850s.¹⁵¹



Source: Appendix, tables 54-59.

FIGURE 65 Russian manufactured goods carried on American vessels through the Sound to the United States, 1783-1859.

The demand for Russian sailcloth in the United States was so great that half of what was carried through the Sound went to American ports in the first thirty

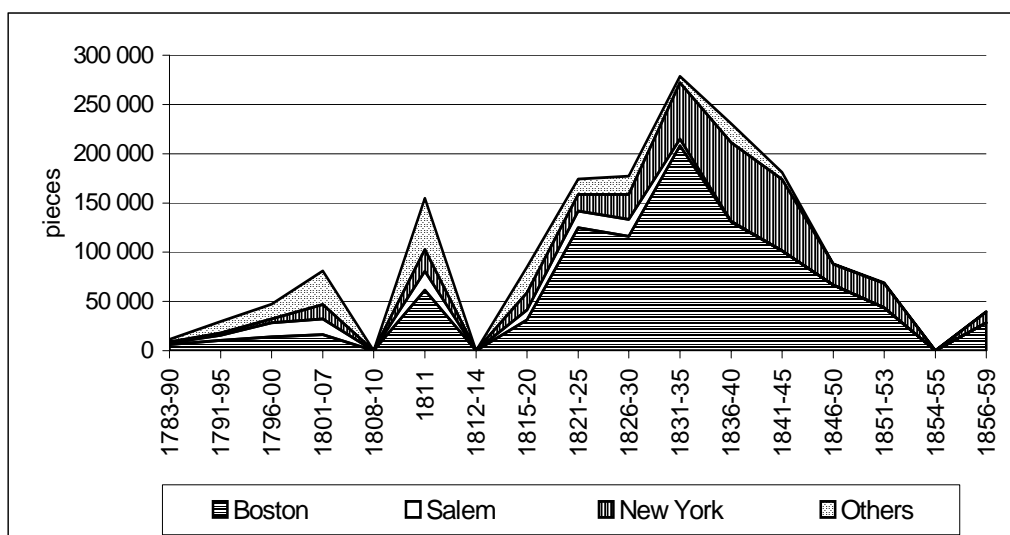
¹⁴⁸ NWR 1823, vol. 25, 228.

¹⁴⁹ See Samuel Breck to Alexander Hamilton, 3 September 1791, Cole 1928, 60-61; Hutchins 1941, 124; HMM 1846, vol. 14, 157-158; HMM 1847, vol. 16, 535; HMM 1848, vol. 21, 682; Stone 1930, vol. II, 31-32.

¹⁵⁰ HUBL, HGP, vol. 17, Shipbook (Horace Gray), 242. Sails made of cotton textiles were thicker and heavier than hemp cloth and thus much more difficult to handle when wet or frozen; see Putta 1963, 26.

¹⁵¹ See Nettels 1962, 71; Saul 1991, 182; Crosby 1965, 23, 26, note 28; Clark 1929, vol. I, 189, 532; Hutchins 1941, 123-124; Kirchner 1975, 149. American hemp manufacturers produced mainly bagging and bale cloth. The production of hemp cloth was concentrated in the valley of the River Ohio and in Kentucky. In 1860 bagging production totalled 9.5 million yards with Kentucky producing 5.8 million yards of this.

years of the 19th century and three-quarters in the 1830s and the 1840s. It was the same with ravenduck: according to ST II, the exports of both at their greatest amounted to 50-60 000 pieces. However, at the end of the 1840s exports of both sailcloth and ravenduck fell to a tenth of the earlier peak figures. The producers reacted so abruptly to the decline in demand that in 1850 complaints were made that there were too few manufactured goods, apart from crash, on the St Petersburg market to meet the demand.¹⁵²



Source: Appendix, tables 54-59.

FIGURE 66 Destination of manufactured goods carried on American vessels through the Sound from St Petersburg to the United States, 1783-1859.

Although classification of hemp and flax textiles (except sailcloth) differs in all comparable sources quite a lot from one another,¹⁵³ one general trend is common to all of them: the amount of manufactures transported from Russia to the United States increased to above 200,000 pieces and above a million dollars at the beginning of the 1820s and remained on that level for about twenty years. At best this was over 40 percent of the U.S. imports from Russia. Although the import values collapsed in the mid-1840s, the proportion of textiles remained around 30 percent to the Civil War.¹⁵⁴ Viewed from St Petersburg, the American

¹⁵² William Brandt & Co's circular, 19/31 December 1850, EI, Price currents, St Petersburg.

¹⁵³ For example "ord lærred" in STA is often equal to the consul's term crash or bagging, but also flems and diaper. This study includes in the latter brand broad and narrow diaper as well as broad (bleached) linen and narrow (bleached) linen. The printed export statistics of St Petersburg usually correspond to the total amount of consuls' shipping lists. However, there are several exceptions. For example in 1838 the printed lists reports the export of sailduck on American vessels 32,900 pieces, but the total figure of the 54 vessels carried sailcloth from St Petersburg increases in the consul's vessel-specific list to 36,400 pieces; CR 1838, NA M-81/3.

¹⁵⁴ Appendix, table 65. Pitkin (1816, 236-239) and Oddy (1805, 125) gave the same amounts of U.S. imports from Russia as the printed lists of consuls in St Petersburg presented for the export from St Petersburg to the United States. According to them, the total export of 1783-1804 (sailcloth, ravenduck, flems, diaper, linen, drillings and

share of the city's exports was at best above 80 percent and the United States remained the major purchaser of hemp cloth and linen until the Crimean War.

TABLE 49 Export of manufactured goods from St Petersburg, 1818-53 (pieces)

Years	Total export	On American vessels	
		Sound Toll Accounts	Consular Returns (St Petersburg)
1818-20	128 800	72 000	80 800
1821-25	219 500	176 100	179 900
1826-30	237 700	178 200	180 900
1831-35	312 200	245 800	256 000
1836-40	322 400	233 700	237 800
1841-45	238 300	124 800	134 900
1846-50	173 000	88 700	91 000
1851-53	126 300	..	67 200

Sources: Appendix, list 1 and tables 52-59; CR, NA M-81/3-6.

Russian textiles entered the transatlantic markets carried by American vessels. According to STA, the textile imports increased from the 1780s to the mid-1830s, but an exceptionally abrupt decline registered by other statistics took place at the beginning of the 1840s. In 1843 the total amounts of sailcloth, raven duck and flens dropped to only a quarter of the figures two years earlier. Export of diaper dropped to a half.¹⁵⁵ Also the U.S. import statistics registered the respective change: import of Russian manufactures collapsed in 1842-43 from \$1.2 million to \$0.3 million. "Linens" were only 612,000 silver roubles of the export of St Petersburg, that is somewhat above a percent of the total export of the city.¹⁵⁶

crash) was 776,600 pieces. According to STA, American vessels carried 775,800 pieces from St Petersburg to North America at the same time; see also amounts of manufactures calculated by Rasch (1965, 53-54). – According to the import statistics of the United States, an average of 23,100 pieces Russia duck was imported in 1816-19, of which 18,500 pieces sailcloth and raven duck. Only in 1818 the statistics specify, in addition to the above-mentioned, brown and white sheetings that were imported 11,900 pieces on average in 1818-19; ASPCN 1816-19.

¹⁵⁵ For some reason the figures of ST II are much higher than those of STA. The amount carried on American vessels in 1831-50 is only 80 percent of the amounts it reports. In the years 1841-45 STA reports that American vessels carried an average of 124,000 pieces to the United States, but according to ST II the amount was: 268,000 pieces. The difference could only be caused by a significant amount of vessels of third countries being involved in sailing between St Petersburg and the United States. However, this did not happen: see Appendix, tables 29, 52-59, 65.

¹⁵⁶ Commerce and Navigation, 1821-60; PRO, FO 65/368. It is obvious that the values reported by the U.S. import statistics with respect to Russian manufactures are markedly too low. Calculated after the prices in 1819, the f.o.b. value of the products departed from St Petersburg for the United States was \$1,545,000 on average in 1821-25, but the value reported by import statistics was only \$ 1,039,000. The difference was even greater in the next five years period: \$1,514,000 and \$840,000. The f.o.b. - price of manufactured products was estimated by adding 8-10 percent to the prices "on the spot".

According to STA, import of Russian manufactured products concentrated on New England, which received in the 1790s above 70 percent and in the 1820s above 80 percent of textiles the Americans transported. The proportion was about three-quarters of the total amounts of the entire period. Boston's share increased all the time: in the 1790s it was a third, in the 1820s almost 70 percent and later all import of New England was concentrated there. At the turn of the century Salem competed in some years with Boston for the position of the major port of import, but in the 1820s its proportion was below ten percent, quite the same as that of New York. New York had an extremely central role in textile import and thus it is no wonder that also Russian textiles carried to Boston ended up there in a roundabout way.¹⁵⁷

Almost all vessels returning to New England carried Russian manufactures. The amounts varied from about twenty to thousands pieces; sometimes the cargos consisted of hemp cloth and linen only. For example the bark *Falmouth* of Portland (278 tons) that sailed in summer 1842 from Matanzas to St Petersburg took a return cargo of 3000 pieces sailcloth and 552,000 arshines crash and bagging to Boston.¹⁵⁸ The same paradoxical model of trade appears with trade of hemp and flax products as with raw hemp and raw flax: the American vessels carried cotton wool to Russia, which was a basis of their own textile industry, and exchanged it for linen and hemp cloths. For example the ship *Joshua Mauran* of Providence (545 tons) carried 800,000 lbs cotton wool to St Petersburg in spring 1848, and took as a return cargo of e.g. 2300 pieces ravenduck, 1300 pieces sailcloth, 120,000 arshines crash and 23,700 arshines diaper to Boston.¹⁵⁹

The central role of the Americans in export of Russian manufactures was more pronounced also for the reason that John D. Lewis was the leading merchant in the field in St Petersburg at least in the 1820s. Almost a third of the textile trade was in the possession of Lewis. According to a survey made by Lewis himself, he and Stieglitz were the major manufacture brokers. Brothers Cramer and Thomas Wright were left far beyond them. In 1821 the difference had been markedly smaller.¹⁶⁰

¹⁵⁷ Albion 1961, 59, 127; Appendix, tables 54-59. In the 1790s Philadelphia, which was specialized importing flems, imported an average of 4400 pieces of all manufactured products per year; in the 1820s 7300 pieces. According to STA, these figures were ten percent and four percent of total American imports.

¹⁵⁸ STA 1842 (753/1496); CR 1842, NA T-201/2, and M-81/4.

¹⁵⁹ STA 1848 (150/444); CR 1848, NA M-81/5 and T-201/2.

¹⁶⁰ HSP, LNP, Lewis Letters 1810-41. In 1827 Lewis reported that he had sent to America 13,700 pieces sailcloth, 19,600 pieces ravenduck, 12,100 pieces flems, 269,000 arshines diaper and 137,300 arshines crash. Lewis's share of the total export of the first three products was one-fifth and of the last two almost a third.

TABLE 50 Destination of manufactured goods carried on American vessels through the Sound from St Petersburg, 1801-1850 (pieces/year).

Ports	1801-05	1831-35	1846-50
Boston	17 800	186 100	66 900
New York	12 700	47 600	21 100
Salem	16 100	4 500	-
Philadelphia	11 800	4 000	-
Baltimore	5 300	1 200	-
Portland	300	600	-
Marblehead	1 300	100	-
Newburyport	3 900	-	-
Providence	3 400	-	-
Charleston	2 000	-	-
New Bedford	1 400	-	-
Portsmouth	900	-	-
Newport	800	-	-
Beverly	800	-	-
Gloucester	800	-	-
Plymouth	700	-	-
Norfolk	400	-	-
Duxbury	200	-	-
Alexandria	200	-	-
Lisbon	400	-	-
Havana	-	700	-
Rio de Janeiro	-	-	200
Unknown	2 300	1 000	700
Total	83 500	245 800	88 900

Sources: STA 1801-05, 1831-35, 1846-50, ØTA, DRA.

Most of Russian manufactures imported to the United States were intended for domestic consumption, the cheapest hemp textiles for “general wear for husbandman, servants and labouring manufacturers” and the finest qualities “for gentleman for strength and warmth”.¹⁶¹ Significant amounts of the product also transferred from North America to re-export. At exceptional times textiles were carried back to Europe, for example to Lisbon and Bilboa. There were markets for Russian duck and cordage in Cape of Good Hope, and sometimes products of St Petersburg were carried around the Horn to the Northwest coast of America. Bostonian merchants exchanged there textiles for sea otter skins.¹⁶²

At the turn of the century Russian manufactures were used in the slave trade of West Africa, and later to clothe slaves in the Southern States and particularly in Cuba. Russian products were not the cheapest for that purpose, but they were considered notably more durable than cotton textiles. The Americans had started massive intermediate trade of Russian linen when the British had been temporarily expelled from the Spanish territories as a consequence of the European wars.¹⁶³ In 1817 Consul Daniel Bayley paid attention to the increasing shipments of manufactures by the Americans. He

¹⁶¹ McCulloch 1854, 684.

¹⁶² Crosby 1965, 49-50.

¹⁶³ See Porter 1937, vol. II, 902, 1342, 1267-69, 1382-85; Bruchey 1965, 345; Gray 1914, 14-15.

claimed that most textiles ended up in the Spanish territories of America via the United States.¹⁶⁴ This was probably not exactly true, but quite often for example the Grays of Boston used sailcloth to finance their purchases in Havana.¹⁶⁵

TABLE 51 Manufactured goods exported from St Petersburg by firms in 1821.

<i>Firms</i>	Sailcloth (pieces)	Ravenduck (pieces)	Flems (pieces)	Diaper (arshines)	Drillings (arshines)
John D. Lewis	8 963	8 071	17 724	184 734	34 150
Stieglitz & Co.	6 022	5 489	9 726	149 607	8 726
Brothers Cramer	8 513	4 821	1 870	130 696	-
Thomas Wright & Co.	4 394	4 477	8 474	81 670	-
John Venning	5 923	6 148	5 345	32 248	5 188
H.E. Schröder & Co.	2 900	300	15	-	-
Clementz & Berg	1 542	520	100	-	-
Hornby, Bayley & Son	1 062	1 048	4	-	9 371
Mollwo & Son	1 041	500	100	-	-
Meyer, Brüxner & Co.	814	346	221	18 226	120
Thomson, Bonar & Co.	250	340	221	-	-
W.A. Cramp & Co.	380	246	114	219	3 964
Others	11 509	8 488	3 287	31 385	69 724
Total	53 313	40 812	47 201	628 785	131 243

Source: HSP, LNP, Lewis Letters 1810-41.

Also John and Robert Hooper of Marblehead exchanged Russian linens for raw sugar that they carried to St Petersburg and Antwerp. The Hoopers sometimes even deputed Martin, Knight & Co. to sell textiles that had been sent to Cuba at a loss, so the harm would be quite small compared to profits from sugar.¹⁶⁶ Also John H. Andrews of Boston sent Russian sheeting to Havana and Brazil for coffee and sugar purchases.¹⁶⁷ According to estimations presented by Hunt's Merchants' Magazine, linens under the label "Russias" were carried to Cuba in 1839-42 for the value of \$290,000.¹⁶⁸ Most of them came from St Petersburg directly or via North America, but Russian manufactures were also available in Hamburg, from where they were carried to Cuba with American sugar traffic or by Germans.¹⁶⁹

After 1815 the prices of Russian manufactures showed, generally speaking, a downward trend. However, there were some temporary deviations from the development; for example in summer 1828 the prices of ravenduck

¹⁶⁴ Bayley to William Hamilton, 25 July/6 August 1817, PRO, FO 65/110.

¹⁶⁵ E.g. Horace Gray to Joshua Orne, 2 November 1824, HUBL, HGP, vol. 17, Shipbook (Horace Gray).

¹⁶⁶ John and Robert Hooper to Martin, Knight & Co., 23 February 1826, PM, John and Robert Hooper, Letterbook, no. 1.

¹⁶⁷ E.g. Robert G. Wood to John H. Andrews, 19 February 1823, and Drake & Mitchell to Andrews, 21 June 1823, EI, JHAP, vol. 1/11.

¹⁶⁸ Moreover, almost an equal amount of a textiles under the name drills was imported to Cuba, and at least a part of it was of Russian origin. According to the estimation in question, about a half of flax clothes imported to the island had a German origin; HMM 1843, vol. 9, 342, 347-348.

¹⁶⁹ E.g. Murdock & Storey to Andrew and Page, 27 July, and 3 August 1827, EI, JHAP, vol. 2/8.

and flems increased due to great purchases of Russian navy and army.¹⁷⁰ As the Americans were the greatest purchasers of them, it is no wonder that for example Stieglitz & Co. claimed that the price of the textiles was defined on the basis of the American demand.¹⁷¹ Maybe the reluctance of the Bostonians to engage themselves with advances had some influence in the fact and manufacturers and dealers in linen usually arrived at St Petersburg only in March and sold their products for ready money. According to the American observations, the manufacturers aimed at bringing their products to the markets of St Petersburg as steadily as possible to maintain the price level.¹⁷²

TABLE 52 Prices of manufactured goods in St Petersburg (roubles/piece), 1810-50.

Article	1810	1819	1840	1850
Sailcloth	55	65	39...67	10...17
Ravenduck	31	35	20...28	5...9
Flems	39	55	29...35	8
Diaper	12	13	8...13	2
Crash	10	15	8...11	2...4

Notes: Prices in 1850 are in silver roubles, former in assignat roubles. Prices of diaper and crash in the first columns are from the year 1811.

Sources: CR 1810-50, NA M-81/2-5; EI, Price Currents (St Petersburg)

According to the firm of Meyer & Brūxner, the best Russian linen and hemp cloths that were known for their whiteness and durability came from Jaroslav region.¹⁷³ Most of clothes were known on the market under the name of their manufactures. John D. Lewis listed in summer 1824 altogether 18 different sorts of sailcloth, the most expensive of which ("D. Hlebnikoff's") valued at 73 roubles per piece and the cheapest ("Iwan Plotnikoff's") 38:40 roubles. About twenty sorts of ravenduck and flems were on sale.¹⁷⁴ Most often the Americans chose the sailcloth under the name Dimitry and Ivan Brusgin that was, for example according to a price comparison by the Salem merchant Samuel Endicott and New Yorker Jonathan Goodhue, most advantageous to the importer.¹⁷⁵ Brusgins were exceptional Russian manufacturers in the respect

¹⁷⁰ John D. Lewis to William D. Lewis, 3 September 1828, HSP, LNP, Letters 1810-41.

¹⁷¹ Stieglitz & Co. to Henry Lee, 1 August 1819, Porter 1937, vol. II, 1282-85.

¹⁷² See McCulloch 1854, 987; Hidy 1978, 30.

¹⁷³ Meyer & Brūxner to Benjamin Schreve, in 1808, EI, BSP; see Crosby 1965, 23.

¹⁷⁴ Lewis's undated memorandum in 1824, HSP, LNP, vol. 70. In the price current of 1827 Lewis mentioned 14 different qualities of sailcloth, the most expensive being "Bruzkin's" (75 roubles/piece) and the cheapest "Plotnikoff's" (42-46 roubles) – In the next year he mentioned "IIX" (Imperial sailcloth) the most expensive and still "Plotnikoff's" the cheapest. In addition to them, also the following qualities were on the markets (with old American spelling): Zotoff, Konopleff, Beleebin, Torubarjeff, Poltaratsky, Grigorieff, Chepotskin, Concharoff, Lugining, Konchin and Serikoff; Lewis to Trotter & Co., 26 June 1828, HUBL, NTC, TA-5.

¹⁷⁵ Goodhue to James Dunlap Gillis, 18 March 1828, EI, James Dunlap Gillis Papers, vol.1. In 1823 the f.o.b. price of the best sailcloth in St Petersburg was \$13:24 per bolt, and it was sold at \$16:25 in Baltimore. The respective figures for the cheapest

that they actively tried to get involved into Cuban sugar business with their product.¹⁷⁶ The demand of the best sailcloth qualities the Americans desired sometimes exceeded the supply in St Petersburg. For example Brothers Cramer reported in January 1827 that the production of the most expensive qualities for export was sold two months in advance.¹⁷⁷

The price changes of Russian manufactured products do not seem to have had a great influence on the amounts carried to the United States in the 18th century. It was the American demand that influenced them more. Although the prices in 1797 were markedly lower than in the preceding years, the Americans did not purchase more textiles than usual. By contrast, as the anticipation of the war was intense in summer 1798 the export of sailcloth and flems from St Petersburg to America increased many fold although the purchases of the Russian army and the British had increased the prices considerably.¹⁷⁸ The rouble prices of textiles doubled between 1806 and 1810, but in fact the export prices went down.¹⁷⁹ It was a factor that, together with neutrality, increased export from St Petersburg. According to consul in Denmark, already in 1805 only the Americans made significant shipments. The situation was the same in 1810 when the Americans were reported paying exceptionally high prices for textiles.¹⁸⁰ The prices remained on the same level after the war, but decreased later considerably. This may have kept the number of American purchases rather high to the 1840s. The Crimean War marked a clear turning point; after that Russian textiles – except crash – were not exported to the American market.¹⁸¹

Also cordage, which was produced for the shipbuilding industry, can be included into manufactured products made of hemp. There were 14 ropewalks only in Boston in 1794, and 173 in the whole country in 1810.¹⁸² However, rather great amounts of cordage were imported mainly from Russia. Russian cordage, as well as cordage made of Russian hemp, was more expensive than the American, but the quality of the latter was markedly poorer. According to the import statistics, for example early in the 1830s, cordage import was about 1100 tons per year, 1000 tons of it from Russia, valued approximately \$100,000.

sailcloth were \$10:30 and \$12:25 per bolt. The prices for the best ravenduck were \$5:11 and \$7:00; PM, EP, vol.1 (Brig Jeremiah).

¹⁷⁶ E.g. Brothers Cramer to Nathan Bridge & Co., 25 March/ 6 April 1827, PM, JDP, vol. 1.

¹⁷⁷ Brothers Cramer to Nathan Bridge, 4/16 January 1827, PM JDP, vol. 1. The Americans also often purchased together with the best qualities dark and cheap Gontchareff's sailcloth intended for American southern ports; Shipbook (Horace Gray), 127, 133, HUBL, HGP, vol.17.

¹⁷⁸ See Brothers Blandow to Caleb Davis, 21 December 1798/ 1 January 1799, USR 1980, 320-321.

¹⁷⁹ See table 1.

¹⁸⁰ Rasch 1965, 62; Brothers Raimbert, Nephew & Co. to Stephen Girard, 7/19 October 1810, USR 1980, 707-710.

¹⁸¹ Hutton to Marcy, 17/29 November 1856, NA M-81/5.

¹⁸² The term "cordage" was used in general for all sorts of cord made use in the rigging of the ships, the greatest 14-15 inches in diameter. Also boltrope (for edges of sails to strengthen them), codilla rope, white rope and junk old rope (junk) were often connected to the name. The last mentioned article was also used for making oakum and mats; see Homans 1858, 428.

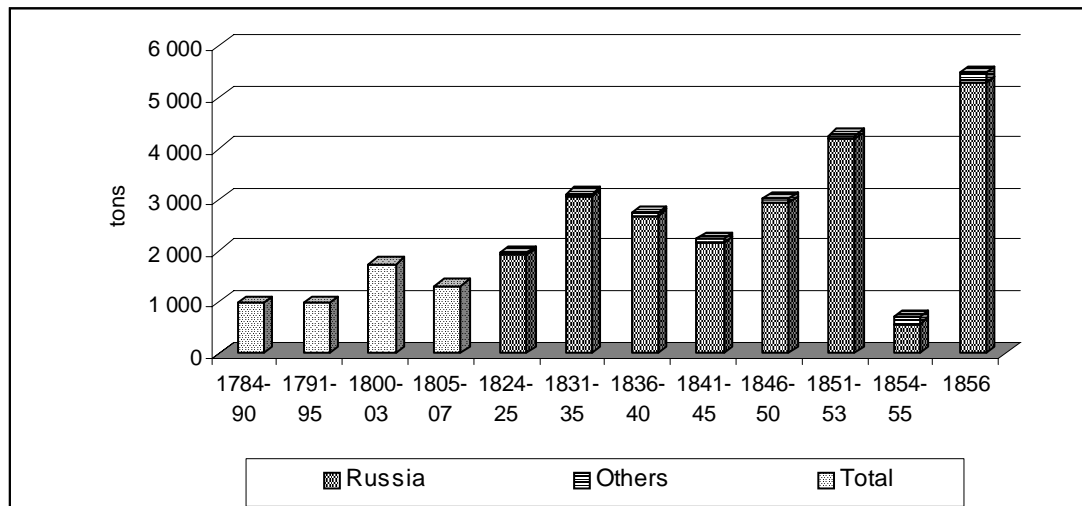
About 70 percent of cordage imported to the United States in 1821-60 was of Russian origin. In the pre-Crimean War years proportion of the product in U.S. imports from Russia increased to above ten percent.¹⁸³

TABLE 53 Transport of cordage from Russia to the United States according to different sources, 1824-50 (tons).

Source	1824-25	1831-40	1841-50
Sound Toll Accounts (1)	434	919	1 313
Consular Returns from St Petersburg (2)	783	871	1 234
Sound Tables (3)	560	940	1 254
Commerce and Navigation (4)	269	836	750

Notes: 1-2) Export on American vessels from St Petersburg, 3) Export from Russia (in 1824-25 export from Baltic Russia), 4) Imports from Russia.

The amounts of cordage transported from the Baltic Sea increased at the beginning of the 19th century: in 1800-03 average of 1700 tons was carried through the Sound, in 1831-35 average of 3100 tons and in 1853 even 4700 tons. Practically all cordage of the Baltic Sea region originated from Russia. According to ST II, about 40 percent of cordage carried through the Sound in the 1830s and 1840s went to North America, which is slightly more than to the Great Britain. In the years preceding the Crimean War more than a half of the total amounts, however, went to the United States.



Note: The amounts for 1784-1807 show the total amount carried through the Sound. The area of departure is not specified.

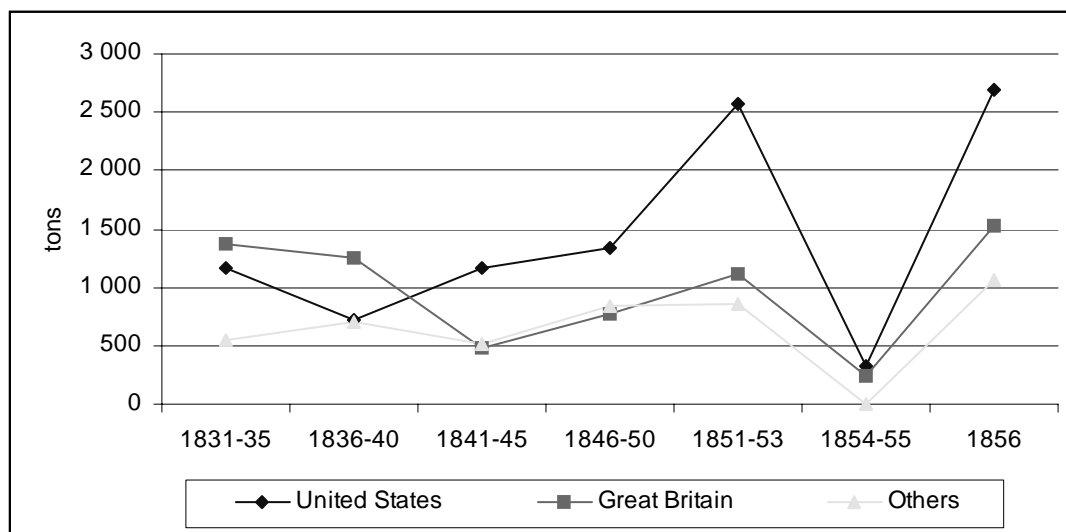
Source: Appendix, tables 60-61.

FIGURE 67 Countries of departure of cordage passing through the Sound, 1784-1856.

The buyers and sellers and the markets for cordage were the same as those for hemp textiles. Henry Gray seems to have sold quite large amounts of raw hemp and finished cordage to Plymouth Cordage Co., founded in 1824, whose

¹⁸³ Appendix, table 65; Commerce and Navigation, 1821-60; Morison 1950, 48.

customers were principally Maine shipbuilders. The company used only Russian hemp.¹⁸⁴ According to John D. Lewis, cordage sold well in Cuba, and the more similar it was to Spanish cordage, the better it would sell there.¹⁸⁵



Source: Appendix, table 61.

FIGURE 68 Destination of Russian cordage passing through the Sound, 1831-56.

TABLE 54 Ports of departure and destination of cordage passing through the Sound, 1824-25.

Departure	Tons per year	%	Destination	Tons per year	%
St Petersburg	1 902	97.0	Boston	379	19.0
Riga	12	0.6	New York	77	3.9
Copenhagen	39	2.0	Alexandria	52	2.7
Others	7	0.4	Salem	42	2.1
Total	1 960	100.0	Newcastle	376	19.2
			London	332	16.9
			Others	702	35.8
			Total	1 960	100.0

Source: ST I, 1824-25, ØTA, DRA.

According to STA, almost all the cordage carried in American vessels was bound for the North America market. Before the Embargo and later in the 1820s and 1830s, three quarters of it was taken to New England.¹⁸⁶ The consul lists show smaller amounts of cordage carried in American vessels than STA, and smaller

¹⁸⁴ HUBL, HGP, vol. 3. Horace Gray also had his own ropewalk, which was generally known as the Mill Dam Company; Morison 1950, 44.

¹⁸⁵ According to Lewis, cordage that cost seven roubles per pood in St Petersburg sold in Havana at 11 roubles; John D. Lewis to William D. Lewis 16 March 1828, HSP, LNP, Letters 1810-41.

¹⁸⁶ Appendix, table 62. In 1783-1804 Pitkin (1816, 236-237) and Oddy (1805, 125) report that U.S. cordage imports from Russia were 195 tons per year. According to STA the amount was 201 tons.

amounts of cordage were also recorded in the Sound in the group “*kjøbmandskaber*” or duty-free ballast. The difference is probably caused by the fact that the name *touværk* in Elsinore included more different types than the consuls meant when they used the term “cordage”. For example, according to STA in 1830 American vessels carried cordage from St Petersburg only to Boston, Salem and New York. According to the consuls, the Americans transported small amounts also to Havana, Le Havre, Stockholm, Bremen, Hamburg, Newcastle and Livorno (Leghorn). According to STA the total amount was 173 tons, while according to the consul in Elsinore it was 232 tons. The differences are large proportionally, but insignificant in terms of the overall picture of trading.¹⁸⁷

9.4 Other imports: tallow, bristles and feathers

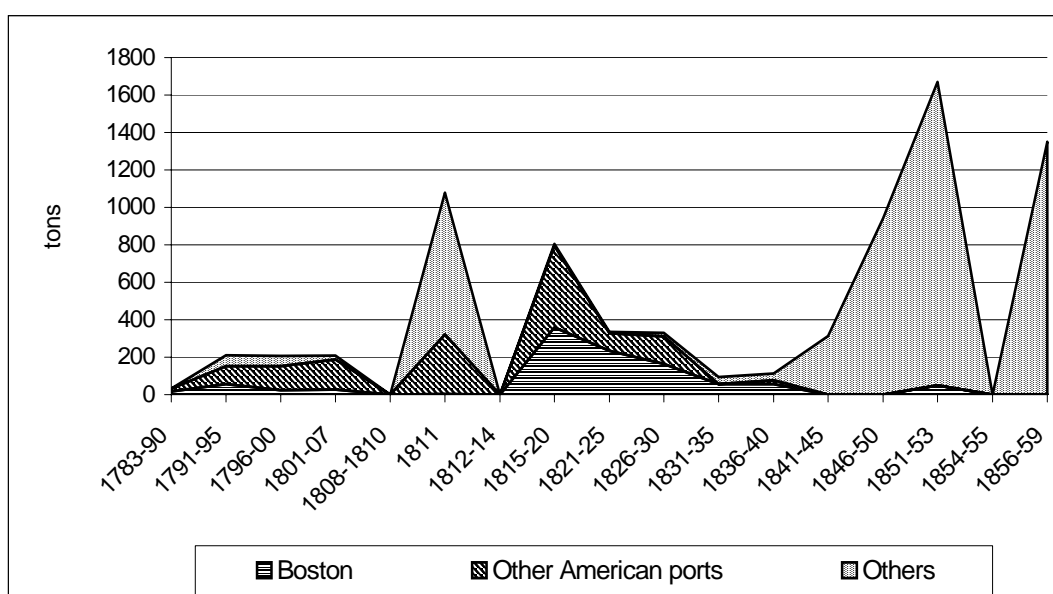
Semi-manufactured by-products of animal husbandry formed a significant group of U.S. imports from Russia. Early in the period by far the most important of these was tallow, animal fat from oxen and sheep mainly used for lighting and in soap manufacture, but also in the production of cloth and leather. Tallow was one of Russia’s main exports from the 17th century onwards, and in the 1840s it was still the most important single export after wheat. Russia’s total exports in the years 1841-45 were valued at 75.5 million silver roubles, of which tallow accounted for 12.0 million silver roubles. St Petersburg was the centre of the export trade in this product. According to the calculations of the Russia Company, the British purchased 80-90 percent of the supply, and the Americans at most only a few percent.¹⁸⁸ Before the war of 1812

¹⁸⁷ Appendix, table 62; CR 1830, NA T-201/1. Vessels departing for the United States sometimes carried over a ton of cordage that was not recorded in Sound toll accounts, e.g. STA 1838 (1909), the brig *Maria Theresa* of Boston and STA 1838 (2258), the ship *Aurora* of Kennebunk. The same applied to vessels from St Petersburg to Stockholm, e.g. STA 1838 (2448), the ship *Leonore* of Newburyport; CR 1838-39, NA M-81/3-4, and T-201/1-2. Old rope (junk) was sometimes included under cordage, sometimes not. This may have been a reason why according to the consuls American vessels carried an average of 3100 tons of cordage in 1831-40, but according to ST II, only 2800 tons was carried from Russia to the United States. According to the consul in St Petersburg, 730 tons of cordage and 1800 tons of junk was loaded onto American vessels for transportation to the United States; CR 1850, NA M-81/5; ST II, ØTA, DRA.

¹⁸⁸ PRO, FO 65/255, 293, 360; see Kirchner 1975, 144-145; Joustela 1963, 171. According to the Russia Company, in 1798-1807 an average of 154 tons of tallow was exported from St Petersburg to “America” (0.6 percent of the total export of the product). The figure for 1813-22 was on average 630 tons (2.0 percent), for 1823-32 163 tons (0.3 percent), 1833-42 187 tons (0.3 percent) and in 1843-44 131 tons (0.3 percent). The total export of the city in 1798 was 26,000 tons and in 1833-42 55 900 tons. According Attman (1981,194-195) in 1802 the tallow export of Russia was 32,400 tons, in the years 1824-34 on average 63,100 tons and in the years 1856-60 57,700 tons. Total British tallow imports in 1846-52 averaged 60,000 tons, 73 percent of it Russian tallow. In 1827 tallow was by far the most significant export product of St Petersburg. Tallow accounted for 42.0 million roubles of the city’s total exports of 116.8 million paper roubles. In 1848 the corresponding figures were 41.6 million and 12.8 million

American candle-makers and soap-makers used 600,000 lbs of foreign tallow a year. According to U.S. import statistics, in 1821-25 the import of tallow and tallow candles from Russia amounted to \$126,000 on average, about five percent of total imports. In the next decade the import of tallow to the United States came to an end almost entirely, whether from Russia or elsewhere.¹⁸⁹

The British monopoly over the tallow market is, according to Walter Kirchner, a good example of how the Americans, as newcomers in trade with Russia, fell behind the British. One obvious reason for this state of affairs was that tallow was traditionally sold by contract before the navigation season and the Americans were not very enthusiastic about trade on these terms. Moreover the American demand for tallow was not great, since before the war of 1812 American candle-makers and soap-makers used scarcely 300 tons of foreign tallow a year. Most tallow was used to produce candles before whale oil (sperm oil) for lighting purposes conquered the market in the 1830s.¹⁹⁰



Sources: Appendix, table 64.

FIGURE 69 Destination of Russian tallow carried by American vessels through the Sound, 1783-1859.

silver roubles; reports of Consul Bayley 6/18 December, 1828, and 31 July 1849, PRO, FO 65/174, 368.

¹⁸⁹ The fluctuations in tallow imports from year to year were rather considerable. According to U.S. foreign trade statistics, an average of 87,000 tons of tallow candles were imported in 1795-1808. The import of pure tallow started at the beginning of the 19th century; in 1805-08 an average of 137,000 tons was exported from Russia. In 1817, 2248 tons was imported from Russia, but none at all in 1819; ASPCN, 1795-1819; Commerce and Navigation, 1821-60; Kirchner 1975, 58-59, 146.

¹⁹⁰ Kirchner 1975, 151; see HMM 1842, vol. 7, 218-221; Clark 1929, vol. I, 327; Davison 1964, 79. Russian tallow was often transported in casks weighing c.1000 lbs. There were about ten grades on the market, and the differences in price between them were not great. The Americans usually purchased the best yellow candle tallow, "Ukraine double melted" that derived from full-grown livestock. According to the import statistics, an average of 137 tons of Russian tallow was imported into the United States in 1805-08. This was half the total amount of tallow imported; ASPCN, 1805-08.

Almost all the tallow carried west through the Sound originated in Russia. In 1791-95, of an average total of 10,000 tons 9,200 tons came from there, and about 200 tons of this was carried by Americans. For 1841-45 the corresponding figures were, according to ST II, 37,600 tons, 37,500 tons and 300 tons.¹⁹¹ However, STA shows that in the 1840s the Americans no longer carried much tallow to North America. Most of the tallow the Americans carried ended up elsewhere. However, the fishermen of New Bedford considered even the small amounts that did enter the country too high. In 1823 the import of foreign tallow was regarded as the main reason for the alleged decline in whaling.¹⁹² Before the Embargo the most common port of destination for tallow transported by the Americans was Lisbon, while after 1815 it usually went to Le Havre, Bordeaux or Havana.¹⁹³ According to William D. Lewis, there would have been demand for Russian tallow candles particularly in Cuba, but it was difficult to transport the product there without it melting.¹⁹⁴ The Americans carried the largest shipments of tallow from Russia at the end of the 1840s and the beginning of the 1850s, but at that time their destination was most commonly Liverpool or London. In the autumn of 1850, for example, the bark *Victoria* of Portland carried a cargo of 1.3 million lbs of raw sugar from Matanzas to St Petersburg and sailed from there to Liverpool with potash, deals and 200 casks (194,000 lbs) of tallow.¹⁹⁵

Bristles was an animal product shipped quite regularly from Russia to the United States. Shipments increased as it became more difficult of unrewarding to find alternative return cargoes in St Petersburg. The United States imported 100,000 lbs of bristles per year already in the 1820s, but by the 1850s the amount had increased five-fold. Bristles for brush-makers were often sold already dyed, identified with the dealers' name, and for cash.¹⁹⁶ The latter consideration may have suited the Americans, but on the other hand the unequal quality of the

¹⁹¹ Johansen 1983a, 103, microfiches 3-4, table 11; ST I, 1824-25; ST II, 1836-45; ØTA, DRA; Appendix, list 1. In 1824-45 exports from St Petersburg reported by the consuls totalled 43,600 tons and the amount ST I recorded being carried from St Petersburg to the Sound 40,200 tons. The major tallow exporters from the Baltic Sea of those years were Riga (550 tons) and Porvoo (100 tons). According to the consuls, exports from St Petersburg in the years 1836-40 totalled 56,000 tons, and according to ST II, the amount carried west from Russia through the Sound was 58,200 tons.

¹⁹² NWR 1823, vol. 25, 135.

¹⁹³ For example in 1837 the ship *Shaw* of Portsmouth (344 tons) carried 74,500 lbs (33 tons) of tallow candles and 27,400 lbs (12 tons) to Havana in addition to iron, cordage and manufactures. In the following year the ship *Rosanna* of Providence (284 tons) proceeded in the same way; she carried mainly deals and spars, but in addition to them 35 tons of tallow; STA 1837 (3205); STA 1838 (2053); CR 1837-38, NA M-81/3, and T-201/1.

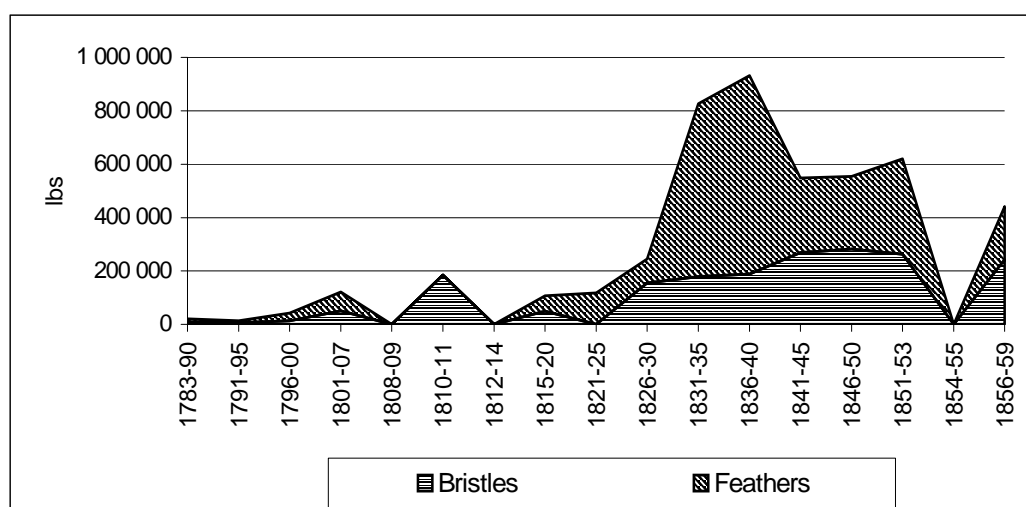
¹⁹⁴ William D. Lewis to John D. Lewis, 24 September and 8 October 1821, HSP, LNP, Letters 1810-41; see Homans 1858, 1792.

¹⁹⁵ STA 1850 (5113/6923); CR 1850, NA M-81/5, and T-201/2.

¹⁹⁶ Commerce and Navigation, 1820-61; see Clark 1841, 67-68; Clark 1929, vol. I, 327; HMM 1842, vol. 7, 222-223. In 1816-19 an average of 32,100 lbs of Russian bristles was imported into the United States; ASPCN, 1816-19.

product was found to be a problem, and it was remarked that “the Russians cheat much more in bristles than in any other article”.¹⁹⁷

The price of the bristles was roughly half a dollar per lbs.¹⁹⁸ By that reckoning, they were one of the most important American imports from Russia at the end of the period and represented about 10 percent of total imports from the mid-1840s onwards. At their peak in 1847 imports of Russian bristles totalled 316,000 lbs, worth \$152,000 or 16 percent of total imports.¹⁹⁹ British sources also show that bristles were a relatively important Russian export: in 1826-30 their export value averaged 4 million roubles, which was two percent of total exports.²⁰⁰



Source: Appendix, table 63.

FIGURE 70 Bristles and feathers carried by American vessels through the Sound from St Petersburg to the United States, 1783-1859.

Feathers were another article that was carried west from the Baltic Sea in significant quantities: on average 210,800 lbs in 1791-95 and 730,000 lbs in 1841-45. Russia was the main source and the United States the major purchaser.²⁰¹ Exports reached their peak in the 1830s when American purchases were

¹⁹⁷ William D. Lewis to John D. Lewis, 10 November 1821, HSP, LNP, Letters 1810-41.

¹⁹⁸ In 1843-45 bristles from St Petersburg sold in New York at \$1.10 per lbs on average, which is conspicuously more than the price of such imported products as coffee and sugar; HMM 1845, vol.12, 469-470. The import duty on bristles was about 4-5 percent in the 1840s and 1850s.

¹⁹⁹ Commerce and Navigation, 1821-60; Kirchner 1975, 147. Bristles (STA: *børster*) were declared in Elsinore according to their value or otherwise usually included in the remainder group “sundries”. The amounts exported therefore show only in consular reports, e.g. the ship *Tsar* of New Bedford/Boston; STA 1847 (2464); CR 1847, NA M-81/5, and T-201/2.

²⁰⁰ PRO, FO 65/236. E.g. in 1848 bristles were exported from St Petersburg worth 2.7 million silver roubles, which was almost seven percent of the total exports of the city; Consul Bayley’s report, 31 July, 1849, PRO, FO 65/368.

²⁰¹ Johansen 1983a, microfiches 3-4, table XI, 22;. According to ST II, 618,200 lbs was exported from Russia in 1841-45, with 344,700 lbs going to the United States, ST II, 1841-45, ØTA, DRA.

claimed to have a crucial effect on the price level.²⁰² The export value of feathers at St Petersburg prices increased to over \$100,000 in the 1830s, that is to say, roughly the same as in the case of cordage.

William Ropes was particularly interested in the feather trade, purchasing the product in the winter from the Russian interior, as the English also did. He specialized in the export of quills, which the Americans purchased at the rate of at least 20 million a year in the 1830s. However, Ropes was to discover in 1841 that "the most universal use of metal pens" had destroyed the demand for goose quills in the United States.²⁰³ In the 1840s Russian exports were only a tenth of what they had been. Interestingly, however, I. Smith Homans' commercial encyclopedia as late as 1858 states that although

*"pens have some peculiar advantages, it does not appear possible to give them the elasticity of the quill, not to fit them so well for quick and easy writing on common description of paper."*²⁰⁴

Most of the animal products appearing in Table 55, such as wool, wax, hides and skins, also belong to the traditional range of Russian exports. Isinglass (gelatine), the best sorts of which were made of sturgeon and beluga, was considered "almost peculiar to Russia".²⁰⁵

TABLE 55 Some animal products carried by American vessels through the Sound from St Petersburg, 1832-49.

Products	1832-35	1836-40	1841-45	1846-49
Wool (lbs)	38 100	13 600	19 900	5 700
Beeswax (lbs)	32 700	19 500	15 300	33 100
Russia leather (lbs)	11 400	14 700	9 200	19 900
Horsemanes (lbs)	33 500	104 700	41 700	15 100
Hogshair (lbs)	7 300	67 000	45 800	33 500
Glue (lbs)	37 800	3 500	3 400	3 400
Isinglass (lbs)	2 000	7 300	1 000	200
Calfskins (pieces)	27 800	38 200	700	-
Cowhides (pieces)	6 100	1 100	-	-

Sources: CR 1832-49, NA T-195/3; T-201/1-2, M-81/3-5.

²⁰² E.g. G.Kurechonoff to Bates & Co., 1 June 1834 (O.S.), PM, JDB, vol. 17. In the 1830s exports from the Baltic Sea averaged 1,190,000 lbs, with the Russian share at 1,014,000 lbs and the amount transported to the United States 676,000 lbs. There are significant differences between STA and consular reports for some vessels, although average exports in 1831-45, calculated according to STA at 556,500 lbs, were close to the figure derived from consular reports (562,600 lbs). According to ST II, an average of 547,600 lbs of feathers was carried from Russia to the United States in those years; STA 1831-45; ST II 1831-45; CR 1831-45, NA M-81/3-4.

²⁰³ E.g. William Ropes to Hardy Ropes, 23 October/4 November 1833, and 3 September 1841, HUBL, RFP. Niles Weekly Register (vol. 18, 18 March 1820) reported 4 million quills being imported from Russia to the United States in 1818.

²⁰⁴ Homans 1858, 1512.

²⁰⁵ McCulloch 1854, 787. Exports of isinglass from Russia through the Sound were at their highest at the turn of the century and even rose above 250,000 lbs; Johansen 1983a, microfiches 1-4, table 11; ST I, 1801-05, ØTA, DRA.

Another special product was "Russia leather". Its softness, waterproofness and elasticity was claimed to be a result of tanning methods that only the Russians had mastered. Russian leather was sold in red, white and black and was mainly used for footwear and furnishings, but the Americans purchased perhaps most of all red leather for bookbinding. Export peaked in the years preceding the Crimean War.²⁰⁶

The quantities of hides and skins exported in different years varied greatly. The same applied to animal glue. Most of the untanned hides imported into the United States originated in the West Indies or South America. The amounts purchased in Russia became significant when trade connections with the regular sources were disturbed. For example, in 1828 John D. Lewis reported that yankees had bought all the calfskins in St Petersburg and made a good profit by trading them, since the "Brazilians and Buenos Ayreans" were at war with one another.²⁰⁷ In the years 1831-35 304,000 calfskins on average were exported from the Baltic, 155,000 of them from Russia, and of those 34,000 went to the United States.²⁰⁸ At St Petersburg prices this amounted to exports worth about \$10,000. The export of raw hides and dressed hides from St Petersburg was more or less on a par with iron exports.²⁰⁹

TABLE 56 Linseed and hempseed, wheat, rye, felts and mats carried by American vessels through the Sound from St Petersburg, 1832-50.

Products	1832-35	1836-40	1841-45	1846-50
Linseed (bushels)	28 400	42 000	103 300	13 200
Hempseed (bushels)	3 700	4 800	80	-
Wheat (bushels)	1 200	-	-	4 200
Rye (bushels)	-	27 400	9 000	34 200
Felt (pieces)	6 500	18 300	7 700	32 000
Mats (pieces)	51 000	81 800	56 700	129 000

Sources: STA 1832-50; CR 1832-50, NA T-195/3; NA T-201/1-2; NA M-81/3-5.

²⁰⁶ John D. Lewis to William Lewis, 16 March 1828, HSP, LNP, Letters 1810-41; see Harder-Gersdorff 1988, 238. McCulloch (1854, 1125-26) estimated that the export of Russia leather from St Petersburg, 170,000 poods (151, 000 pieces) in 1841, was worth 1.5 million silver roubles. According to ST I, an average of 165,000 pieces were exported from Russia in 1824-25, 1600 pieces to the United States (Boston). The corresponding amounts in the 1840s were 124,000 and 14,900 pieces. In 1851-53, 83,000 pieces passed through the Sound bound for the United States; ST I, 1824-25; ST II, 1841-53, ØTA, DRA.

²⁰⁷ John D. Lewis to William D. Lewis, 20 June 1828, HSP, LNP, Letters 1810-41. On substitutive import also: Nathan West to James D. Gillis, 27 February 1828, EI, James Dunlap Gillis Papers, 1800-1850, vol. 1; see Clark 1929, vol. I, 327.

²⁰⁸ ST II, 1831-35, ØTA, DRA. Most of the skins exported from the Baltic in 1825, (379,000 in number, originated from Memel and 85,000 from St Petersburg. 52,000 skins went from the Baltic to Boston, 3600 to Newburyport and 100 to New York. In 1836 192,000 skins were carried to the United States, but two years later only 7500 skins; ST I, 1825; ST II 1836, 1838.

²⁰⁹ Consul Bayley's report 22 April 1831, PRO, FO 65/194.

American vessels carried dozens of different products from the Baltic, and only a few of them were recorded in the Sound Toll Accounts in a category of their own. By contrast, the consular lists were sometimes over specific in that respect, since it was of no great commercial significance to know exactly how many reindeer tongues, cantharides, or hare skins were imported into the United States. Among products carried irregularly, linseed became one of the major commodities of U.S. trade with Russia. For example, in 1844 18 American vessels carried 22,100 chetwerts of linseed, that is 132,600 bushels, from St Petersburg to Boston and New York. Usually linseed was carried as part of a larger general cargo, but it was sometimes also an option for sailing in ballast.²¹⁰ A quarter (26,800 bushels) of the linseed (Table 56) shipped from St Petersburg in the years 1841-45 was carried as freight, in other words, according to consular records, “for foreign account”, to Antwerp.²¹¹

Of the wheat and rye shipped from St Petersburg, some went to North Sea ports, some to Boston and New York. Only one cargo of rye shipped from St Petersburg between 1836 and 1840 went to Amsterdam, and about five full cargoes to the United States. In the same years sailing in ballast from St Petersburg through the Sound became more common, as did transfers to Wiborg and Stockholm. Grain shipments may have resulted from the need to find a return cargo rather than any expectations of great profit.²¹² Rye was also carried as freight: the 135,000 bushels the Americans carried in 1846 went to Bremen and other ports on the North Sea, according to STA.²¹³

Almost all vessels returning to the United States from St Petersburg also carried mats.²¹⁴ Sometimes American merchants also tried out Russian

²¹⁰ STA 1844. Vessels carrying linseed and hempseed usually sailed clearly short-loaded. For example, in 1842 the ship *Cherokee* of Boston (412 tons) returned to her home port with only 1200 chetwerts of linseed, although she had carried almost 1.2 million lbs of raw sugar from Havana to St Petersburg. The vessel sailed the route again with almost similar cargoes in 1841 and 1844; STA 1841 (1574/2578); STA 1842 (1419/2233); STA 1844 (349/1119); CR 1842, NA M-81/4, and T-201/2. Cantharides were made of blister beetles, that was most often called Spanish flies.

²¹¹ As well as those from St Petersburg, one cargo was carried to the United States from Riga (23,000 bushels) and five small lots from Königsberg (together 22,200 bushels). According to ST II, an average of 3.5 million bushels of linseed was exported from the Baltic in 1842-43, 2.3 million bushels of which was from Russia, and 40,600 bushels of which went to the United States. According to STA, American vessels, however, carried 56,000 bushels to the United States; ST II, 1841-45; STA 1841-43, ØTA, DRA. As a proportion of total Russian exports, linseed represented an average of 14.3 million roubles' worth in 1831-35, for example, about seven percent of total exports; PRO, FO 65/236.

²¹² On the other hand, for example the ship *Sterling* of Boston sailed late in the autumn of 1836 from London to Danzig to take on a cargo of wheat and rye to Baltimore (according to the consul in Elsinore, for Boston); STA 1836 (2615/3090); CR 1836, NA T-201/1. In 1838 nine cargoes from Elsinore that crossed the Atlantic included rye (altogether 81,000 bushels). However, according to ST II, only 49,500 bushels was carried from Russia to the United States; STA 1836-40; ST II, 1836-40, ØTA, DRA.

²¹³ Small amounts were carried to the United States also from Danzig e.g. STA 1836 (3090): 3800 bushels and from Königsberg, e.g. STA 1837 (2013): 1700 bushels.

²¹⁴ Articles called mats were made of several textures. The coarser sorts were used for packing and fine qualities for mats. Most of the mats on the international market were from St Petersburg (woven from lime tree bast) and from Archangel. During

specialities. For example, Brothers Cramer were allowed to supply Russian rams for Isaac Hicks in New York,²¹⁵ and Stephen Girard was interested in yellow turnip seeds.²¹⁶ William D. Lewis, who travelled between the cities of the east coast, ordered "Russian Music Books" with English translations from his brother, and "some of their marches, pollonnaises, valzes etc". He had found them "excellent presents for young ladies".²¹⁷

9.5 The transportation of lumber

Lumber was the most important commodity from the Baltic area to the west at the beginning of the 19th century. American involvement in the shipping of lumber was totally different from their other Baltic trading activities. Lumber was rarely carried across the Atlantic, and even then not to the United States but to South America, and its main destination was western Europe. The transportation of lumber by the Americans can be considered to have resulted from the need to find a suitable and at least to some degree profitable return cargo for the voyage to west. This explanation does not, however, apply to the late 18th century, when lumber was not usually carried as freight, although in 1796, for example, altogether 12 vessels carried lumber west through the Sound, as many as eight vessels carrying their cargo from Memel, three from Danzig and one from Riga.²¹⁸

Already in 1826-30 when sailing eastwards in ballast from the North Sea was still common, the Americans carried an average of 14,600 standard deals from St Petersburg. According to British calculations, exports of deals were worth 16 million roubles on average (excluding exports from Finland) in the period 1826-35, or four percent of exports. The English purchased half of this total.²¹⁹

the first years of the period under discussion small amounts of soap were also transported to almost all American ports. According to STA, American vessels carried 137,000 lbs of soap from St Petersburg to the United States in 1795.

²¹⁵ Judah Paddock to Hicks, 13 June 1804, NYHS, Isaac Hicks Papers, "Paddock".

²¹⁶ Girard to Myles McLeveen; 12 February 1810, USR 1980, 640-641. In 1800 the U.S. import statistics mention 31,600 gallons of "spirits from grain" imported from Russia, and 14,900 gallons of the same product in 1804; ASPCN 1800, 1804.

²¹⁷ William D. Lewis to John D. Lewis, 7 June, and 9 June 1821, HSP, LNP, Letters 1810-41.

²¹⁸ STA 1796. Five of these cargoes were carried to Cadiz and two to Lisbon.

²¹⁹ In the consuls' export statistics the sawn goods exported from St Petersburg were identified as "deals", and their quantities were recorded somewhat cryptically by the 'standard dozen'. The normal unit was a hundred deals, but this was the 'long hundred' of dozen, the St Petersburg standard hundred (P.S.H.) amounting to 165 cubic feet and originally 120 lengths of timber 1.5 inches thick, 11 inches in breadth and 12 feet long. This was the original unit of measure that was used in exports to western and southern Europe. 'Standard deal' was also used as a unit of measure. The figures STA gives for American vessels usually by number of pieces do not tally with the data of the consuls. For example, in 1837 two American vessels carried 5087 standard deals from St Petersburg to Antwerp and Havana according to the consul in St Petersburg. According to the consul in Elsinore the amount was 3163 deals and 650 deal ends. According to STA the cargoes contained 550 planks, 2613 ships' planks

From the 1830s onwards the American lumber freighters were essentially the vessels that carried raw sugar from Cuba and lumber from St Petersburg or Wiborg was taken on as an alternative to simply returning in ballast. For example, in July 1838 two Portland brigs sailing together, the *Sun* and the *Rapid*, passed Elsinore with a cargo of sugar and returned to the Sound a few months later carrying lumber taken on in Wiborg. Both cargoes were intended for Bordeaux.²²⁰

According to STA, in the period 1836-50 altogether 132 American vessels sailed west through the Sound carrying lumber, of which 118 were bringing their cargo from Russian or Finnish ports, 12 from German and two from Swedish. In some years a third of the vessels returning from the Baltic to the Sound carried lumber. However, sailing in ballast was still the only option for many vessels. For example, in 1843 altogether 17 cargoes of lumber were carried west from the Baltic Sea, but also 13 American captains declared in Elsinore that they were crossing the Atlantic in ballast. In the following year 15 shiploads of lumber left St Petersburg and five left Wiborg and Hamina. However, 12 vessels were registered in Elsinore as sailing entirely in ballast, and most of the others that sailed westward were short-loaded.²²¹ The change-over to lumber carried as freight and sailing in ballast can be considered an indicator of a significant fall in the demand for Russian products in the United States. The change had already started before the 1846 tariffs came into force.

About 85 percent of the lumber the Americans freighted from St Petersburg in the years 1841-45 went to French ports, and about 70 percent to Bordeaux alone. Especially lumber carried to French ports was recorded in consular lists as "for foreign account". Export to English ports started in 1850 when the equal treatment of foreign and domestic lumber freighters came into effect at British ports. Almost all the lumber (13,510 St.dozen deals) loaded onto American vessels in St Petersburg in 1851-53 went to British ports. The countries of destination did not change after the Crimean War, but the amounts

and 650 ordinary boards. The total exports (12 vessels) recorded by the consul in St Petersburg for 1843 were both 190, 341 standard deals and 15, 862 dozen. The consul in Elsinore recorded that 109,800 deals had passed through the Sound. According to STA the total exported amounted to 66,700 deals and 28,360 boards (3-4 groups according to the length of the sawn goods); STA 1837, 1843; CR 1837,1843, NA M-81/4, and T-201/2; PRO, FO 65/236. On the lumber exports from the Baltic region see Åström 1988, 110-135; on classifications, terminology and measures of lumber, e.g. Åström 1988, 201-204, Johansen 1983a, 108, 112.

²²⁰ STA 1838 (1768/2905, 1769/2906); CR 1838, NA M-81/3, and T-201/T1.

²²¹ STA 1836-50. For example the ship *Gloucester* (338 tons) of Boston, which arrived at St Petersburg on 6 July 1843 from "sundry ports in South Seas & Havana" with a cargo of 977, 000 lbs of sugar was registered in Elsinore on 22 August as returning in ballast to Boston. Abraham van Sassen, who served as substitute for A.P. Gibson, the consul in St Petersburg, reported that the vessel, commanded by John Proctor, departed in ballast carrying only 55 poods of cordage and small amounts of manufactures. E.L. Rainals, the consul in Elsinore, did not report these but put down that the vessel was sailing in ballast to Boston; STA 1843 (1660/3414); CR 1843, NA T-201/2, and M-81/4. The Americans carried lumber from German ports, especially Stettin, in vessels that had also left their export cargo there; e.g. STA 1841 (2492/3919), 1849 (545/1225).

transported trebled.²²² In 1858-59, when large cotton vessels started to take deals and lathwood as return cargo to England, the American share of lumber exports from St Petersburg increased to almost 20 percent.²²³

TABLE 57 Destination of deals carried by American vessels from St Petersburg through the Sound, 1836-56.

Destination	1836-40		1846-50		1856
	Consular Returns	Sound Toll Accounts	Consular Returns	Sound Toll Accounts	Consular Returns
Bordeaux	1 170	770	7 240	40 370	900
Le Havre	-	-	520	2 480	-
Madeira	2 010	2 030	80	310	-
Havana	1 150	550	-	-	-
Rio de Janeiro	-	-	1 380	5 890	-
Bristol	-	-	240	590	11 490
London	-	-	-	-	5 990
Liverpool	-	-	440	-	10 700
Hull	-	-	280	1 170	3 430
Others	1 020	-	-	2 130	1 030
Total	5 350	3 350	10 180	52 940	33 540

Notes and sources: Consular Returns from St Petersburg (NA M-81/3-5): standard deals (1836-40) and standard dozen deals. Sound Toll Accounts: deals (*Da. dehler, ordinarie*), boards and planks (*Da. skudeplanker*).

The first American vessel to take on lumber at Wiborg, the main port in Finland exporting sawn goods, was probably the ship *George Cabot* of Boston in 1838. She carried salt, cotton and mahogany from Liverpool to St Petersburg and took a return cargo of 890 dozen ships' planks (STA: *skudeplanker*) and 226 dozen ordinary planks to Bordeaux.²²⁴ By 1850 altogether 17 American vessels had sailed from Wiborg to the same destination, and 11 to other ports in western and southern Europe.²²⁵ In 1844, for example, the Americans transported a quarter of the lumber going from Wiborg to France, which was still only a fraction of the total exports of the city.²²⁶ The brig *Alice* of Newburyport was the

²²² In 1851-53 British ports took 12, 650 St. dozen deals; STA 1841-50; CR 1841-50, NA M-81/4-6; on imports to Bordeaux, see Åström 1988, 141.

²²³ In 1844-45 an average of seven percent of lumber exports from St Petersburg was loaded on American vessels, which amounted to 15,500 St. dozen deals. The lumber constituted about one-sixth of total exports from St. Petersburg. In 1826-30 the amount was slightly below 200,000 St. Dozen. It exceeded 300,000 St. dozen in 1858; Åström 1988, 95, 198-199; CR 1844-45, NA M-81/4-6; Appendix, list 1.

²²⁴ STA 1838 (1411/2546); CR 1838, NA T-201/T1, and T-195/4.

²²⁵ By 1850 the Americans had carried 20,260 dozen deals, boards and planks from Wiborg to Bordeaux, and to other ports in western and southern Europe altogether 9060 dozen. Three vessels sailed to Malaga (1873 dozen) and another three to Marseilles (2881 dozen). Other destinations for lumber from Wiborg were Antwerp, Paimbeauf, Le Havre, Barcelona and Cadiz; STA 1838-50. According to the consul in Elsinore, three vessels carried 3560 dozen deals from Wiborg to Bordeaux and one vessel 776 dozen deals to Malaga in 1851; CR 1851, NA T-201/1.

²²⁶ Exports from Wiborg to France in 1844 amounted to 19,200 dozen deals and battens, the total exported was 162,083 dozen and the amount freighted by the Americans amounted to 6648 dozen. Total exports from Finland were about 243,000 dozen STA 1844 (1290, 1581, 1622, 2101); Åström 1988, 86; Ahvenainen 1984, 442. According to the British consul in Wiborg, exports from the city in 1839-44 amounted to an average

first to carry a major consignment of lumber from Riga. She arrived from London in ballast in the summer of 1840 to transport flax and 6700 plants to Madeira. The bark *Elizabeth* of Baltimore, to take another example, began the traffic in lumber from Hamina in the summer of 1843 with a cargo of 780 dozen deals for Marseilles.²²⁷

In 1851 Reynold Frenckell, U.S. consul in Helsinki, drew attention to the revival of the American lumber traffic from Finland, which he assumed would show a further increase after the Saimaa Canal was finished.²²⁸ The lumber traffic from Wiborg was the occasion of a request made in the summer of 1854 to appoint an American consular agent to the city. American captains claimed that they had run into difficulties as there were no commercial representatives of the United States in the region. The issue was forgotten in the consulate because of the Crimean War and it was taken up again for discussion only in 1858. Caleb Croswell, consul in St Petersburg, considered Wiborg particularly important because it was the export centre of Russian pine. The post went to John Sparrow, who was considered suitable because he had been in contact with the Americans for decades in Kronstadt and he was planning to open a steam vessel line between St Petersburg, Wiborg and Helsinki.²²⁹

9.6 Total imports

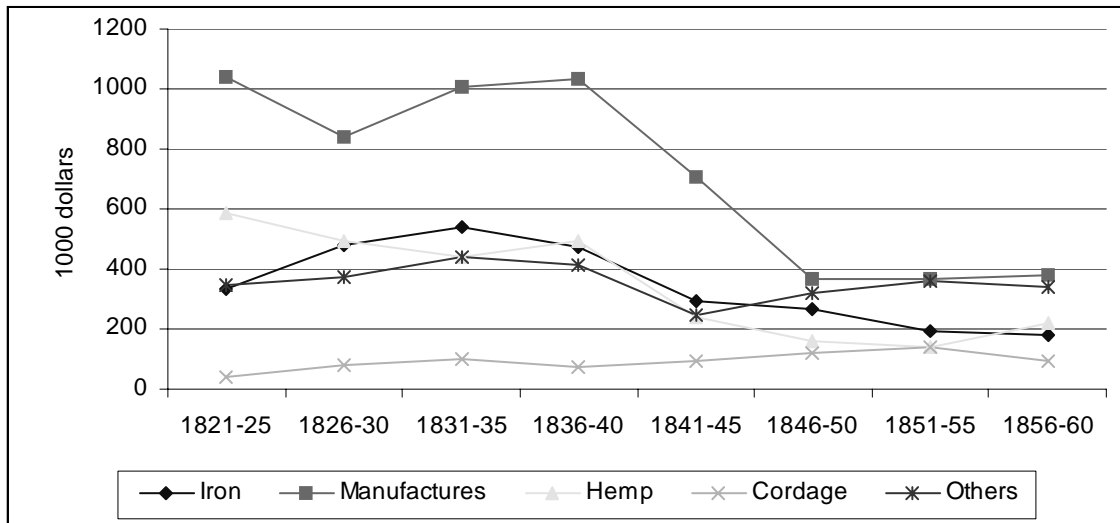
Hemp and flax manufactures (i.e. cloths) were the major exports of Russia and the U.S. became the greatest purchaser of then in the beginning of 19th century. In the mid -1820s more than half of Russian manufactures transported through the Sound were carried to Boston. The trade of manufactures concentrated from 1820s on exchange between St Petersburg and North America. Americans paid most attention to Russian sailcloth. It was better than their own canvas for the merchant marine and the Navy. The American demand and import of Russian manufactures decreased at the beginning of 1850s. American cotton textiles were better than before and the captains carrying Cuban sugar to the Baltic Russia had to find profitable possibilities. One of them was to take lumber freight for Britain.

of 143,000 dozen, of which 70 percent went to England and 15 percent to France; PRO, FO 65/316.

²²⁷ STA 1840 (2038/2835), 1843 (2540); CR 1840,1843, NA T-201/2. Three vessels had carried 2400 deals and 30,800 staves from Riga to France by 1850. One vessel sailed from Hamina to Marseilles (813 dozen deals) and one to Bordeaux (1305 dozen deals); STA 1841-50; CR 1841-50, NA T-201/2-3.

²²⁸ Frenckell to the Secretary of State, 15 January 1851, NA T-389/1.

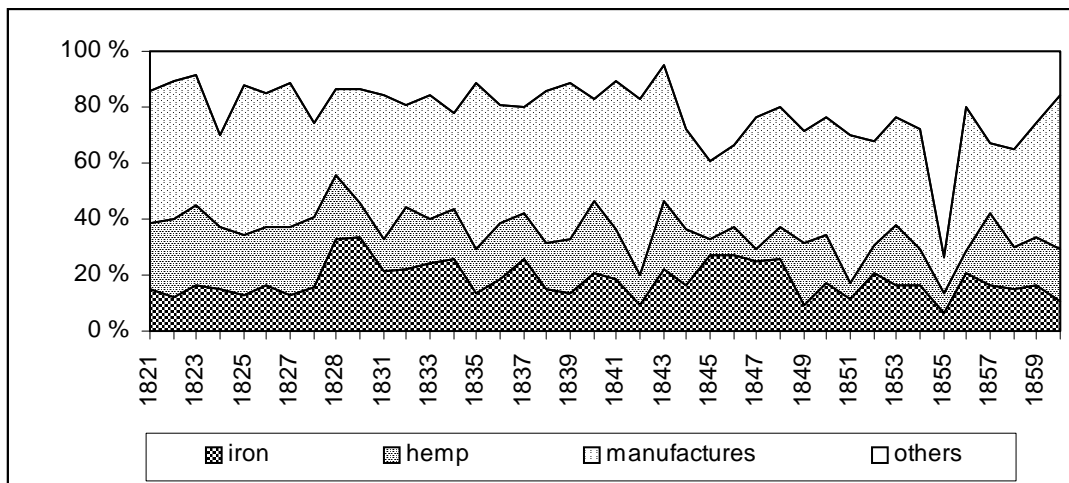
²²⁹ Francis W. Pickens to Lewis Cass, 8 September 1858, NA M-35/18/10; Caleb Croswell to Cass, 22 February 1859, NA M-81/6.



Source: Appendix, table 66.

FIGURE 71 U.S. imports of principal Russian products, 1821-60.

Russian hemp was the best raw material for New England rope-makers. Russian cordage was the best in the western market and for decades American ship-builders would only accept Russian sailcloth, cordage and raw hemp, no matter whether domestic materials would have been cheaper. The captains and ship owners also considered Russian bar iron to be the best for ship-building.



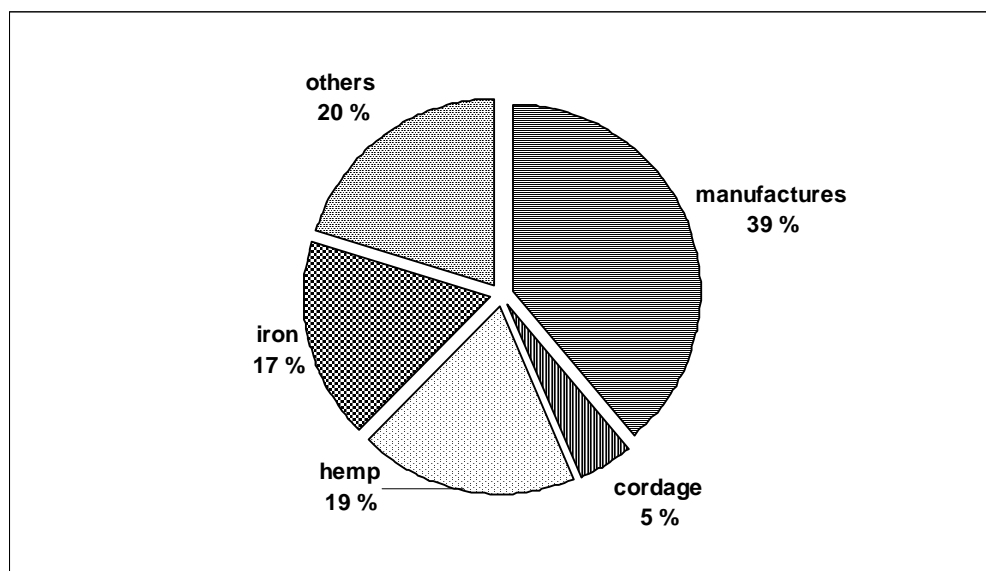
Note: Cordage is included to manufactures
 Source: Appendix, table 66.

FIGURE 72 Distribution of U.S. imports from Russia in terms of principal commodities, 1821-60.

Figures 72 and 73 show the importance of manufactures, hemp, cordage and iron. By value these articles made up about 80 percent of all U.S. imports from Russia. The group "others" includes many animal products, such as tallow, bristles, feathers, wool, quills, isinglass, glue, hides and skins. Linseed, hempseed, felt and mats were occasionally amongst the cargo of American

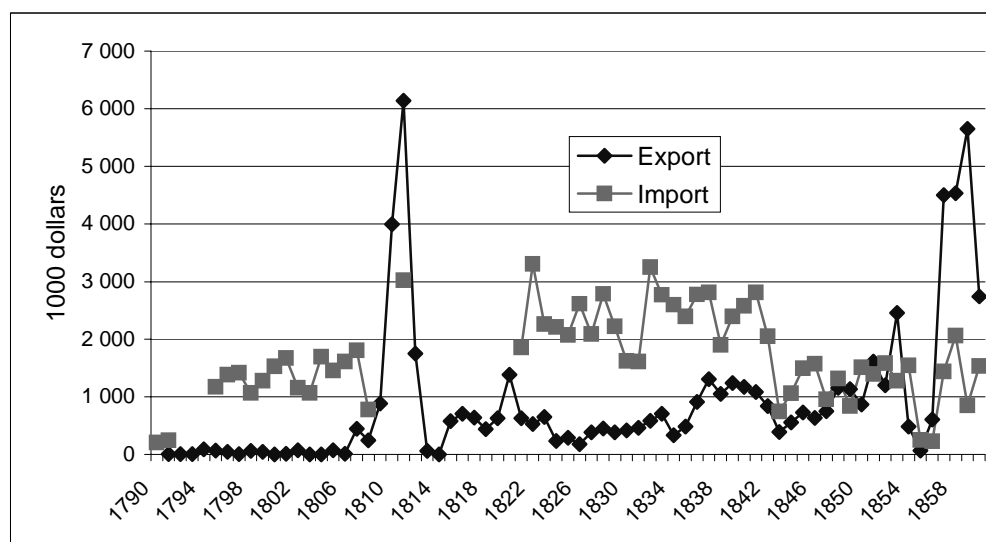
vessels. Like timber, all kinds of seeds and grain most often found a market at western European ports.

Russian hemp was the best raw material for New England rope makers. Russian cordage was best in the Western market, and the builders of American vessels accepted for decades only Russian sailcloth, cordage and raw hemp. No matter if the domestic materials would be cheaper. According to captains and ship owners also the Russian bar iron was best for shipbuilding.



Source: Appendix, table 65.

FIGURE 73 Distribution by value of U.S. imports from Russia, 1821-60.



Sources: Appendix, tables 43 and 65.

FIGURE 74 The U.S exports and imports in the trade with Russia, 1790-1860.

In the 1820s the United States imported from Russia over five times as much as it exported there. In the following decade imports were three times exports and in the 1840s nearly double. After the Crimean War the situation changed and U.S. imports were worth only a third of exports. Comparing only import and export values for direct trade with Russia, the exchange was highly unfavourable to the United States. This was due to the sugar triangle, since American vessels sailed from Cuba to St Petersburg and returned to North America laden with Russian goods. In Boston, New York or New Orleans there were nonetheless several domestic products other than cotton which would have been suitable for Russian markets. The balance of trade changes if we take into account freight income from carrying Cuban sugar and coffee to Russia. Moreover, hundreds of vessels visited U.S. ports only occasionally. They sailed between European ports, or more often between the West Indies and European ports, but there are no statistics for their freight income.

10 CONCLUSION

In the mid-1780s Russia was one of the countries of which the Americans had great commercial expectations. New trading partners and “freedom of trade” were expected to make up for the losses that resulted from the independence of the United States, because the former mother country did not concede any commercial privileges to the young republic. U.S. foreign trade ran into great difficulties in its first decade. The attempt to forge connections with Russia was just one example of this. In trade with Russia direct turnover was very low and export from the United States soon came to an end. Things changed radically in the new situation created by the Revolutionary and Napoleonic Wars and unexpectedly lucrative markets opened up on the Baltic Sea for the Americans with their neutrality and adherence to the principle of free ships – free goods. Despite considerable losses in tonnage, the profits gained through the advantage of neutral status were not insignificant. This was especially true of Russian trade in the years 1809-11. However, the joy came to an end in 1812 with the outbreak of war between America and Britain and during the war the British rapidly won back their dominant position in trade with Russia. Nonetheless, the Americans had “discovered” the markets of St Petersburg during the European wars, even if they were unable to maintain the position they had gained in the years of emergency.

The problems of acquiring reliable information from St Petersburg hampered trading connections in the early years. Information often came indirectly via Copenhagen, Hamburg or London, but the long distance and the slant introduced by the senders’ particular interests reduced its reliability. Insufficient information as to Russian markets was a clear reason for reverses in the 1780’s and it is no wonder that thereafter St Petersburg was cautiously approached by way of Copenhagen, Gothenburg and Hamburg. At this time especially, though later too, the problem was how to find the most suitable trading partner in St Petersburg. The captains of the vessels played a crucial role in this. In principle they were agents of the ship-owners, but in the Russian environment they acted quite independently and did not always follow the wishes of the owners. Competition for American cargoes in St Petersburg was

fierce. One of the surest ways to win an American vessel for one's own trading house was to bribe the captain. This was an open secret, and the ship-owners on the other side of the ocean, who also made satisfactory profits, were unwilling to tackle it, at least openly.

At least some reliable information was needed to make decisions about sales and purchases. Estimates of the quantities of goods being carried to St Petersburg were crucial when deciding on sugar purchases in Havana or Boston, for example, in years that were considered normal. Cuban sugar prices themselves mattered less. The same applied to shipping Russian iron and manufactures from St Petersburg to the United States until the 1840s. The information sent by the merchants' agents from Havana, St Petersburg and Copenhagen contained much of interest, but it was often out-of-date by the time it arrived. On their departure captains were given instructions about the sale and purchase of merchandise. Although these instructions were sometimes set out in great detail, in practice the owners' wishes were of necessity observed only very loosely. By contrast it is surprising how meticulously orders given on financing arrangements were carried out.

In the early decades the emphasis of U.S. foreign policy towards Europe was strongly on commercial questions. U.S. foreign policy, which emphasized neutrality and non-intervention, was applied to commerce in terms of the principle of free ships – free goods, which was interpreted as broadly as possible. A strong incentive for that was the experiences of the Napoleonic Wars, when Britain and France interpreted their neutrality in such a way as to fit in with their own war aims. The United States pressed Russia, which had only modest naval forces, to commit itself to accepting the principle of freedom of the seas, in other words complete freedom of the seas for neutral countries even in times of war. The Russians, however, would only agree to sign a declaration or an agreement of this kind on the condition that Britain also accepted the principle.

The British, with their immense sea power, were unresponsive. American attempts to use Russia to put pressure on Britain got nowhere, and the principle of freedom of the seas was not even included in the trade agreement between Russia and the United States of 1832. In fact the agreement, though attended by lively discussions, had only minor significance. It only put down in writing what had already been practised in trade between the countries for about twenty years, including reciprocity and the most favoured nation clause. As Britain agreed to the neutrality demands of the United States at the outbreak of the Crimean War in 1854, the Americans extended the principle of neutral shipping in a way that enabled them to leave the international Treaty of Paris of 1856 unsigned.

The emphasis on the freedom of the seas drew the United States into a degree of active involvement over the Sound Dues question that was rather unusual in the country's foreign policy. What was in question was ultimately a centuries old system practised on the old continent, and attempts to challenge it surprised the Europeans. The Americans did not invoke economic arguments

during the dispute, even though the dues had a direct and indirect influence, albeit difficult to measure, on U.S. trade with St Petersburg. At all events it was American activity that led to the abolition of the Sound dues in 1857.

It was American merchants who carried on American trade with Russia, and the goods were almost entirely carried on American vessels. In St Petersburg the Americans dealt mainly with English and German trading houses. There were only two prominent merchants of American background in the city: John D. Lewis and William Ropes. At the end of the 1810s and in the 1820s Lewis's was one of the biggest trading houses in St Petersburg, and a substantial proportion of the Americans transacted business with him. From the end of the 1820s the most important single company in the American trade was Ludwig Stieglitz's. Generally speaking, American trade in St Petersburg was concentrated on just a few firms.

In the United States New England entrepreneurs dominated the Russian trade. William Gray of Salem is probably the merchant who sent most vessels to St Petersburg. Originally about ten cities were actively involved in trade with St Petersburg, but after the 1820s it was concentrated on Boston to an ever-increasing degree.

The competitiveness of American shipping was based on the low cost of raw materials at the beginning of the 19th century. Although the level of wages was higher, running costs were lower than those of the Europeans. The shipbuilding industry had close links with St Petersburg trade, as the dockyards used imported iron almost exclusively, and Russia was one of the major suppliers. Russia's role as a supplier of hemp, cordage and sailcloth was even more important. Until the 1840s it was most commonly ships of 200-400 tons that set sail for St Petersburg. Their size more than doubled in the 1850s, the age of cotton, and the clipper ships, famous for their speed but slightly too big for Northern ports, arrived on the Baltic Sea. Brigs, which were common in the early years, gave way to barks in the 1840s. The general trend was towards an increase in the size of vessels: the tonnage of the vessels passing through the Sound at the beginning of the 1800s was on average only a third of that at the end of the 1850s.

Changes in the structure of the vessels may be the most important explanation for the fact that, according to STA, over a period of 60 years the time spent by American vessels on the Baltic Sea decreased by about ten days. The time it took for vessels to sail to Kronstadt fully loaded and take on a cargo there decreased by as much as 20 days in the same period. Vessels spent about two months at the ports of the Baltic Sea, which is about the same time as the voyage took from Havana to Elsinore. It usually took a few weeks less for the voyage from Boston to St Petersburg. The return voyage from St Petersburg to the east coast of North America also usually took a few months. Though not usual, it was not exceptional for vessels to sail twice from North America to St Petersburg, except in the case of William Ropes' vessels. Between 1783 and 1860 about 4800 American vessels sailed to the Baltic Sea through the Sound, 3300 of them to Russian ports and almost all of those to St Petersburg. Two thirds of the

vessels sailing to Russia set out from Massachusetts and four fifths from New England. Massachusetts kept its leading position until the 1850s, when vessels registered in Maine, the principal shipbuilding state, moved into top place. Although New York became by far the most significant port in the United States, trade with the Baltic remained under the control of the Bostonians if the number of vessels is considered the criterion. By the 1830s at the latest Boston had risen to a position of dominance, and in the end it was the only New England port involved in trade with St Petersburg. The vessels used in this trade were almost all built in Maine. Most trade between New England and the Baltic was also carried on vessels from Massachusetts, but the larger markets and better financing possibilities increased the attraction of New York.

The American vessels that sailed to the Baltic before 1810 can be divided into two main groups: those that exported colonial products from the United States to Copenhagen and those that sailed from west European ports in ballast to St Petersburg. The importance of Copenhagen was largely due to the activity of Ryberg & Co. This firm managed to turn the major Danish port into a suitable entrepôt for the Americans for the sale of colonial products and to some extent for the purchase of Russian products. At least until the years of Napoleon's Continental System, and to some extent also during it, 90 percent of American vessels sailed past Copenhagen bound directly for St Petersburg in ballast. After 1815 direct voyages from the United States to Russia increased sharply, although about half of the vessels sailing across the Atlantic still headed for Copenhagen following the old practice. Stockholm and German ports were also favoured by the Americans in some years. At the beginning of the 19th century Copenhagen lost its commercial position for various reasons and at the same time it lost its American trade. Not even the trade agreement between Denmark and the United States in 1826 changed the situation.

Until the end of the 1820s a significant proportion of the American vessels that passed through the Sound were sailing to St Petersburg in ballast in order to pick up a return cargo. In the 1830s the practice of sailing in ballast changed direction, suggesting that St Petersburg's products were no longer in such demand as they had been in the east coast ports of the United States. One way to avoid sailing without a cargo was to take a cargo of Finnish lumber to western Europe, and this was an option that was resorted to relatively often. The opening up of British ports in the 1850s increased the shipment of both Russian and Finnish lumber to Britain. Taking the data as to vessels' departure ports as an indicator of shipping movements, about half of the 2000 vessels that departed from the United States and completed their journey in the Baltic in the period 1783-1860 sailed directly to Russia. By the decade preceding the Civil War American traffic had become totally concentrated on St Petersburg as far as export was concerned, and in practice all vessels sailing east through the Sound were bound for Kronstadt.

About a third of the American vessels that sailed to Russia through the Sound, in other words something over one thousand vessels, came from Cuba. The sugar triangle, from its creation in the 1820s until its decline in the years of

the Crimean War, was the most significant single factor in American shipping. Over the entire period of this study, American trade with the Baltic was based on the attraction of St Petersburg in one way or another. Originally Russian export products - hemp, iron and manufactures - were the attraction, and after them Cuban sugar. In the last phase, cotton wool, which Russia purchased and which was to replace the semi-manufactured products imported by the British, that is cotton yarn, was also involved. The objective was to develop the domestic Russian cotton wool industry. The American share of foreign trade with St Petersburg was reckoned at about a tenth, while the British share approached 50 percent.

Most of the American captains sailing west through the Sound in the period 1783-1860 declared a port on the east coast as their port of destination. This applied to more than 2900 of the 4800 vessels that sailed from Russia. The rest transferred to western European ports or reported that they were sailing to "the North Sea". The ports of destination ranged widely: vessels departing from Russian ports on the Baltic registered altogether 85 different ports of destination west of Elsinore, 28 of them in the United States. In the early years of trade between the two countries a large number of vessels returned to Massachusetts, most often to Boston or Salem, or else to Rhode Island, usually Newport or Providence. At the beginning of the 19th century New York became just as important, but until the 1820s it was usual for many of the vessels that returned from Russia to sail to the smaller ports of New England, at least according to STA. In addition to those above-mentioned, other examples were Newburyport, Marblehead, Bristol and Portsmouth. Apart from established trading practices, local patriotism may have had some influence on the fact that vessels continued to return to their home ports for as long as it was economically viable to do so.

Tonnage figures shed light upon the structure of navigation between the United States and Russia. Before the embargo year of 1808 the ratio between the tonnage that departed for Russia and that returning to North America was 1:20. In terms of the number of vessels the ratio was more or less the same. Between 1815 and the Civil War two vessels returned directly from Russia to the United States for each outward bound vessel. The picture of trade and navigation changed dramatically at the end of the 1850s. For example, in 1859 the U.S. foreign trade statistics reported almost 40,000 tons departing from the United States for Russia, which is almost ten times the average figure for the 1820s. New Orleans had become clearly the most important port of departure, but even at its greatest the tonnage departing from there did not reach the amount of tonnage that sailed from the West Indies to St Petersburg at the height of the sugar boom.

It is estimated that in the 1820s and 1830s a fifth of U.S. trade tonnage was engaged in traffic entirely outside the country. The Baltic Sea was one area of such activity, but the tonnage active there markedly exceeds the above-mentioned by a fifth. It can be concluded from the consuls' shipping lists that from the 1830s onwards over 45 percent of the American tonnage that was involved in trade with Russia did not trade directly between the two countries.

The American mercantile marine completely dominated trade with Russia until the 1830s. The proportion of non-American shipping remained below five percent of both departing and arriving tonnage, and this accounted for only one to three percent of U.S. exports to Russia. The proportion of foreign tonnage involved in U.S. imports from Russia was somewhat higher.

The United States' exports to Russia mainly consisted of cotton, rice and tobacco. In the case of American cotton wool, Great Britain was by far the most important purchaser, and Russia's share was at the most only three percent of American exports. From the Russian perspective, at the end of the 1840s almost 80 percent of the country's cotton wool imports came from Britain, even though at the beginning of the century the import of English cotton yarn was to a great degree restricted by a high tariff wall. The purpose was to develop Russia's own weaving and spinning industry. It is noteworthy that the British managed almost to monopolize cotton wool exports to Russia. In principle the Americans should have had an excellent opportunity to start large-scale shipments of cotton wool to St Petersburg at that point. In fact, it seemed for a while after the Crimean war that this would occur, since the proportion of cotton carried directly from the United States increased to a third of Russia's imports, while the British share fell to about 50 percent. At least from the 1820s cotton dominated U.S. domestic exports to St Petersburg, while at the end of the 1850s cotton accounted for almost 100 percent of all U.S. exports to Russia.

Rice and tobacco were traditional American exports, but it was quite difficult to get them onto the Russian markets. South Carolina rice was usually taken to Copenhagen, and only a tenth of the rice that went through the Sound to the Baltic ended up in St Petersburg. Rice meant little to the Russian consumer. By contrast, though there was a demand for tobacco, the American product was too expensive because of the high customs tariff and moreover tasted unfamiliar. Russian domestic products and Turkish tobacco were better known. Bremen merchants dominated the market for imported tobacco in St Petersburg. In their factories Maryland tobacco was sorted and processed into a form that was suitable for northern European markets.

Neither Russian nor American produce dominated trade links between the two countries. In the 1820s it was Cuban raw sugar that took precedence. The Americans had close business ties with Cuba that went back to colonial times. This can be seen, for example, in the fact that the United States was the major buyer of the island's sugar once Spain had opened the island's ports to international shipping. Around 1850 two thirds of American raw sugar purchases came from Cuba. Some of this was re-exported, but the amounts that ended up in Russia in that form were small compared with the amounts shipped directly from Havana to St Petersburg. In the 1820s Russia adopted a customs policy that promoted the establishment of the country's own national refineries. This opened up excellent opportunities for high-quality raw sugar from Cuba, as the import of refined sugar was effectively prevented. Moreover the duty collected on raw sugar, probably imposed for fiscal reasons, was so

high that it enabled sugar beet grown in the Ukraine to develop gradually into a serious competitor with imported sugar.

The high quality of Cuban raw sugar guaranteed that the Russian import levies collected as specific duties gave it a clear competitive edge. In fact, cane sugar was the only instance in which the British, who were used to dominating the Russian markets, had to give ground to the Americans. The American sugar triangle, that is, the traffic from New England to St Petersburg via Cuba and back to the northeast coast of the United States, came into existence at the beginning of the 1820s and ended only in the years of the Crimean War. About 90 percent of Russian raw sugar imports came by way of St Petersburg, and at one time the Americans provided almost 80 percent of the needs of the city's refineries. Almost a thousand American vessels, or an average of thirty per year, were involved in sailing the sugar triangle, which lasted for thirty years. The amounts carried on American vessels were at their greatest in 1851, when more than 55 million lb. was carried through the Sound, 53 million lbs of it to St Petersburg. In the same year the Americans carried just under 9 million lbs of cotton wool, 200,000 lbs of rice and 17,000 lbs of coffee to St Petersburg.

Those sailing the sugar triangle often left New England in the new year, and by the end of January many of them were already waiting off Havana for the first consignments of the new sugar crop. The vessels reached Cuba in ballast or laden with crops and lumber. In the basic model of the sugar triangle sugar purchases were partly financed by selling goods carried from St Petersburg either in the United States or in Cuba. The sugar business was unusual in that an exceptional amount of Russian capital was involved in it. However, the bulk of the finance came in one way or another from London. The sugar trade involved several risks, some connected with the at times great fluctuations in Cuban sugar prices, some due to the problems of the two- or three-month long voyage, and others to Russia's unpredictable customs policy. Moreover, the vulnerability of American mercantile shipping, tied as it was almost exclusively to one commodity, showed up very clearly in the 1840s when hurricanes destroyed much of the Cuban sugar crop. Not enough raw sugar reached St Petersburg, and so the Russians made the decision that the Americans had been dreading for about twenty years, to permit the import of refined British sugar. This broke up the American monopoly for some years, but at the beginning of the 1850s exports increased to their highest level ever.

Hammered bar iron was perhaps the most important U.S. import from Russia until high tariffs and strong competition on price first from Swedish iron and then from puddled British iron made Russian iron uncompetitive. This happened by the 1840s, if not before. Moreover, fewer vessels returned from St Petersburg to the United States, and thus bar iron, which was usually carried as ballast, lost its old markets. The Americans were important customers for Russian iron producers. Prior to the large-scale production of British puddled rolled iron, England had purchased the bulk of Russian iron. American demand did not even come close to compensating for the lost English markets, but it helped Russian iron production at least to remain on the same level as it was at

the end of the 18th century. According to STA, 98 percent of the iron the Americans purchased from the Baltic between 1815 and 1850 ended up in the United States. 60 percent of it came from St Petersburg and 38 percent from Stockholm. American vessels often carried Russian iron, but Swedish iron was mainly carried by Swedish vessels. From the 1840s onwards British iron and American domestic production started to undermine the demand for Russian hammered bar iron on the other side of the Atlantic, although even in the 1850s large quantities of high-quality Russian sheet iron were still being imported into the United States.

"Manufactures", Russian hemp and linen textiles form a group of their own amongst U.S. imports. They were articles of good quality, hand-made and relatively cheap, which were shipped from St Petersburg in relatively large quantities until the mid-1840s. The shipbuilders of New England considered Russian sailcloth and cordage the best products on the market. It is in a way paradoxical that at the beginning of the 1840s, for example, thousands of tons of cotton wool were carried from the United States to Russia while finished hemp and linen textiles, worth ten times as much as cotton, were imported from there.

The former mother country of the United States, England, also remained its most important trading partner after it became independent. The fact that imports especially remained British-dominated meant that trade was in one way or another managed by London, which had developed into a centre of world trade. London merchant bankers granted very generous credit to American merchants, perhaps a result of the fact that English-based trading houses were most often chosen as the trading partners of American captains in St Petersburg. Moreover, even financing arrangements without English involvement were most quickly and easily managed in London. Trade between the United States and St Petersburg demanded relatively large capital investment, and it is no wonder that it was the wealthiest New England firms that opened up the trade in the 1780s. It was possible for them to operate on their own capital. However, the same cannot be said of the "minor entrepreneurs" who flooded St Petersburg during Napoleon's Continental System. At that time the British had several reasons to finance and encourage the Americans to sail to St Petersburg. The problem of a lack of working capital often shows up clearly in the correspondence of American merchants, and almost equally often it is revealed that help came directly or by a circuitous route from London.

St Petersburg trading houses were very rarely involved in financing U.S. trade with Russia except for sugar shipments. Capital for commercial enterprises was said to be scarce, and Russian rates of interests were markedly higher than British. Russian practice in selling to the English did nothing to reduce the Americans' need for capital, since many goods were sold against advances already in the winter preceding the navigation season. The Americans were reluctant to conform to this practice. They wanted to buy and sell in cash. Of course the St Petersburg traders approved of cash purchases, but they

demanded a long term of payment for the products they took for sale. It was in this situation that British capital was needed.

There was no banking house specializing in trade between America and Russia at the beginning of the 19th century. Usually the Americans resorted to Barings of London, which in the 1830s had capital of almost half a million pounds involved in American trade. They had very few competitors on the same scale. Barings was the first to use letters of credit on a large scale in American trade. The bank had several agency agreements with American firms that were actively involved in the Cuban sugar triangle. Barings' hold was at first perhaps tightest on the Boston credit markets, but later they also extended their activities to New York. The central role of British finance in trade with Russia does not show up very clearly in contemporary estimates. In many cases the share of American finance in Cuban operations was put at a third or two thirds, with the remainder said to have come from Havana or the Russians. This may have been true in a formal sense, but the flow of money was directed from London, and the decisions required for high-risk investments were also made there.

In numerical terms, Russia was not a very significant trading partner of the United States between Independence and the Civil War. The volume of trade calculated by the value of the goods carried was dismal for anyone who considered an active balance of trade an objective. However, official trade statistics reveal only a part of American trade with Russia. The statistics reveal neither the mainstream of American shipping which sailed from Cuba to St Petersburg nor the traffic from southern Europe to Russia at the beginning of the period. The same applies to the traffic that carried Russian products from the Gulf of Finland to western Europe and South America. If freight income and profits from this trade could be added to the trade balance figures, the situation would seem much more favourable to the Americans. Nor should one leave the other trading partner, Russia, unconsidered. The raw sugar and cotton wool the Americans carried gave a major boost to the creation and development of modern industry in St Petersburg. The arrival of American railway technology and shipbuilding expertise was another thing ignored by the official statistics. The distant trading partners were connected to one another in numerous different ways, yet not always in the ways the decision-makers wished. Walter Kirchner appears correct in stating in the preface of his work *Studies in Russian-American Commerce*:

Both Russia and the United States, with their persistent mercantilistic outlook, were concerned with the national advantage that surplus of export over imports were assumed to bring. But the thesis may be suggested that such a view was outdated. Internal economic developments may have demanded imports, fiscal problems notwithstanding. Actually, merchants generally followed a path which was either contrary to, or at least independent of, official national policies. In an age of increasing liberalism, trade between the two countries conformed to the desires of entrepreneurs rather than of national governments and should be viewed from that perspective.

YHTEENVETO

Tutkimuksen pääasiallinen tarkoitus on selvittää Yhdysvaltain ja Venäjän välisen kaupan, kauppamerenkulun ja kauppapoliittisten suhteiden kehittyminen Pariisin rauhasta vuoteen 1860. Näitä kokonaisuongelmia lähestytään neljällä tasolla: 1) valtioiden välinen kauppadiplomatia, 2) kaupan piirissä toimivat yrittäjät ja heidän toimintatapansa, 3) maiden välinen kauppamerenkulku ja 4) kauppavaihdon määrä.

Yhdysvaltain ja Venäjän välisestä kauppavaihdosta 90-95 % kulki Itämeren satamien ja Juutinrauman kautta. Koska molempien maiden ulkomaankauppatilastot ovat perin vajavaisia, oivallista vertailuaineistoa saadaan Juutinrauman tullitilastoista. Tanskalaiset olivat kantaneet kaikilta salmiensa kautta purjehtivista aluksilta ja niiden lasteilta tullia 1400 -luvulta lähtien. Tätä tutkimusta varten on tullikirjoista etsitty amerikkalaiset alukset, joita lähes 80 vuoden aikana purjehti salmesta noin 9500. Näiden alusten lastit sekä niiden koti-, lastaus- ja määräsatomatiedot ovat tutkimuksen keskeisintä tilastomateriaalia. Muuta keskeistä lähdeaineistoa ovat Itämeren piirissä toimineiden amerikkalaisten ja englantilaisten lähettiläiden ja konsulien raportit sekä Yhdysvaltain itärannikon kaupungeissa toimineiden kauppahuoneiden arkistot.

Venäjä oli yksi niistä maista, joiden suhteen amerikkalaisilla oli suuria kaupallisia odotuksia 1780-luvun puolivälissä. Uusien kauppayhteyksien, ”kauppavapauden”, otaksuttiin korvaavan niitä menetyksiä, jotka olivat seurauksena Yhdysvaltain itsenäistymisestä: entinen emämaa ei antanut nuorelle tasavallalle mitään kaupallisia etuoikeuksia. Yhdysvaltain ulkomaankauppa ajautui ensimmäisen kymmenvuotiskauden aikana vaikeuksiin, joista yhteyden avaaminen Venäjälle oli vain yksi esimerkki: suora kauppavaihto jäi alkuinnostuksen jälkeen perin vähäiseksi ja vienti Yhdysvalloista päättyi lähes kokonaan 1790-luvun lopussa. Asetelmat muuttuivat ratkaisevasti vallankumoussotien ja Napoleonin mannerjärjestelmän luomassa tilanteessa: tiukassa puolueettomuudessa (free ships – free goods) pitäytyville amerikkalaisille avautui yllättävän edullisia markkinoita Itämerellä.

Tanskalaiskaupparien aiheuttamista tonnistotappioista huolimatta puolueettomuuden suojassa hankitut voitot eivät olleet vähäiset. Tämä pätee erityisesti Venäjän-kauppaan vuosina 1809-11. Ilo päättyi vuosien 1812-14 amerikkalais-englantilaiseen sotaan, jonka aikana britit hankkivat nopeasti takaisin hallitsevan asemansa Venäjän-kaupassa. Joka tapauksessa amerikkalaiset olivat eurooppalaisten sotien aikana ”löytäneet” Pietarin markkinat, vaikka eivät pystyneetkään säilyttämään poikkeusvuosina hankittua asemaansa.

Ennen sisällissotaa Yhdysvaltain Euroopan -suunnan ulkopoliitiikka painottui selvästi kaupallisiin kysymyksiin, joihin liitettiin puolueettomuutta ja puuttumattomuutta korostavat periaatteet. Käytännössä se tarkoitti mahdollisimman laajasti ymmärrettyä merten vapautta, joka olisi tehnyt mahdolliseksi puolueettomien maiden harjoittaman esteettömän kaupan keskenään sodassa olevien maiden kanssa. Vahvana pontimena näille vaatimuksille olivat Napole-

onin sotien kokemukset, jolloin Britannia ja Ranska olivat tulkinneet puolueettomuuden periaatteita monella eri tavalla, mutta aina omin sotatavoitteidensa tueksi. Amerikkalaiset katsoivat joutuneensa kärsimään eniten ”mielivaltaisesta puolueettomuudesta”. Yhdysvallat painosti merivoimiltaan vähäistä, mutta suurvallaksi ymmärrettyä Venäjää hyväksymään opin puolueettomien täysin vapaasta merenkulusta. Tällaisen julistuksen tai sopimuksen venäläiset suosivat allekirjoittamaan vain sillä ehdolla, että Britanniaakin hyväksyisi periaatteen. Merien valtiaina purjehtineet britit eivät asialle lämmenneet.

Amerikkalaisten aktiiviset yritykset käyttää Venäjää Britannian painostamiseen eivät itse asiassa tuottaneet vähäisintäkään tulosta. Venäjän ja Yhdysvaltain välillä vuonna 1832 solmittuun kauppasopimukseen ei saatu mahtumaan viittaustakaan merten vapaudesta. Kun Britannia Krimin sodan syttyessä 1854 myöntyi neutraliteettivaatimukseen, joiden olisi pitänyt tyydyttää amerikkalaisiakin, Washingtonin päättäjät laajensivat merten vapauden käsitettä tavalla, joka antoi heille mahdollisuuden olla allekirjoittamatta Pariisin kansainvälistä puolueettomuussopimusta vuonna 1856.

Merten vapauden korostaminen vei Yhdysvallat hieman outoon ja maan yleisestä ulkopolitiikasta poikkeavaan toimeliaisuuteen Juutinrauman tullikiistassa. Amerikkalaiset vaativat tullivapautta Juutinrauman kautta kulkeville aluksilleen. Heidän mukaansa kenelläkään ei ollut oikeutta periä maksuja kahden meren välisestä purjehduksesta. Pari vuosikymmentä kestänyt kiista hämmästytti eurooppalaisia; kysymyshän oli vanhan mantereen vuosisatoja kestäneestä käytännöstä. Taloudellisiin perusteluihin amerikkalaiset eivät kiistan aikana juuri vedonneet, vaikka tulleilla oli suoraa ja epäsuoraa – joskin vaikeasti mitattavaa – vaikutusta Yhdysvaltain Pietarin-kauppaan. Joka tapauksessa amerikkalaisten aktiivisuus johti juutintullien poistoon vuonna 1857.

1700-luvun lopun kauppayhteyksiä hankaloitti luotettavan informaation saanti Pietarista. Ei ole ihme, että vastoinkäymisten jälkeen Pietaria lähestyttiin varovaisesti Kööpenhaminasta, Göteborgista ja Hampurista käsin. Tässä vaiheessa – kuten myöhemminkin – ongelmaksi muodostui myös sopivimman kauppakumppanin löytäminen oudosta Pietarista. Ratkaisevassa asemassa olivat alusten kapteenit, jotka periaatteessa olivat omistajien agentteja, mutta venäläisessä ympäristössä toimivat varsin itsenäisesti eivätkä aina alusten ja lastien omistajien toiveiden mukaisesti. Pietarilaisten kilpailu amerikkalaislasteista oli varsin kovaa. Kapteenien lahjonta oli yksi varmimmista keinoista saada amerikkalaisalus omalle kauppahuoneelle. Nämä liiketoimet olivat julkista salaisuutta, johon valtameren takana olevan ja usein kohtuullisen voiton itsekkin saaneen kauppahuoneen oli lähes mahdotonta puuttua. Sama koski venäläisten tullivirkailijoiden lahjontaa.

Osto- ja myyntipäätökset tarvitsivat tuekseen edes jossain määrin luotettavaa tietoa. Liikekumppanien lähettämät tiedot Havannasta, Pietarista ja Kööpenhaminasta olivat Bostoniin tullessaan usein jo vanhentuneita. Normaaleina pidettyinä vuosina Havannassa tai Bostonissa tehdyissä raakasokerin ostopäätöksissä ratkaisevaa oli se, kuinka paljon tuotetta arvioitiin Pietariin vietävän.

Tämä puolestaan johti Kuubassa monenlaisiin hämäysoperaatioihin, jossa raakasokerin hinnat olivat sivuseikka.

Kapteenit saivat matkoille lähtiessään työnantajiltaan toimintaohjeita, jotka saattoivat olla hyvin yksityiskohtaisia. Käytännössä omistajien toiveita tulkittiin ja niitä oli pakkokin tulkita hyvin väljästi. Bostonissa ja Salemissa ei voitu keväällä tietää millaiseksi eri tuotteiden myynti- ja ostohinnat kesän aikana Länsi-Intiassa, Etelä-Euroopassa tai Itämeren alueella muodostuisivat. Lastia koskevien päätösten teko jäi siten usein laivapäällystölle. Rahoitusjärjestelyistä annettuja määräyksiä toteltiin sen sijaan hämmästyttävän tarkasti niin Havannassa kuin Pietarissakin.

Amerikkalais-venäläisen kaupan toteuttajina olivat amerikkalaiset kauppiat ja kauppavaihdosta noin 95 % kulki amerikkalaisilla aluksilla. Pietarissa amerikkalaiset asioivat lähinnä englantilaisten ja saksalaisten kauppahuoneiden kanssa. Amerikkalaistaustaisia, merkittäviksi katsottavia kauppiaita kaupungissa oli vain kaksi: John D. Lewis ja William Ropes. Lewisin kauppahuone oli 1810-luvun lopulla ja 1820-luvulla Pietarin suurimpia ja valtaosa amerikkalaisista kävi kauppaa hänen kanssaan. Tärkein yksittäinen yritys amerikkalaiskaupan kannalta oli 1820-luvun lopulta lähtien Ludwig Stieglitzin kauppahuone. Yleisesti ottaen amerikkalaiskauppa Pietarissa oli keskittynyt perin harvojen kauppahuoneiden käsiin.

Yhdysvalloissa Venäjän-kauppaa hallitsivat Uuden Englannin yrittäjät. Salemin William Gray lienee kauppias, joka lähetti Pietariin useimpia aluksia kuin kukaan muu. Aluksi Pietarin-purjehdukseen osallistui aktiivisesti kymmenkunta uuden Englannin kaupunkia, mutta 1820-luvulta lähtien kauppa keskittyi yhä enenevässä määrin Bostoniin.

Amerikkalaisen purjemerenkulun kilpailukyky perustui 1800-luvun alussa halpoihin rakennuskustannuksiin. Laivanrakennus oli ala, joka oli kiinteästi yhteydessä Pietarin-kauppaan, sillä lähes kaikki koillisrannikon laivaveistämöt käyttivät tuontirautaa ja Venäjä oli sen tärkeimpiä toimittajia. Vielä keskeisempi osuus Pietarilla oli hampun, ja alusten purjealustentakilointiin käytettävien materiaalien toimittajana. Yleisimmät Pietarin-purjehtijat olivat kolmimastoisia 200-400 tonnin ship -tyypin aluksia 1840-luvulle saakka. Puuvillarahtauksen myötä alusten koko yli kaksinkertaistui kun nopeudestaan kuuluisat, mutta Itämeren satamiin hieman liian suuret klipperit saapuivat Itämerelle 1850-luvulla. 1800-luvun alussa Juutinrauman kautta purjehtineiden alusten kantavuus oli keskimäärin vain kolmannes siitä mitä 1850-luvun lopulla.

Alusten rakenteissa tehdyt muutokset ovat yksi selitys sille, että amerikkalaisalusten Itämerellä kuluttama aika lyheni. Kronstadtiin täydessä lastissa menneiden ja sieltä lastin ottaneiden alusten käyttämä aika supistui 60 vuodessa peräti 20 päivällä. Itämeren satamissa alukset viipyivät keskimäärin kaksi kuukautta eli suunnilleen saman ajan kuin niiltä kului Havannan ja Helsingörin väliseen matkaan. Bostonista Pietariin päästiin pari viikkoa nopeammin. Paluumatka Pietarista Pohjois-Amerikan itärannikolle kesti sekin normaalisti pari kuukautta. Kaksi kertaa Pohjois-Amerikasta Pietariin purjehtineet alukset eivät

olleet harvinaisuuksia, mutta yleistä tapa ei ollut William Ropesin kauppahuoneen aluksia lukuun ottamatta.

Vuosien 1783-1860 välisenä aikana Juutinrauman kautta venäläisiin satamiin purjehti noin 3300 alusta, lähes kaikki Pietariin. Näistä aluksista 2/3 oli kotoisin Massachusettsista ja 4/5 Uuden Englannin kaupungeista. Massachusetts säilytti johtoasemansa 1850-luvulle saakka, jolloin tärkeimmäksi laivanrakennusalueeksi kehittyneen Mainen alukset nousevat enemmistöksi. Vaikka New Yorkista kasvoi Yhdysvaltojen ylivertaisesti tärkein ulkomaankaupan satama, Itämeren kauppa säilyi bostonilaisten hallussa. Viimeistään 1830-luvulla Boston nousi hallitsevaan asemaan ja lopulta tilanne muodostui sellaiseksi, että Massachusettsista ja koko Uudesta Englannista vain bostonilaiset kauppahuoneet harjoittivat Pietarin-purjehdusta. Valtaosa New Yorkin Itämeren-kaupasta kulki massachusettsilaisin aluksin. New Yorkin vetovoimaa lisäsivät laajemmat markkinat ja paremmat rahoitusmahdollisuudet.

Itämerelle purjehtineet amerikkalaisalukset voi vuoteen 1810 saakka jakaa kahteen pääryhmään: siirtomaatuotteita Yhdysvalloista Kööpenhaminaan vievät ja Länsi-Euroopan satamista painolastissa Pietariin purjehtineet. Kööpenhaminan keskeinen osuus on paljolti laskettava Ryberg & Co:n toiminnan tiliin. Kauppahuone onnistui luomaan Tanskan pääsatamasta amerikkalaisille sopivan välisataman siirtomaatuotteiden myyntiin ja osittain myös venäläisten tuotteiden ostoon. Vuoden 1815 jälkeen suorat purjehdukset Yhdysvalloista Venäjälle lisääntyivät jyrkästi, vaikka vielä noin puolet Atlantin yli tulleista aluksista suunnistikin entiseen tapaan Kööpenhaminaan. Joinakin vuosina myös Tukholma ja saksalaiset satamat olivat amerikkalaisten suosiossa. Monista eri syistä Kööpenhaminan kaupallinen merkitys heikkeni Itämeren alueella 1800-luvun alussa ja samalla tanskalaiset menettivät myös välitysasemansa amerikkalaiskaupassa. Asiaan ei tuonut muutosta Tanskan ja Yhdysvaltain välinen vuoden 1826 kauppasopimukseen.

Aina 1820-luvun loppuun asti suuri osa amerikkalaisista Helsingörin ohitaneista aluksista purjehti tyhjänä Pietariin paluukastin hakuun. 1830-luvulla itään suuntautunut painolasti-purjehdus kääntyi vastakkaiseen suuntaan todistaen sitä, että pietarilaisilla tuotteilla ei enää ollut entisenlaista kysyntää Yhdysvaltain itärannikon satamissa. Yksi tapa välttää lastitta palaaminen Itämereltä oli ottaa suomalainen puutavaralasti Viipurista tai Haminasta Länsi-Eurooppaan ja tätä mahdollisuutta käytettiin suhteellisen runsaasti. Brittisatamien avautuminen 1850-luvulla lisäsi sekä venäläisen että suomalaisen puutavaran vientiä.

Venäjän ja Yhdysvaltain välisiä kauppasuhteita eivät hallinneet kummankaan maan omat tuotteet. Tämän aseman sai 1820-luvulla kuubalainen raakasoikeri. Noin kolmannes Juutinrauman kautta Venäjälle menneistä amerikkalaisista aluksista oli lähtöisin Kuubasta. Sokerikolmion synty 1820-luvulla ja sen hiipuminen Krimin sodan vuosiin oli merkittävin yksittäinen tekijä amerikkalaisessa Pietariin suuntautuneessa purjehdusmerenkulussa. Amerikkalaisilla oli siirtokunta-ajalta perityt tiiviit liikesuhteet Kuubaan, jotka vain vahvistuivat sen jälkeen kun Espanja oli avannut saaren satamat kansainväliselle purjehduk-

selle. Yhdysvaltain ostamasta raakasokerista 2/3 tuli vuoden 1850 tienoilla Kuubasta. Osa siitä meni jälleenvientiin, mutta tällä tavalla Venäjälle päätyneet määrät olivat vähäisiä verrattuna Havannan ja Pietarin välisen suoran kaupan määriin.

Venäjä päätyi 1820-luvulla tullipolitiikkaan, joka edisti maan omien, "modernia teollisuutta" edustavien puhdistamojen syntyä. Tämä antoi Havannan hyvälaatuiselle raakasokerille erinomaiset mahdollisuudet, sillä puhdistetun eurooppalaisen sokerin tuonti Venäjälle tehtiin käytännössä mahdottomaksi. Raakasokerin kaiketi fiskaalisista syistä kannetut tullit olivat niin korkeat, että Ukrainassa viljelty juurikassokeri nousi vähitellen Kuubalaisen ruokosokerin vaaralliseksi kilpailijaksi.

Kuubalaisen raakasokerin hyvä laatu takasi sen, että painotulleina kanne-
tut venäläiset tuontimaksut antoivat sille selvän kilpailuedun. Ruokosokeri oli oikeastaan ainoa artikkeli, jonka kohdalla venäläisiä markkinoita hallitsemaan tottuneet britit joutuivat tekemään tilaa amerikkalaisille. Amerikkalaisten soke-
rikolmio tarkoitti purjehdusta Uudesta Englannista Kuuban kautta Pietariin ja sieltä takaisin Yhdysvaltain koillisrannikolle. Amerikkalaiset toimittivat kau-
pungin Pietarin puhdistamoille parhaimmillaan lähes 80 % niiden tarvitsemasta raaka-
aineesta. Sokerikolmion purjehdukseen osallistui keskimäärin kolmisen-
kymmentä alusta vuosittain. Suurimmillaan amerikkalaisten kuljettamat määrät olivat vuonna 1851, jolloin Juutinrauman kautta rahdattiin yli 55 milj. naulaa ja siitä meni Pietariin 53 milj. naulaa (24 500 tonnia). Samana vuonna amerikkalaiset kuljettivat esimerkiksi raakapuuviillaa Pietariin vajaa 9 milj. naulaa, riisiä 200 000 naulaa ja kahvia 17 000 naulaa.

Sokerikolmion purjehtijat lähtivät Uudesta Englannista usein vuodenvaihteessa ja uuden sokerisadon ensimmäisten erien odottajia oli runsaasti Havannan edustalla jo tammikuun lopussa. Alukset tulivat Kuubaan tyhjinä tai vilja- ja puutavaralastissa. Sokerikolmion perusmalliin kuului myös se, että osa soke-
riostoista rahoitettiin Pietarista tuoduilla tuotteilla myymällä ne joko Yhdysvalloissa tai Kuubassa. Sokerikauppa oli ala, jossa poikkeuksellisesti oli mukana myös runsaasti venäläistä rahaa. Silti suurin osa tämänkin liiketoimen rahoituksesta tuli tavalla tai toisella Lontoosta. Sokerikauppa sisälsi monia riskejä, joista osa liittyi kuubalaisen sokerin suuriin hintavaihteluihin, osa kaksi tai kolme kuukautta kestäväen merimatkan ongelmiin ja lopuksi vielä Venäjän arvaamattomaan tullipolitiikkaan. Lisäksi lähes täysin yhteen tuotteeseen kiinnit-
tyneen amerikkalaisen kauppamerenkulun haavoittuvuus tuli korostetun selvästi esille 1840-luvulla kun hurrikaanit tuhosivat suuren osan Kuuban sokerisadosta. Pietariin ei saatu tarpeeksi raakasokeria ja sen vuoksi venäläiset tekivät päätöksen, jota amerikkalaiset olivat pelänneet parikymmentä vuotta: puhdistetun brittisokerin maahantuonti sallittiin. Amerikkalaisten monopoliasema murtui muutamaksi vuodeksi, mutta 1850-luvun alussa vienti kasvoi suuremmaksi kuin koskaan aikaisemmin.

Koko ajanjakson ajan Itämeren amerikkalaispurjehdus perustui tavalla tai toisella Pietarin vetovoimaan. Aluksi venäläiset vientituotteet hamppu, rauta sekä pellava- ja hamppukankaat olivat houkuttimena ja sen jälkeen kuubalai-

nen sokeri. Viime vaiheessa mukaan tuli amerikkalainen raakapuuvilla, jolla venäläiset halusivat korvata brittien tuoman puolivalmisteen, puuvillalangan. Tavoitteena oli oman puuvillateollisuuden kehittäminen.

Vuosina 1783-1860 Juutinraumasta suurin osa länteen purjehtineiden amerikkalaisalusten kapteeneista ilmoitti määräsatomakseen jonkin Yhdysvaltain itärannikon sataman. Venäjältä lähteneistä 4800 aluksesta yli 2900 valitsi tämän vaihtoehdon. Loput siirtyivät Länsi-Euroopan satamiin tai ilmoittivat purjehtivansa "Pohjanmerelle". Määräsatomien kirjo oli runsas: Itämeren alueen venäläisistä satamista lähteneet ilmoittivat kaikkiaan 85 Helsingörin länsipuolella olevaa määräsatomaa (Yhdysvalloissa 28). Alkuvuosina suurin osa aluksista palasi Massachusettsiin (useimmiten Bostoniin tai Salemiin) tai Rhode Islandiin (tavallisimmin Newportiin tai Providenceen). 1800-luvun ensimmäisinä vuosina näiden rinnalle nousi New York, mutta 1820-luvulle saakka oli yleistä, että suuri osa Venäjältä palaavista aluksista suunnisti ainakin Juutinrauman tullitilastojen mukaan Uuden Englannin pienehköihin satamakaupunkeihin, joita edellä mainittujen lisäksi olivat muun muassa Newburyport, Marblehead, Bristol ja Portsmouth. Kauppatapejen ohella ehkä paikallispatriotismi vaikutti siihen, että alukset palasivat kotisatamiinsa niin kauan kuin se taloudellisesti oli mielekästä.

Yhdysvaltain ja Venäjän välisen merenkulun rakenteesta tonnistoluvut antavat omalla tavallaan valaisevan kuvan. Ennen Yhdysvaltain määräämää yleistä kauppakieltovuotta 1808 Venäjälle lähteneen ja Pohjois-Amerikkaan palanneen tonniston suhde oli 1:20. Alusmäärien suhde oli suunnilleen sama. Vuoden 1815 ja Yhdysvaltain sisällissodan välisenä aikana jokaista Yhdysvalloista Venäjälle lähtenyttä alusta kohden oli kaksi palavaa. Kaupan ja merenkulun kuva muuttui 1850-luvun lopussa jyrkästi. Esimerkiksi 1859 Yhdysvalloista Venäjälle lähtevää tonnistoja oli maan ulkomaankauppatilaston mukaan lähes 40 000 tonnia, yli kymmenkertainen määrä 1820-luvun keskiarvolukuihin verrattuna. Selvästi tärkeimmäksi lähtösatomaksi nousi New Orleans, mutta parhaimmillaankaan sieltä lähtenyt tonnisto ei yltänyt vilkkaimman sokerikaupan vuosina Kuubasta Pietariin purjehtineen tonniston määrään.

Yhdysvaltain kauppatonnistosta on 1820- ja 1830-luvulla viidenneksen arvioitu purjehtineen täysin maan ulkopuolisessa liikenteessä. Yksi tällaisen toiminnan alue oli Itämeri, mutta siellä toimiva tonnisto ylittää selvästi edellä mainitun viidenneksen. Konsulien laivalistojen perusteella on pääteltävissä, että 1830-luvulta lähtien ehkä noin 45 % Venäjän kaupassa purjehtineesta amerikkalaisesta tonnistosta operoi maiden välisen suoran kaupan ulkopuolella.

Amerikkalainen kauppalaivasto hallitsi täydellisesti Venäjän kauppaa 1830-luvulle sakka: sekä lähtevästä että saapuvasta tonnistosta ei-amerikkalaisten osuus jäi alle viiden prosentin ja Yhdysvaltain viennistä Venäjälle tämän tonniston osuus oli vain pari prosenttia. Yhdysvaltain Venäjän-tuonnista ulkomaalaisen tonniston osuus oli hieman suurempi.

Yhdysvaltain oma vienti Venäjälle koostui pääosin puuvillasta, riisistä ja tupakasta. Amerikkalaisen raakapuuvillan ylivoimaisesti suurin ostaja oli Britannia. Venäjän osuus oli suurimmillaan vain kolmisen prosenttia Yhdysvaltain

viennistä. Venäjän kannalta katsottuna tilanne oli sellainen, että Britannian osuus maan raakapuuvillankin tuonnista nousi 1840-luvun lopulla lähes 80 prosenttiin, vaikka englantilaisen puuvillalangan tuonti jätettiin korkean tullimuurin taakse. Venäjän tarkoitus oli kehittää omaa puuvillan kehruu- ja kutomoteollisuutta. Kuvaavaa on, että britit pystyivät lähes monopolisoimaan amerikkalaista alkuperää olevan raakapuuvillankin kuljetuksen Venäjälle. Periaatteessa amerikkalaisilla olisi tässä vaiheessa ollut erinomainen mahdollisuus aloittaa raakapuuvillan suurrahaus Pietariin. Krimin sodan jälkeen hetken siltä näyttikin: Yhdysvalloista suoraan Venäjälle viedyn puuvillan osuus nousi kolmannekseen maan tuonnista samaan aikaan kun brittiosuus laski noin 50 prosenttiin. Joka tapauksessa puuvilla oli tuote, joka hallitsi ainakin 1820-luvun alusta lähtien Yhdysvaltain kotimaisten tuotteiden vientiä Pietariin. 1850-luvun lopulla puuvillan osuus oli lähes 100 % Yhdysvaltain kokonaisviennistä Venäjälle.

Riisi ja tupakka olivat amerikkalaisten vanhoja vientituotteita, mutta niiden saaminen Venäjän markkinoille oli varsin hankalaa. Etelä-Carolinan riisi jätettiin tavallisesti Kööpenhaminaan ja vain kymmenesosa Itämerelle kuljetusta riisistä päätyi Pietariin. Venäläiset kulutustottumukset eivät suosineet tätä tuotetta. Sen sijaan tupakalle käyttäjiä oli, mutta amerikkalaiset tuotteet olivat korkeiden tullien vuoksi liian kalliita, hieman oudosta maistuvia ja vain yläluokan suosiossa. Venäläisten omat tuotteet ja Turkista tullut tupakka oli tutumpaa. Pietarin tuontitupakan markkinoita hallitsivat asiantuntijain ottein bremeniläiset kauppiaat, joiden tehtaissa Marylandin tupakka lajiteltiin ja käsiteltiin Pohjois-Euroopan markkinoille sopivaan muotoon.

Yhdysvaltain Venäjän-tuonnin tärkein tuote oli aluksi kankirauta, jonka kohtalona oli joutua korkeiden amerikkalaistullien puristukseen ja sen ohella tiukkaan hintakilpailuun ensin ruotsalaisen raudan ja sitten putlatun brittiraudan kanssa. Karkeasti yleistäen: venäläinen rauta hävisi tämän kilpailun viimeistään 1840-luvulla. Yhtenä syynä oli se, että Pietarista Yhdysvaltoihin palaavien alusten määrä väheni ja siten usein painolastina kuljetetun raudan vienti supistui. Venäläisille raudantuottajille amerikkalaiset olivat elintärkeitä asiakkaita. Ennen brittiläisen raudan suurtuotantoa Englanti oli ostanut valtaosan venäläisestä raudasta. Amerikkalaiskysyntä ei läheskään korvannut menetettyjä markkinoita, mutta auttoi venäläistä raudantuotantoa pysymään edes sillä tasolla kuin se oli 1700-luvun lopulla. Juutinrauman tilastojen mukaan vuosien 1815 ja 1850 välisenä aikana 98 % amerikkalaisten Itämereltä ostamasta raudasta päätyi Yhdysvaltoihin. Tästä määrästä 60 % oli peräisin Pietarista ja 38 % Tukholmasta. Venäläinen rauta kuljetettiin Yhdysvaltoihin amerikkalaisin aluksin, mutta ruotsalaiset kuljettivat itse rautansa Atlantin yli. Venäläisen kankiraudan supistuneita amerikkalaismarkkinoita korvasi osittain Euroopan parhaana pidetty levyrauta, jota tuotiin Yhdysvaltoihin huomattavia määriä vielä 1850-luvullakin.

Aivan oman ryhmänsä Yhdysvaltain tuonnista muodostivat venäläiset hamppu- ja pellavakankaat, "manufactures". Ne olivat laadukkaita, käsin valmistettuja ja suhteellisen halpoja tuotteita, joita laivattiin Pietarista huomatta-

van suuria määriä 1840-luvun puoliväliin saakka. Tietyllä tavalla paradoksaalista oli, että esimerkiksi 1840-luvun alussa Yhdysvalloista vietiin Venäjälle tuhansia tonneja raakapuuvillaa ja samaan aikaan sieltä tuotiin valmiita hamppuja ja pellavakankaita, joiden arvo oli kymmenkertainen puuvillaan verrattuna.

Yhdysvaltain tärkeimmäksi kauppakumppaniksi jäi itsenäistymisen jälkeenkin entinen emämaa Englanti. Etenkin brittipainotteisena pysyvä tuonti vaikutti siihen, että kaupan rahoitus tuli tavalla tai toisella hoitumaan maailmankaupan keskuksiksi kehittyneen Lontoon kautta. Lontoon kauppia pankkiirit luotottivat auliisti amerikkalaisia kauppiaita. Se oli yksi syy miksi amerikkalaiskauppiaiden liikekumppaneiksi valikoitui Pietarissa useimmiten englantilaispohjainen kauppahuone. Muutoinkin rahoitusjärjestelyt ja maksuliikenne hoituivat nopeimmin ja vaivattomimmin Lontoon kautta. Yhdysvalloista Pietariin käyty kauppa vaati suhteellisen suuria pääomia eikä ole ihme, että kaupan avaajina 1780-luvulla olivat Uuden Englannin varakkaimmat kauppahuoneet. Omalla pääomalla operointi oli heille mahdollista, mutta samaa ei voi sanoa niistä "pienyrittäjistä", joita tulvi Pietariin esimerkiksi Napoleonin mannerjärjestelmän aikana. Tuolloin briteillä oli moniakkin syitä rahoittaa ja rohkaista amerikkalaisia Pietarin-kävijöitä. Amerikkalaiskauppiaiden kirjeenvaihdosta käy selvästi ilmi käyttöpääoman puute ja lähes yhtä usein se, että apu tuli suoraan tai välikäsiä kautta Lontoosta.

Yhdysvaltain Venäjän-kaupan rahoitukseen pietarilaiset kauppahuoneet osallistuivat sokerilaivauksia lukuun ottamatta hyvin harvoin. Pääomaa kaupallisiin yrityksiin väitettiin olevan niukasti ja korkotaso oli huimasti brittiläistä korkeampi. Amerikkalaisten pääomatarvetta ei suinkaan vähentänyt tapa, jolla venäläiset olivat tottuneet myymään tuotteensa englantilaisille. Monet tuotteet myytiin ennakkomaksuja vastaan jo purjehduskautta edeltäneen talven aikana. Tähän tapaan amerikkalaiset eivät hevin taipuneet. He halusivat ostaa ja myydä käteisellä. Käteisostot toki sopivat pietarilaisille, mutta myytäväksi ottamilleen tuotteille he vaativat pitkiä maksuaikoja. Tässäkin tilanteessa brittiraha oli tarpeen.

Amerikkalais-venäläiseen kauppaan erikoistuneita pankkiliikkeitä ei 1800-luvun alkupuolella ollut. Useimmiten amerikkalaiset kääntyivät lontoolaisen Baringien pankkiliikkeen apuun. Liike operoi 1830-luvulla Amerikan-kaupassa lähes puolen miljoonan punnan pääomalla ja siinä suuruusluokassa heillä oli perin vähän kilpailijoita. Baringit olivat ensimmäisiä, jotka operoivat amerikkalaiskaupassa laajamittaisesti luottokreditiveillä. Pankilla oli useita edustusosimuksia etenkin sellaisten amerikkalaisten firmojen kanssa, jotka toimivat aktiivisesti Kuuban sokerikolmiossa. Baringien ote oli aluksi tiukin ehkä bostonilaisilla luottomarkkinoilla, mutta myöhemmin he laajensivat toimintaansa myös New Yorkiin. Brittirahoituksen keskeinen osuus Venäjän-kaupassa ei näy kovinkaan selvästi aikalaisarvioissa. Monissa tapauksissa amerikkalaisrahoituksen osuudeksi arvataan Kuuban operaatioissa 1/3 tai 2/3 ja loppurahoituksen väitetään tulleen havannalaisilta tai venäläisiltä. Usein näin muodollisesti olikin, mutta rahavirtojen ohjailu ja riskisijoituksiin vaadittavat päätökset tehtiin kuitenkin Lontoossa.

Absoluuttisin luvuin laskettuna Venäjä ei muodostanut Yhdysvalloille kovinkaan tärkeää kauppakumppania itsenäistymisen ja sisällissodan välisenä aikana. Tuotteiden arvon mukaan laskettu kauppataase oli perin synkkää tarkasteltavaa niille, jotka pitivät vientivoittoista lopputulosta tavoitteena. Virallisten kauppatilastojen luvut kertovat kuitenkin vain osan amerikkalais-venäläisestä kaupasta. Tilastoihin ei tarttunut amerikkalaispurjehduksen valtavirta, joka kulki Kuubasta Pietariin eikä se liikenne, joka suuntautui ajanjakson alkupuolella Etelä-Euroopasta Venäjälle. Sama koskee sitä purjehdusta, joka vei venäläisiä tuotteita Suomenlahdelta Länsi-Eurooppaan ja Etelä-Amerikkaan. Jos näistä purjehduksista kertyneet rahtitulot ja liikevoitot lisätään kauppataaseen lukuihin, tilanne näyttää amerikkalaisten kannalta huomattavasti edullisemmalta. Eikä pidä unohtaa kauppavaihdon toistakaan osapuolta, Venäjää. "Amerikan" osuus Pietarin ulkomaankaupasta laskettiin noin 10 prosentiksi. Virallisten tilastojen ulkopuolelle jää sen lisäksi uusimman amerikkalaisen rautatieteknologian ja laivanrakennustietouden tulo Venäjälle. Amerikkalaisten rahtaama raakasokeri ja puuvilla antoivat kaiken lisäksi merkittävän sysäyksen Pietarin modernin tehdasteollisuuden syntyyn.

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APPENDIX

Treaty of Commerce and Navigation

(Concluded December 12, 1832; ratifications exchanged at Washington May 11, 1833; proclaimed May 11, 1833.)

In the name of the most Holy and Indivisible Trinity.

The United States of America and His Majesty the Emperor of all the Russias, equally animated with the desire of maintaining the relations of good understanding which have hitherto so happily subsisted between their respective States, and of extending and consolidating the commercial intercourse between them, have agreed to enter into negotiations for the conclusion of a treaty of navigation and commerce; for which purpose the President of the United States had conferred full powers on James Buchanan, their Envoy Extraordinary and Minister Plenipotentiary near His Imperial Majesty; and His Majesty the Emperor of all the Russias has conferred like powers on Sieur Charles Robert Count de Nesselrode, his Chancellor, Knight of the Orders of Russia, and many others, &c.;

And the said Plenipotentiaries having exchanged their full powers, found in good and due form, have concluded and signed the following articles:

Article I

There shall be between the territories of the high contracting parties a reciprocal liberty of commerce and navigation. The inhabitants of their respective states shall mutually have liberty to enter the ports, places, and rivers of territories of each party wherever foreign commerce is permitted. They shall be at liberty to sojourn and reside in all parts whatsoever of said territories in order to attend to their affairs; and they shall enjoy, to that effect, the same security and protection as natives of the country wherein they reside, on condition of their submitting to the laws and ordinances there prevailing, and particularly to the regulations in force concerning commerce.

Article II

Russian vessels arriving either laden or in ballast in the ports of the United States of America, and reciprocally vessels of the United States arriving either laden or ballast in the ports of the Empire of Russia, shall be treated, in their entrance, during their stay, and at their departure, upon the same footing, as national vessels coming from the same place, with respect to their duties of tonnage. In regard to light-house duties, pilotage, and port charges, as well as to the fees and perquisites of public officers, and all other duties and charges, of whatever kind or denomination, levied upon vessels of commerce, in the same name or to the profit of the Government, the local authorities, or of any private establishment whatsoever, the high contracting parties shall reciprocally treat each other upon the footing of the most favoured nations with whom they have not treaties now actually in force, regulating the said duties and charges on the basis of an entire reciprocity.

Article III

All kind of merchandise and articles of commerce, which may be lawfully imported into the ports of the Empire of Russia in Russian vessels, may also be so imported in vessels of the United States of America, without paying other or higher duties, or charges, of whatever kind or denomination, levied in the name or to the profit of the Government, the local authorities, or of any private establishment whatsoever, than if the same merchandise or articles of commerce had been imported in Russian vessels. And, reciprocally, all kind of merchandise and articles of commerce, which may be lawfully imported into the ports of the United States of America in vessels of the said States, may also be so imported in Russian vessels, without paying other or higher duties or charges, of whatever kind or denomination, levied in the name or to the profit of the Government, the local authorities, or of any private establishment whatsoever, than if the same merchandise or articles of commerce had been imported of the United States of America.

Article IV

It is understood the stipulations contained in two preceding articles are to their full extent applicable to Russian vessels and their cargoes arriving in the ports of the United States of America, and reciprocally to vessels to said States and their cargoes arriving in the ports of the Empire of Russia, whether the said vessels clear directly from the ports of the country to which they respectively belong or from the ports of any other foreign country.

Article V

All kinds of merchandise and articles of commerce, which may be lawfully exported from the ports of the United States of America in national vessels, may also be exported therefrom in Russian vessels without paying other or higher duties or charges, of whatever kind or denomination, levied in the name or the profit of Government, the local authorities, or of any private establishments whatsoever, than if the same merchandise or articles of commerce had been exported in vessels of the United States of America. And, reciprocally, all kind of merchandise and articles of commerce, which may be lawfully exported from the ports of the Empire of Russia in national vessels, may also be exported therefrom in vessels of the United States of America, without paying other or higher duties of charges, of whatever kind or denomination, levied in the name or to the profit of the Government, the local authorities, or of any private establishment whatsoever, than if the same merchandise or articles of commerce had been exported in Russian vessels.

Article VI

No higher or other duties shall be imposed on the importation into the United States of any article the produce or manufacture of Russia, and no higher or other duties shall be imposed on the importation into the Empire of Russia of any article the produce or manufacture of the United States, than are or shall be payable on the like article being the produce or manufacture of any other foreign country. Nor shall any prohibition be imposed on the importation or exportation of any article the produce or manufacture

of the United States or of Russia, to or from the ports of the United States, or to or from the ports of the Russian Empire, which shall not equally extend to all other nations.

Article VII

It is expressly understood that the preceding articles II, III, IV, V and VI, shall not be applicable to the coastwise navigation of either of the two countries, which each of the high contracting parties reserves exclusively to itself.

Article VIII

The two contracting parties shall have the liberty of having in their respective ports Consuls, Vice-Consuls, Agents, and Commissaries, of their own appointment, who shall enjoy the same privileges and powers as those of the most favored nations; but if any such Consul shall exercise commerce, they shall be submitted to the same laws and usages to which the private individuals of their nation are submitted, in the same place.

He Consuls, Vice-Consuls, and Commercial Agents shall have the right, as such, to sit as judges and arbitrators in such differences as may arise between the captains and crews of the vessels belonging to the nation whose interests are committed to their charge, without the interference of the local authorities, unless the conduct of the crews or of the captain should disturb the order or the tranquillity of the country, or the said Consuls, Vice-Consuls, or Commercial Agents should require their assistance to cause their decisions to be carried into effect or supported. It is, however, understood that this species of judgment or arbitration shall not deprive the contending parties of the right they have to resort, on their return, to the judicial authority of their country.

Article IX

The said Consuls, Vice-Consuls, and Commercial Agents are authorized to require the assistance of the local authorities, for the research, arrest, detention and imprisonment of the deserters, proving, by the exhibition of the registers of the vessels, the rolls of the crews, or by other official documents, that such individuals formed part of the crews; and this reclamation being thus substantiated, the surrender shall not be refused.

Such deserters, when arrested, shall be placed at the disposal of the said Consuls, Vice-Consuls, or commercial Agents, and may be confined in the public prisons, at the request and cost of those who shall claim them, in order to be detained until the time when they shall be restored to the vessels to which they belong, or sent back to their own country by a vessel of the same nation or any other vessel whatsoever. But if not sent back within four months from the day of their arrest, they shall be set at liberty, and shall not be again arrested for the same cause.

However, if the deserter should be found to have committed any crime or offence, his surrender may be delayed until the tribunal before which his case shall be depending shall have pronounced its sentence, and such sentence shall have been carried into effect.

Article X

The citizens and subject of each of the high contracting parties shall have power to dispose of their personal goods within the jurisdiction of the other, by testament, donation, or otherwise, and their representatives, being citizens or subjects of the other party, shall succeed to their said personal goods, whether by testament or ab intestato, and may take possession thereof, either by themselves, or by others acting for them, and dispose of the same at will, paying to the profit of the respective Governments such dues only as the inhabitants of the country wherein the said goods are shall be subject to pay in like cases. And in case of the absence of the representatives, such care shall be taken of the said goods as would be taken of the goods of a native of the same country in like case, until the lawful owner may take measures for receiving them. And if a question should arise among several claimants as to which of them said goods belong, the same shall be decided finally by the laws and judges of the land wherein the said goods are. And where, on the death of any person holding real estate, within the territories of one of the high contacting parties, such real estate would by the laws of the land descend on a citizen or subject of the other party, who by reason of alienage may be incapable of holding it, he shall be allowed the time fixed by the laws of the country; and in case the laws of the country actually in force may not have fixed any such time, he shall then be allowed a reasonable time to sell such real estate, and to withdraw and export the proceeds without molestation, and without paying to the profit of the respective Governments any other dues than those to which the inhabitants of the country wherein said real estate is situated shall be subject to pay in like cases. But this article shall not derogate in any manner from the force of the laws already published, or which may hereafter be published, by His Majesty the Emperor of all the Russias, to prevent the emigration of his subjects.

Article XI

If either party shall hereafter grant to any other nation any particular favor in navigation or commerce, it shall immediately become common to other party, freely, where it is freely granted to such a nation, or on yielding the same compensation, when the grant is conditional.

Article XII

The present treaty, of which the effect shall extend in like manner to the Kingdom of Poland, so far as the same may be applicable thereto, shall continue in force until the first day of January, in the year of our Lord one thousand eight hundred and thirty-nine, and if, one year before that day, one, of the high contracting parties shall not have announced to the other, by an official notification, its intention to arrest the operation thereof, this treaty shall remain obligatory one year beyond that day, and so until the expiration of the year which shall commence after the date of a similar notification.

Article XIII

The present treaty shall be approved and ratified by the President of the United States of America, by and with the advice and consent of the Senate of the said States, and by

His Majesty the Emperor of all the Russians, and the ratifications shall be exchanged in the city of Washington within the space of one year, or sooner if possible.

In faith whereof the respective Plenipotentiaries have signed the present treaty in duplicate, and affixed thereto the seal of their arms.

Done at St. Petersburg the sixth/eighteenth December, in the year Grace one thousand eight hundred and thirty-two.

(Seal.)

JAMES BUCHANAN

(Seal.)

COMTE DE NESSELRODE

Separate Article

Certain relations of proximity and anterior engagements having rendered it necessary for the imperial Government to regulate the commercial relations of Russia with Prussia and the Kingdoms of Sweden and Norway by special stipulations, now actually in force, and which may be renewed hereafter; which stipulations are in no manner connected with the existing regulations for foreign commerce in general: The two high contracting parties, wishing to remove from their commercial relations every kind of ambiguity or subject of discussion, have agreed that the special stipulations granted to the commerce of Prussia, and of Sweden and Norway, in consideration of equivalent advantages granted in these countries, by the one to the commerce of the Kingdom of Poland and by the other to that of the Grand Duchy of Finland, shall not, in any case, be invoked in favor of the relations of commerce and navigation sanctioned between two high contracting parties by the present treaty.

The present separate article shall have the same in force and value if it were inserted, word for word, in the treaty signed this day, and shall be ratified at the same time.

In faith whereof we, the undersigned, by virtue of our respective full powers, have signed the present separate article, and affixed thereto the seals of our arms.

Done at St. Petersburg the sixth/eighteenth of December, in the year of Grace one thousand eight hundred and thirty-two.

(Seal.)

JAMES BUCHANAN

(Seal.)

COMTE DE NESSELRODE

Sources: Copies of treaty e.g.: Malloy 1910, vol. II, 1514-1519, and Miller 1942, vol. III, 723-734.

LIST 1

The total exports and imports of St Petersburg are calculated from the following unpublished sources. Printed sources (e.g. Kirchner 1975) are mentioned in footnotes.

NA: CR M-81/3-5.

PRO, FO 65: 99, 110, 137, 140, 144, 150, 160, 167, 174, 182, 188, 194, 215, 219, 227, 228, 236, 246, 255, 263, 274, 293, 302, 303, 313, 314, 327, 337, 353, 360, 373, 381, 397, 413, 434, 477, 522.

PRO, FO 181: 44, 47, 66, 167, 190.

PRO, FO 184: 8, 11.

PRO, Miscellanea 6; 68.

LIST 2**WEIGHTS AND MEASURES**

(Used in the study)

Ahm

(A measure of capacity used e.g. for wine, brandy, rum and oils)

1 ahm = 4 ankers = 20 viertels = c.151 litres

Anker

(A measure of capacity used e.g. for wine, rum, olives, and oils)

1 anker = 5 viertels = 37,7 litres

Arroba

(A Spanish and Portuguese unit of weight, also a unit of liquid measure)

1 arroba (Port.) = 32,4 pounds (Port.)

1 arroba (Sp., sugar) = 25 US pounds (lbs) = c.12.4 kilogrammes

1 arroba (Sp., wein) = 4,25 gallons (US) = c. 16.2 litres

Arshine (also: arsheen, archine)

(A Russian unit for linear measure, used e.g. for Russian manufactures of hemp and flax)

1 archine (Russ.) = 28 inches (US)

100 archines (Russ.) = 77,8 yards (US)

Bag

(A measure of capacity of varying size)

1 bag = for example c. 90 - 170 lbs sugar, c.100-200 lbs coffee, 60-100 lbs pepper, c. 180 lbs isinglass.

Bale

(Usually a unit of weight and unit of linear measure e.g. for cloths)

1 bale *cotton* in St. Petersburg (1858): from Mobile 530 lbs, from New Orleans 460 lbs, from Charleston 410 lbs, from New York 490 lbs, from Liverpool 430 lbs. The average weight of all cotton bales imported to St Petersburg was c. 480 lbs. In 1855 the American cotton bale in Liverpool was in average 438 lbs (from Mobile 504 lbs and from New Orleans 455 lbs).

In 1860 the weight of cotton bales from Alabama, Mississippi and Louisiana were in average 500 lbs, bales from Georgia 375 lbs and bales from South Carolina 352 lbs.

1 bale *tobacco* = 100-600 lbs.

1 bale *ravenduck* = 20 pieces (1000 archines) or 25 pieces (1250 archines).

1 bale *sailcloth* = 10-20 pieces

1 bale *flems* = 10-20 pieces

1 bale *sheeting* or *crash* = 20 pieces

Barrel (Da. tønde)

(A measure of capacity and weight of varying size)

1 barrel *rice* (in 1850) c. 400 lbs

1 barrel *grain* = 3.95 US bushels

1 barrel *rum, wine* = 4 ankers = 151 litres

1 barrel usually also 31.5 US gallons (liquid measure)

Basket (Da. kurv)

A measure of capacity used e.g. for fruits, equal to a box

Berkowitz

(A Russian unit of weight)

1 berkowitz = 10 poods = 400 lbs (Russ.) = 392 lbs (Riga) = 1 skibspund (Da.) = 360 lbs (US)

Botta/ Butt (Da. both)

(Measure of capacity used e.g. for fruits, oils and wine)

1 botta (Sp.) = 30 arrobas wein (Sp.) or 38 1/2 arrobas oil (Sp.) = 12 ankers = 127 ½ gallons = c. 452 litres

Box (Da. kiste, kasse)

(Measure of weight and capacity used usually for fruits and sugar)

According to Fragnals (1976,121,125) the weight of sugarbox was "a merchant's nightmare", usually 17 arrobas (Sp.) net. According to Ely (1964,457,note 4) the weight of Cuban sugarbox in export was 450 lbs. The weight of sugarboxes varied in Elsinore from 16 to 25 arrobas (400-625 lbs). In this study the weight of sugarbox is 420 lbs (net).

Bushel

(Usually a measure of weight and capacity)

1 bushel (at paddy weight) = 40 lbs (Da.) = 45 lbs (US)

According Homans (1858,1634) a bushel of clean rice was 44-48 lbs (US)

As a measure of capacity bushel was equal to c. 35 litres

Cask (Da. fad/fustage)

(A measure of capacity of varying size, used also a measure of weight.

In New Orleans 1852 a cask of *coffee* was 1568 lbs, a cask of *cacao* 1120 lbs and , cask of *pimento* 959 lbs, and cask of *tobacco* 930 lbs.

1 cask *bristles* = 900 lbs

1 cask *tallow* = 800-900 lbs

1 cask *candles* = c. 900 lbs

1 cask *wine* and *rum* = 4 hhds = 24 ankers = 905 litres

1 cask *train oil* = 6 ankers = 226 litres

1 cask *olive oil* = 158 US gallons (according to consul Harris in 1811)

Chetwert (A Russian measure of grain)

1 chetwert was equal about six US bushels or 210 litres

Coil (A measure of weight)

E.g. coil of cordage = 250 - 320 lbs

Foot (Da. fod), a unit of length

1 foot = 12 inches = 30.5 centimeters

1 foot (Russ.) = 13.75 US inches

Gallon (A dry and liquid measure, measure of capacity)

Usually used: 1 US gallon = 3,8 litres

Hogshead /hhd (Da. oxehoved)

(A measure of capacity and weight used e.g. for wine, brandy, rum, sugar, and tobacco)

1 hhd = 6 ankers = c. 226 litres

1 hhd of *rum* and *train oil* from America = 60 gallons (see above)

1 hhd of *muscovado* : from 1350 lbs to 1500 lbs according to port in Cuba (Ely 1964,471)

1 hhd of *sugar* from Cuba = 54 arrobas net (Fraginals 1976,125)

1 hhd of *sugar* from Louisiana: c.1140 - 1150 lbs (Ely 1964, 458)

1 hhd of *molasses* when loadind in Havana = 110 gallons (Sager & Panting 1990,213)

1 hhd of *rum* = 60 gallons

1 hhd of *tobac* =1200 lbs

1 hhd of *quercitron bark* = 1400 lbs

Hundredweight/ cwt (Da. centner)

(Measure of weight used e.g. for iron)

1 cwt = 100 lbs (Da.) or 112 lbs (US) = 49.6 kilogrammes

1 cwt (US) = 3 poods 4 lbs (Russ.)

Last (Da. læst)

(A measure of weight and capacity)

1 last = 6 shippounds = 893 kilogrammes e.g. for tallow, hemp, flax (Johansen 1983, 127)

1 last = 24 barrels for hempseeds and flaxseeds

1 last = 60-96 scheffels

Lispund/ lsb (A measure of weight)

1 lsb = 16 lbs = c. 8 kilogrammes

Piece (Unit for linear measure for cloths)

1 piece of sailcloth, ravenduck, diaper, flems, sheetings etc. = 20-50 arshines

1 "ordinary" piece = c.31 metres

Pipe (A measure of capacity used e.g. for wine, rum, train-oil, fruits)

1 pipe = 3 ahms = 12 ankers = 60 viertel = c. 452 litres

1 pipe = double hogshead = 110-125 gallons

1 pipe (Sp.) = 115 US gallons

1 pipe (Sp.) = 25-27 arrobas as a weight measure

Pood (A Russian measure of weight, *puđ*)

Pood = 40 lbs (Russ.) = 32 lbs (Da.) = 36 lbs (US)

10 poods = 1 berkowitz = 400 lbs (Russ.) = 1 *Sklb* (Da.) used in STA

63 poods usually = 1 ton (US) = 20 cwt (US) = 2240 lbs (US)

Pound/ lb

A measure of weight equal to 454 grammes (US) and 496 grammes (Da).

The weight of pound differs a little e.g. in the US, Britain, Portugal, Spain (Cuba), Russia, but in STA they are equal.

Quintal (A measure of weight)

1 quintal = 100 pounds = 4 arrobas (Sp.)

1 quintal (Pr.) = c. 113 lbs (US)

1 quintal in STA = 100 lbs

Roll (Da.rulle)

A measure of length used for cloths, equal to 50 or 100 feet

Scheffel, a measure of capacity.

70-90 scheffels hemseed or linseed from Russia was equal to one last in STA.

Shippound/ Shlb (Da. skibspund/ Sklb)

A measure of weight used for many diggerent products

1 shippound was usually equal to 320 lbs (Da.) = 20 lispound (Da.) = c. 159 kilogrammes

1 *shippound* in STA = 300 lbs = c. 149 kilogrammes

Tierce, a measure of capacity and weight.

1 tierce *rice* = c. 320 lbs (US)

1 tierce *coffee* = c. 380 lbs (US)

1 tierce e.g. *oils, olives* and *wine* = 4 ankers (Da.) = c. 151 litres

1 tierce = 42 US gallons

Ton, a measure of weight.

1 ton = 63 poods (Russ.)

1 ton = 2240 lbs (US)

Sources: STA 1783-1806, 1815-50, ØTA, DRA; CR, NA T-201/2-4 and M-81/1-6; Johansen 1983a; Ely 1964; Fragnals 1976; Sager & Panting 1990; Thaarup & Martensen 1821; Åstrand 1858; Homans 1858; Hjort 1831.

TABLE 1
The domestic exports of the United States, 1816-60.

Years	Cotton		Tobacco		Rice		Wheat and flour		Manufactures		Total \$million
	\$million	%	\$million	%	\$million	%	\$million	%	\$million	%	
1816-20	24.3	39	9.5	15	2.6	4	11.6	18	4.2	7	61.9
1821-25	24.7	48	5.6	11	1.7	3	5.9	12	5.6	11	51.7
1826-30	26.6	49	5.6	10	2.3	4	6.0	11	6.5	12	54.8
1831-35	41.5	56	6.3	8	2.2	3	6.9	9	7.2	10	74.4
1836-40	64.2	63	8.6	8	2.2	2	6.7	7	9.3	9	101.9
1841-45	51.4	55	8.5	9	2.0	2	7.7	8	10.2	11	94.2
1846-50	59.3	46	7.8	6	2.8	2	24.5	19	14.0	11	129.9
1851-55	98.3	53	11.1	6	2.1	1	23.9	12	25.3	14	186.3
1856-60	148.9	54	17.3	6	2.3	1	36.5	13	33.5	12	278.3

Source: Taylor 1951, 444, 450.

TABLE 2
Destination of U.S domestic exports, 1821-60.

Years	Great Britain		France		West Indies		Germany		Total \$million
	\$million	%	\$million	%	\$million	%	\$million	%	
1821-25	23.7	46	6.1	12	9.9	19	1.4	3	51.7
1826-30	22.7	41	9.0	16	9.6	17	1.6	3	54.8
1831-35	36.1	48	11.3	15	9.9	13	2.4	3	74.4
1836-40	52.6	52	17.1	17	10.8	11	2.8	3	101.9
1841-45	42.8	45	14.1	15	11.2	12	3.9	4	94.2
1846-50	68.6	53	15.2	12	12.8	10	3.9	3	129.8
1851-55	95.2	51	22.6	12	14.6	8	6.5	3	186.3
1856-60	135.7	49	32.1	12	20.1	7	12.4	4	278.3

Note: More domestic exports went to South America and British North America than to Germany.

Source: Taylor 1951, 444, 450.

TABLE 3
Destination of U. S. re-exports, 1816-60.

Years	Great Britain		West Indies		France		Germany		Total \$million
	\$million	%	\$million	%	\$million	%	\$million	%	
1816-20	0.9	5	..	..	2.4	13	1.2	6	18.6
1821-25	0.8	5	5.6	33	1.7	10	1.2	7	17.1
1826-30	0.8	5	7.4	48	1.3	8	1.1	7	15.3
1831-35	1.6	9	7.9	45	1.9	11	1.2	7	17.4
1836-40	2.2	2	5.1	38	1.6	12	0.9	7	13.4
1841-45	1.4	20	2.0	29	0.4	6	0.6	9	7.0
1846-50	1.3	16	2.1	26	0.5	6	0.5	6	8.0
1851-55	3.5	20	2.5	15	0.6	4	0.7	4	16.8
1856-60	3.2	20	3.0	18	0.6	4	1.5	9	16.4

Note: Re-exports to South America are included in the figures for the West Indies.

Source: Taylor 1951, 444, 448.

TABLE 4
U.S. imports for domestic consumption, 1821-60.

Years	Textiles		Iron and steel		Coffee		Sugar		Total
	\$million	%	\$million	%	\$million	%	\$million	%	\$million
1821	18.4	42	3.0	7	2.4	6	2.0	5	89.9
1825	..	..	..	..	2.0	3	2.6	4	56.7
1830	18.4	37	5.7	11	3.2	6	3.9	8	56.8
1835	43.3	36	8.6	7	9.4	8	6.2	5	90.1
1840	23.6	27	7.1	8	7.6	9	4.2	5	118.2
1845	34.1	32	8.9	8	5.4	5	4.0	4	101.5
1850	66.3	33	17.5	11	9.9	6	6.9	4	132.7
1855	67.2	30	23.9	10	15.5	7	13.3	6	230.8
1860	113.0	33	21.2	6	19.6	6	28.9	9	305.0

Source: Taylor 1951, 444-445.

TABLE 5
The origin of U.S. imports, 1821-60.

Years	Great Britain		West Indies		France		Germany		Russia		Total
	\$million	%	\$million	%	\$million	%	\$million	%	\$million	%	\$million
1821-25	30.3	41	14.0	19	6.7	9	1.9	3	2.3	3	73.8
1826-30	27.7	38	12.0	17	8.5	12	2.3	3	2.3	3	72.0
1831-35	44.0	41	15.7	15	15.5	14	3.2	3	2.5	2	107.5
1836-40	50.9	39	18.2	14	23.4	18	4.3	3	2.5	2	131.6
1841-45	35.7	37	12.6	13	16.7	18	2.1	2	1.5	2	93.8
1846-50	57.1	41	15.3	11	25.3	18	5.9	4	1.2	1	140.7
1851-55	112.9	46	24.3	10	31.4	13	12.4	5	1.2	0	247.5
1856-60	120.3	37	41.2	13	42.5	13	16.0	5	1.2	0	321.4

Note: Brazil and China were greater importers than Russia and Germany.

Source: Taylor 1951, 444, 450.

TABLE 6
Exports and imports of principal U.S. states, 1815-60 (millions of dollars).

Years	Massachusetts (Boston)		New York (New York)		Pennsylvania (Philadelphia)		Maryland (Baltimore)	
	Exports	Imports	Exports	Imports	Exports	Imports	Exports	Imports
1815-20	10	0	15	0	6	0	6	0
1821-25	12	16	21	34	9	12	4	4
1826-30	9	13	21	37	6	11	4	4
1831-35	9	17	26	65	4	11	4	4
1836-40	9	18	29	85	4	12	4	6
1841-45	9	19	31	60	3	7	4	4
1846-50	11	28	47	91	5	10	7	5
1851-55	17	40	97	156	6	16	8	6
1856-60	23	43	125	220	6	15	10	9

Years	Louisiana (New Orleans)		South Carolina (Charleston)		Georgia (Savannah)	Alabama (Mobile)	U.S. total	
	Exports	Imports	Exports	Imports	Exports	Exports	Exports	Imports
1815-20	8	0	9	0	0	0	75	107
1821-25	8	4	8	2	5	0	77	80
1826-30	12	5	7	1	4	1	75	79
1831-35	22	11	9	1	6	4	97	117
1836-40	19	12	11	2	7	10	121	142
1841-45	29	8	7	1	4	10	107	103
1846-50	38	8	9	1	5	9	144	149
1851-55	57	13	13	1	6	16	241	253
1856-60	93	20	15	1	12	26	354	331

Note: For total U.S. exports and imports cf. table 5.
Source: Bruchey 1967, table 3N.

TABLE 7
Russian exports, 1802-1860.

Articles	1802		1820		1840		1860	
	1000 sr.	%	1000 sr.	%	1000 sr.	%	1000 sr.	%
Hemp and flax	5 590	30.9	16 180	25.6	21 427	25.1	28 764	15.9
Wheat	1 158	6.4	7 100	11.2	11 074	13.0	37 508	20.7
Rye	1 600	8.8	1 750	2.8	622	0.7	12 117	6.7
Other cereals, flour, etc.	420	2.3	2 040	3.2	2 890	3.4	14 947	8.2
Seeds, all sorts	718	4.0	3 560	5.6	7 820	9.2	15 868	8.7
Wood and wood products	412	2.3	1 128	1.8	2 657	3.1	4 975	2.7
Metals and metal products	1 370	7.6	5 350	8.5	2 872	3.4	2 569	1.4
Fat and lard (tallow)	2 752	15.2	13 700	21.7	15 620	18.3	18 221	10.1
Bristles, down, feathers	225	1.2	1 151	1.8	2 035	2.4	3 155	1.7
Leather	701	3.9	1 495	2.4	3 537	4.1	2 394	1.3
Others	3 154	17.4	9 746	15.4	14 877	17.4	40 865	22.5
Total	18 100	100.0	63 200	100.0	85 431	100.0	181 383	100.0

Notes: The group hemp and flax includes also hemp and linen cloths (manufactures). Assignat rubles have been converted into silver roubles (sr.) on basis of 1.00 silver rouble equivalent to 3.50 assignat roubles.

Source: Blackwell 1970, 431.

TABLE 8
Destination of Russian exports, 1827-53.

Countries	1827-30	1831-35	1849-53
	(%)	(%)	(%)
United States ("America")	5.0	5.3	2.5
Great Britain	49.1	49.8	49.2
Netherlands	6.2	5.1	7.6
France	5.4	4.2	7.1
Turkey and Greece	6.4	9.6	6.7
Prussia	7.8	6.5	5.5
Austria	4.6	5.8	5.2
Others	5.5	13.7	16.2
Total	100.0	100.0	100.0

Notes: In 1827-30 exports to "America" were worth 9.4 million roubles and in 1831-35 10 million roubles. For converting roubles see table 7.

Sources: PRO, FO 65/236 (1827-35); Blackwell 1970,433 (1849-53).

TABLE 9
Russian imports, 1802-1860.

Products	1802		1820		1840		1860	
	1000 sr.	%	1000 sr.	%	1000 sr.	%	1000 sr.	%
Cotton	2 240	17.2	14 780	21.1	15 667	20.1	30 583	19.2
Sugar	1 589	12.2	13 100	18.7	8 400	10.8	5 344	3.4
Fruits, nuts, etc.	402	3.1	1 586	2.3	3 036	3.9	7 121	4.5
Spices	80	0.6	346	0.5	436	0.6	765	0.5
Coffee	302	2.3	2 440	3.5	1 221	1.6	3 768	2.4
Tobacco	54	0.4	339	0.6	1 357	1.7	3 581	2.2
Olive and vegetable oils	201	1.5	1 165	1.7	1 705	2.2	6 193	3.9
Salt	478	3.7	950	1.4	2 210	2.8	4 516	2.8
Wool and wool products	2 100	16.1	6 480	9.2	4 417	5.7	7 565	4.7
Dyes	850	6.5	4 104	5.9	6 224	8.0	9 230	5.8
Others	4 754	36.4	27 790	35.4	33 455	42.8	80 637	50.6
Total	13 050	100.0	70 080	100.1	78 128	100.0	159 303	100.0

Note: 1) For converting roubles see table 7.

Source: Blackwell 1970, 432.

TABLE 10
The origin of Russian imports, 1827-53.

Products	1827-30	1831-35	1849-53
	%	%	%
United States ("America")	10.0	12.6	10.1
Great Britain	42.3	37.8	33.9
Prussia	4.0	4.9	11.2
France	6.9	7.1	10.8
Hanse Towns	14.0	14.4	7.8
Turkey and Greece	4.2	7.9	6.3
Netherlands	2.6	3.2	5.2
Others	16.0	12.1	14.7
Total	100.0	100.0	100.0

Notes: In 1827-30 imports from "America" were worth of 16.4 million roubles and in 1831-35 22.2 million roubles.

Source: Blackwell 1970, 431.

TABLE 11
Exports and imports of St Petersburg by country in 1845.

Country	Import		Export		Total	
	1000sr.	%	1000sr.	%	1000sr.	%
"America & West Indies"	5 865	7.7	2 606	3.2	8 471	5.4
Great Britain	23 346	30.8	38 856	48.0	62 202	39.6
Hanse Towns	7 800	10.3	2 018	2.5	9 818	6.3
France	7 773	10.2	6 450	8.0	14 223	9.1
Netherlands	3 117	4.1	2 953	3.6	6 070	3.9
Italian States	2 754	3.6	6 280	7.8	9 034	5.8
Prussia	5 159	6.8	4 170	5.1	9 329	5.9
Turkey	3 793	5.0	5 120	6.3	8 913	5.7
Others	16 293	21.5	12 518	15.5	28 811	18.3
Total	75 900	100.0	80 971	100.0	156 871	100.0

Source: PRO, FO 65/360

TABLE 12
Number of Russian manufacturing plants in 1804,1830, and 1860.

	1804	1830	1860
Cotton textiles	199	538	1 200
Linen textiles	285	190	117
Tallow, soap, candles, wax	269	1 031	2 515
Sugar	10	57	467
Iron and steel	28	198	693
Others	1 609	3 292	10 346
Total	2 400	5 306	15 338

Source: Falkus 1972, 33.

TABLE 13
Regional distribution of Russian seaborne commerce, 1826-60 (1000 roubles).

Years	Imports			Exports		
	Baltic Sea	White Sea	Black Sea	Baltic Sea	White Sea	Black Sea
1826-30	140.9	1.4	10.6	146.9	9.7	21.8
1836-40	166.8	1.0	22.8	178.0	10.0	60.9
1846-50	59.2	0.4	9.0	53.1	3.7	28.7
1856-60	71.3	0.5	12.0	72.9	6.3	51.6

Note: Years 1826-30 in assignat roubles, 1846-60 in silver roubles.

TABLE 14
American shipbuilding in principal states, 1836-60.

Years	Massachusetts		New York		Maine		U.S. total	
	Number of vessels	Burthen (1000 tons)	Number of vessels	Burthen (1000 tons)	Number of vessels	Burthen (1000 tons)	Number of vessels	Burthen (1000 tons)
1836-40	146	20	58	15	153	28	695	117
1841-45	78	18	40	20	124	26	542	113
1846-50	141	23	88	51	331	75	1 164	255
1851-55	162	69	144	93	333	138	1 249	438
1856-60	111	46	62	45	200	82	1 156	291

Notes: Number of vessels and tonnage are five-years averages. Steamship tonnage is included.

Source: Albion 1961, 406-407.

TABLE 15
Number of different types of vessels built in U.S., 1815-60.

Years	Ships and barks	Brigs	Schooners	Steamers	Total
1815-20	62	110	537	-	709
1821-25	55	136	337	15	543
1826-30	54	110	462	39	665
1831-35	94	110	482	63	749
1836-40	81	83	456	107	727
1841-45	97	72	250	124	543
1846-50	190	154	627	199	1170
1851-55	289	95	611	257	1252
1856-60	176	54	440	229	899

Note: Figures given are five-year averages.

Source: Albion 1961, 406 (Appendix XIV).

TABLE 16
American tonnage employed in U.S. trade, 1821-60.

Years	Exports			Imports		
	Burthen (1000 tons)	Share in export tonnage (%)	Share in export value (%)	Burthen (1000 tons)	Share in import tonnage (%)	Share in import value (%)
1821-25	862	89.7	87.1	812	89.1	93.4
1826-30	929	89.1	86.9	913	87.5	93.7
1831-35	1 125	70.4	76.7	1 082	61.0	90.9
1836-40	1 409	67.3	78.9	1 359	66.4	87.1
1841-45	2 033	68.9	74.8	2 006	68.7	84.9
1846-50	5 517	63.5	70.1	2 693	64.8	82.2
1851-55	3 603	63.7	70.1	3 475	62.9	74.6
1856-60	5 115	67.2	71.3	4 993	67.5	69.2

Notes: The figures for registered tonnage are lower than the usually accepted figures for "total tonnage" including enrolled and licensed tonnage.

Source: Commerce and Navigation, 1821-60

TABLE 17
Registered tonnage by customs districts, 1815-60 (1000 tons).

Years	New York	Boston	Philadelphia	Salem	Bath	Cotton ports	U.S. total
1815-21	168	112	73	29	15	55	820
1825-30	141	107	59	29	17	31	703
1831-35	154	129	49	21	25	35	759
1836-40	188	141	46	21	26	62	852
1841-45	238	168	41	21	36	74	1 018
1846-50	342	230	49	17	56	103	1 351
1851-55	647	387	72	20	107	136	2 119
1856-60	818	417	60	19	148	199	2 501

Notes: The cotton ports are Charleston, Savannah, Mobile, and New Orleans.

Source: Albion 1961,404.

TABLE 18
Total tonnage of principal maritime states, 1815-60 (1000 tons)

Years	Massachusetts	New York	Maine	Connecticut	Maryland	Rhode Island
1815-21	312	270	137	48	137	37
1831-40	469	398	247	65	99	44
1851-60	839	1 431	713	51	160	44

Source: Albion 1961, 403.

TABLE 19
Relative maritime activity of the principal American ports, 1821-60.

Ports	Imports	Total exports	Domestic exports	Foreign exports	Tonnage entered	Tonnage cleared	Registered tonnage
	%	%	%	%	%	%	%
New York	60.3	32.9	29.5	58.6	26.0	21.2	26.7
Boston	15.7	8.4	6.6	21.9	10.0	9.1	16.9
Philadelphia	7.5	3.6	3.2	8.3	3.6	2.9	4.7
Baltimore	3.2	3.7	4.2	3.0	6.0	3.2	5.1
New Orleans	6.6	24.5	26.9	7.3	9.0	10.8	4.3
Charleston	0.9	6.7	7.9	-	2.3	3.3	1.3
Savannah	0.3	4.0	4.6	-	1.4	2.1	0.8
Mobile	0.3	6.3	7.6	-	1.8	2.7	0.5

Source: Albion 1961, 389.

TABLE 20
Tonnage cleared for foreign countries, 1821-60 (1000 tons).

Years	Boston	New York	Salem	Philadelphia	Cotton ports	U.S. Total
1815-21	141	220	..	79	194	961
1825-30	92	241	17	67	269	1 076
1831-35	149	323	16	67	345	1 597
1836-40	186	402	15	70	491	2 093
1841-45	224	424	17	73	622	2 468
1846-50	363	802	28	111	691	3 844
1851-55	579	1 387	41	148	907	5 734
1856-60	640	1 578	36	130	1 257	7 515

Notes: The figures for 1821-25 are state rather than port totals, but were almost the same.

Cotton ports are Charleston, Savannah, Mobile, and New Orleans.

Source: Albion 1961, 393.

TABLE 21
Tonnage entered from foreign countries, 1821-60 (1000 tons).

	Boston	New York	Salem	Philadelphia	Cotton ports	U.S. Total
1815-21	182	235	..	81	152	911
1825-30	123	284	17	81	198	1 044
1831-35	167	413	14	83	241	1 556
1836-40	228	529	13	93	320	2 060
1841-45	261	517	17	84	507	2 246
1846-50	401	940	28	124	577	3 789
1851-55	594	1 695	35	179	655	5 679
1856-60	703	1 855	37	177	976	7 349

Notes: The figures for 1821-25 are state rather than port totals, but were almost the same.

Cotton ports are Charleston, Savannah, Mobile, and New Orleans.

Source: Albion 1961, 393.

TABLE 22
Number of sailings through the Sound, 1783-1860.

Year	Total	American vessels	Year	Total	American vessels
1783	11 233	5	1821	9 177	193
1784	10 955	15	1822	9 490	217
1785	10 274	19	1823	9 214	161
1786	9 025	21	1824	10 547	169
1787	9 774	27	1825	13 146	231
1788	9 259	38	1826	11 065	156
1789	8 858	48	1827	13 023	193
1790	9 746	52	1828	13 264	218
1791	10 465	47	1829	13 456	180
1792	12 120	73	1830	13 197	153
1793	9 930	87	1831	12 964	177
1794	10 518	137	1832	12 202	191
1795	7 969	133	1833	10 985	166
1796	12 113	183	1834	10 605	160
1797	9 623	82	1835	10 255	124
1798	9 508	118	1836	11 924	140
1799	7 848	159	1837	13 115	104
1800	9 048	59	1838	13 982	153
1801	8 988	143	1839	16 214	117
1802	12 184	161	1840	15 662	143
1803	11 629	195	1841	14 735	123
1804	10 580	168	1842	13 957	113
1805	11 537	168	1843	14 945	152
1806	7 140	209	1844	17 375	138
1807	6 240	192	1845	15 950	82
1808	..	36	1846	18 765	71
1809	..	90	1847	21 537	81
1810	2 393	266	1848	16 857	141
1811	2 393	262	1849	18 959	121
1812	13 959	126	1850	19 121	105
1813	1 426	-	1851	19 944	131
1814	8 186	-	1852	17 578	80
1815	8 855	133	1853	21 586	97
1816	8 872	171	1854	16 480	46
1817	13 170	138	1855	15 892	54
1818	12 588	140	1856	20 637	106
1819	10 690	84	1857	..	100
1820	10 922	168	1858	..	92
			1859	..	105
			1860	..	85

Notes: The total number of vessels is not the same in different (or even in the same) sources. For example the US consul in Elsinore produced three different totals for the year 1845 “from the books of toldkammeret”: 16 01, 15 950, and 15 865. According to STA the number of vessels was 15 950. Sources: Johansen 1983a; STA 1783-1806, 1815-1850, ØTA, DRA; CR NA T-201/1-3, and T-195/1-4; Despatches from United States Ministers to Denmark, NA M-41/3; Ojala 1999,51; Macgregor 1834, vol. I, 189; Report from the Select Committee (1856), 75.

TABLE 23
Home ports of American vessels in Russian (the Baltic Sea) trade, 1783-1860.

Years	Boston	Salem	Newbury- port	Marblehead	MA total	Bristol	Providence	Newport	RI total	Portsmouth	Bath	Portland	ME total	New York	Philadelphia	Baltimore	Charleston	Other ports	Total
1783	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1
1784	2	2	-	-	4	-	-	-	-	-	-	-	-	-	1	1	-	-	5
1785	2	2	-	-	6	-	-	-	-	-	-	-	-	-	1	-	-	-	7
1786	4	4	-	-	9	-	-	-	1	-	-	-	-	1	-	-	-	-	11
1787	3	2	-	-	6	-	-	-	-	-	-	-	-	3	-	-	1	1	11
1788	2	2	-	-	4	-	-	2	2	-	-	-	-	1	2	-	-	2	11
1789	6	3	1	1	12	-	-	1	2	-	-	-	-	1	-	-	1	2	18
1790	6	4	1	1	13	-	1	-	4	-	-	-	-	2	2	-	-	-	22
1791	7	2	-	-	10	-	1	1	4	-	-	-	-	4	-	-	1	4	21
1792	9	5	1	-	16	-	1	3	6	-	-	-	-	3	-	1	-	-	26
1793	12	7	4	-	22	-	4	1	5	-	-	-	-	2	1	1	-	-	33
1794	20	8	2	-	35	-	3	1	4	-	-	-	-	1	7	-	-	1	49
1795	19	7	1	-	30	-	4	1	8	2	-	-	-	2	5	1	1	1	49
1796	27	11	2	2	44	-	4	-	6	1	-	-	-	1	2	2	2	1	59
1797	13	7	-	-	21	-	5	-	6	-	-	-	-	1	1	-	-	-	29
1798	10	8	1	-	20	-	3	2	5	1	-	-	-	4	2	1	2	2	38
1799	16	16	1	-	40	-	2	1	4	2	-	-	-	5	1	-	2	1	55
1800	8	2	1	-	13	-	4	1	6	-	-	-	-	-	-	1	-	2	22
1801	20	17	3	1	41	-	3	-	4	1	-	-	-	5	4	1	3	4	63
1802	14	16	7	3	46	-	7	1	11	2	-	-	-	7	1	-	2	1	70
1803	15	17	6	4	42	-	6	2	11	1	-	-	-	5	4	2	3	2	70
1804	11	16	5	3	43	1	7	-	10	1	-	-	-	7	3	2	3	1	70
1805	17	16	4	1	53	-	7	1	10	2	-	-	-	6	-	2	2	2	77
1806	12	18	8	1	53	-	6	1	7	3	-	-	-	12	4	1	-	2	82
1807	16	9	11	2	53	-	5	1	6	4	-	-	-	12	5	-	1	-	81
1815	6	2	4	1	19	2	2	3	7	-	-	-	-	6	1	2	-	3	38
1816	17	6	2	1	31	5	1	-	6	-	-	-	-	9	4	1	-	2	53
1817	14	6	3	2	25	2	1	1	4	-	-	-	-	10	2	1	-	-	42
1818	20	5	3	1	35	1	3	2	6	2	-	-	-	7	-	2	-	-	52
1819	16	4	1	-	22	1	-	-	1	-	-	-	-	1	-	1	-	1	26
1820	31	7	2	-	42	2	2	2	6	-	-	1	1	4	5	2	-	2	62
1821	29	7	-	2	42	5	1	4	10	1	-	1	1	6	3	1	-	3	67
1822	35	10	1	3	53	4	2	3	9	2	-	2	2	9	3	1	-	2	81
1823	19	4	-	-	24	1	-	1	2	1	-	2	2	2	1	-	-	-	32
1824	25	11	4	1	42	3	-	-	3	-	-	1	1	5	1	-	-	-	52
1825	27	7	3	1	44	5	-	-	5	1	-	5	6	5	4	3	-	-	68
1826	28	5	-	1	41	1	-	-	1	2	-	-	-	4	3	-	-	-	51
1827	30	8	2	1	45	1	2	-	3	1	-	-	1	8	3	1	-	-	62
1828	28	12	3	1	47	1	2	-	3	2	-	-	-	5	4	1	-	-	62
1829	34	11	2	-	49	1	-	-	1	2	-	-	1	4	1	1	-	1	60
1830	31	3	1	1	37	-	-	-	-	1	-	-	-	6	1	-	-	1	46

continues

TABLE 23 (continues)

Years	Boston	Salem	Newbury- port	Marblehead	MA total	Bristol	Providence	Newport	RI total	Portsmouth	Bath	Portland	ME total	New York	Philadelphia	Baltimore	Charleston	Other ports	Total
1831	40	3	2	1	48	1	-	-	1	-	-	-	-	7	5	2	-	2	65
1832	45	3	1	1	54	1	2	-	3	2	-	-	-	8	1	-	-	-	68
1833	39	2	3	1	47	-	-	1	1	1	-	2	2	8	1	1	-	1	62
1834	43	-	11	-	55	1	1	-	2	-	-	1	2	6	-	-	-	-	65
1835	32	2	8	-	45	-	-	1	1	-	-	-	1	2	2	-	-	-	51
1836	42	2	5	1	53	-	-	-	1	1	-	1	1	2	4	1	-	-	63
1837	26	3	6	-	39	-	-	-	1	1	1	1	2	3	4	-	-	-	50
1838	46	2	7	-	59	-	3	1	4	-	-	2	6	5	-	-	-	-	75
1839	31	2	5	-	40	-	3	1	4	-	-	1	1	11	1	-	-	-	57
1840	32	4	3	1	46	-	1	1	2	-	1	2	5	6	4	-	-	-	63
1841	31	4	3	1	40	-	3	-	3	2	1	2	6	5	-	2	-	-	58
1842	29	3	5	1	40	-	1	-	1	-	-	2	6	2	2	-	-	-	51
1843	28	3	5	-	38	1	2	-	3	-	1	4	12	7	2	1	-	-	63
1844	35	2	3	1	46	1	4	-	5	-	4	1	8	6	-	-	-	1	66
1845	16	1	3	1	22	-	2	-	2	-	1	1	4	3	1	1	-	-	33
1846	12	1	2	-	18	-	3	-	3	-	2	2	10	-	-	1	-	-	32
1847	13	2	6	-	26	-	1	-	1	-	5	1	7	4	-	-	-	1	39
1848	20	3	1	-	27	-	2	-	2	2	7	6	23	6	-	-	-	1	61
1849	23	3	3	-	31	1	1	-	2	2	4	2	19	2	-	1	-	-	57
1850	15	3	1	-	19	-	1	-	1	-	7	4	24	5	-	1	-	1	50
1851	26	1	1	-	31	-	0	-	-	-	6	2	22	6	1	1	-	2	63
1852	13	2	1	-	17	-	1	-	1	-	5	1	15	1	-	-	-	-	33
1853	11	2	3	1	17	-	1	-	1	-	7	2	18	3	-	-	-	1	40
1856	11	-	1	-	12	-	-	-	-	-	2	3	17	7	-	-	1	3	40
1857	9	-	-	-	10	-	-	-	-	-	5	-	19	6	-	-	-	-	35
1858	5	-	1	-	6	-	-	-	-	1	10	-	18	6	-	-	1	5	37
1859	14	-	-	-	15	-	1	-	1	-	5	1	21	8	-	-	1	3	49
1860	10	-	1	-	12	-	1	-	1	-	2	1	10	7	-	-	2	2	34
Total	1359	362	181	45	2148	42	123	41	236	47	76	57	294	318	110	45	29	67	3294

Notes: Home port in this table is as given in STA when the vessel sailed eastward to the Russian port. For other vessels it is the port reported in Elsinore when sailing westward. Home ports given in the reports of the consuls in Elsinore and St Petersburg are almost identical.

Sources: Years 1783-1806, 1815-50: STA, ØTA, DRA. Years 1807-12: CR, NA T-201/T1, NA T-195/T-2, and NA M-81/2. Years 1851-60: CR, NA 81/5-6, and NA T-195/4.

TABLE 24
Tonnage of American vessels by home port in the Russian (the Baltic Sea) trade, 1803 - 60.

Years	Boston	Salem	Newburyport	MA total	Providence	RI total	Bath	Portland	ME total	Portsmouth	New York	Philadelphia	Baltimore	Other ports	Total
1803	1 787	2 214	673	5 821	1 682	1 832	-	-	.	-	1 993	909	462	461	11 478
1804	1 802	640	547	4 037	940	940	-	-	.	-	1 843	362	416	-	7 598
1805	2 208	1 305	204	5 648	606	1 138	-	-	.	409	1 623	425	647	673	10 563
1806	749	1 520	1 031	5 501	841	1 270	-	-	.	1140	2 344	761	565	222	11 803
1807	2 696	812	1 858	8 494	1 236	1 236	-	-	.	820	3 035	-	-	277	15 247
1835	7 506	233	1 302	10 295	-	415	-	-	256	-	329	928	-	-	12 223
1836	11 808	491	1 629	15 227	-	-	-	-	338	380	613	1649	333	380	18 160
1837	6 983	676	1 975	11 404	329	239	-	315	315	344	898	814	-	-	14 104
1838	13 231	650	2 323	17 359	818	1 128	250	496	1 460	-	1 548	-	-	-	21 495
1839	8 021	650	1 383	11 843	981	981	-	366	366	-	3 664	440	-	-	17 294
1840	9 639	1 331	975	14 383	236	451	299	578	877	-	1 236	1026	-	445	18 418
1841	9 909	1 290	1 070	12 955	697	697	-	680	1 481	397	1 590	-	-	1295	18 415
1842	7 616	954	1 132	11 499	1 136	1 136	-	282	1 481	-	648	872	1035	-	16 641
1843	8 543	930	1 758	11 784	647	976	289	1 299	3 833	-	2 738	970	321	140	20 762
1844	10 567	603	762	13 610	1 313	1 642	1 293	349	3 391	-	2 836	-	221	-	21 700
(1844)	10 800	603	1 118	13 843	1 313	1 313	1 293	349	3 391	-	3 185	-	221	329	22 282
1845	4 758	295	965	6 658	761	761	600	-	1 729	-	1 205	225	386	-	10 964
(1845)	4 758	295	965	6 658	761	761	600	-	1 699	-	1 205	225	386	-	10 934
1846	4 464	320	641	6 250	1 255	1 255	608	760	3 025	-	-	-	464	-	10 994
(1845)	4 447	320	641	6 236	1 255	1 255	608	760	3 025	-	-	-	469	-	10 985
1847	4 862	526	1 821	8 169	322	322	1 425	248	1 972	-	1 631	-	-	494	12 588
(1847)	3 762	526	1 821	7 971	322	322	1 665	246	2 200	-	1 894	-	-	504	12 891
1848	5 168	1 044	299	7 410	940	940	2 165	2 246	7 549	448	2 543	-	-	494	19 384
(1848)	6 033	1 044	299	8 275	940	840	2 165	1 904	6 965	-	2 239	-	-	1185	19 604
1849	8 793	1 044	1 343	11 489	641	641	1 592	658	6 048	603	976	-	327	300	20 384
(1849)	8 569	1 044	1 343	11 265	641	641	1 592	658	6 048	-	976	-	327	654	19 911
1850	4 844	666	295	6 200	395	395	2 968	950	9 275	-	2 524	-	386	-	18 780
(1850)	5 869	731	295	6 895	395	395	2 657	1 345	9 601	-	2 133	-	386	-	19 410
1851	10 176	231	300	12 000	-	-	2 512	882	8 619	-	2 565	282	586	841	24 893
1852	4 928	726	300	6 272	489	489	2 460	524	7 004	-	392	-	-	-	14 157
1853	5 163	-	1 581	8 766	449	449	4 428	943	10 655	-	1 055	-	-	1383	22 308
1856	6 294	-	391	6 685	-	-	3 684	1 994	11 422	-	5 226	-	-	2171	25 504
1857	5 283	-	-	6 001	-	-	4 192	-	14 491	-	5 369	-	-	-	25 861
1858	3 430	-	988	4 419	493	-	9 086	-	13 717	-	4 337	-	-	4778	27 251
1859	5 597	-	-	5 892	856	856	3 263	990	15 515	-	6 652	-	-	3127	32 042
1860	5 547	-	387	6 326	1 046	1 046	972	961	6 995	-	4 620	-	-	2446	21 733

Notes: Tonnage in 1808-12: HSP, LNP, Letters 1810-41. In the shipping list of John D. Lewis 369 vessels are recorded arriving in St Petersburg (average 246 tons). For 1810 Lewis's list covers only nine months and at least 27 vessels are missing. In the table the tonnage of these vessels is calculated to be on average 246 tons. The total tonnage of these vessels (6642 tons) is included in the table. Total tonnage: 1808 - 4138 tons, 1809 - 13,479 tons, 1810 - 29,315 tons, 1811 - 33 640 tons, and 1812 - 16, 601 tons. Sources: Home ports as in table 23; CR, NA T-201/1-2, NA T-195/2-4, and NA M-81/3-6. Parallel figures in 1844 - 1850 (years within parentheses): STA 1844-50, ØTA, DRA.

TABLE 25
Ports of departure of American vessels passing the Sound eastward, 1783-1860.

Year	Boston		Salem		MA (total)		RI (total)		New York		Phil.	Charleston		Savannah		New Orl.	United States (total)	
	To Russia	To the Baltic	To Russia	To the Baltic	To Russia	To the Baltic	To Russia	To the Baltic	To Russia	To the Baltic	To Russia	To Russia	To the Baltic	To Russia	To the Baltic	To Russia	To Russia	To the Baltic
1783	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1784	-	-	2	2	2	2	-	-	-	-	-	-	-	-	-	-	2	3
1785	2	2	-	-	3	3	-	-	-	-	-	-	-	-	-	-	3	5
1786	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1787	-	-	-	-	-	-	-	-	1	-	-	1	-	-	-	-	-	4
1788	-	1	-	-	-	1	1	1	-	1	-	1	2	-	-	-	2	8
1789	1	1	-	-	1	1	-	7	-	1	-	-	2	-	-	-	1	12
1790	-	-	-	1	-	1	-	5	-	-	1	-	-	-	-	-	1	9
1791	-	-	-	1	-	1	-	4	-	-	-	-	1	-	-	-	-	7
1792	-	1	-	3	-	4	-	6	-	1	-	1	10	-	-	-	1	23
1793	-	1	-	3	1	5	-	6	1	2	-	-	4	-	-	-	2	18
1794	-	1	-	5	2	9	-	3	-	-	1	-	3	-	-	-	3	18
1795	1	3	2	6	3	9	-	4	-	1	-	-	3	-	1	-	3	20
1796	1	3	1	9	2	16	-	5	-	1	-	1	5	-	1	-	3	32
1797	-	5	-	5	-	11	-	2	-	-	-	-	4	-	-	-	-	17
1798	-	5	1	17	1	25	-	2	-	4	-	-	3	-	-	-	1	35
1799	-	5	-	13	-	22	-	6	-	2	-	-	4	-	5	-	-	41
1800	2	6	1	5	3	12	-	2	-	-	-	-	-	-	-	-	3	15
1801	1	8	1	9	2	19	-	-	-	-	-	-	1	-	1	-	2	21
1802	-	3	1	9	1	22	-	2	1	2	-	1	3	-	-	-	4	31
1803	-	6	-	8	-	26	-	2	-	-	-	-	4	-	3	-	1	39
1804	-	3	1	14	2	25	-	3	-	4	-	-	7	-	2	-	2	44
1805	-	10	2	15	2	28	1	2	1	1	1	-	1	-	1	-	5	39
1806	-	13	-	10	-	33	1	3	1	4	-	-	3	-	2	-	2	45
1807	1	7	-	3	-	10	-	2	1	2	1	3	11	1	5	-	7	33
1808	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1	1
(1808)	-	..	-	..	-	..	-	..	-	..	1	-	..	-	..	-	1	..
1809	3	6	-	1	4	9	1	-	1	-	1	-	-	1	-	-	9	17
(1809)	3	..	1	..	5	..	1	..	2	..	..	-	..	1	..	-	12	..
1810	2	14	4	18	12	46	3	8	6	20	3	-	5	1	3	-	26	109
(1810)	7	..	3	..	12	..	3	..	4	..	3	1	..	2	..	1	29	..
1811	17	17	7	-	31	-	9	-	11	-	3	2	2	3	-	-	64	64
(1811)	14	..	7	..	24	..	12	..	14	..	4	1	..	3	..	-	64	..
1812	2	5	3	-	14	-	5	-	7	-	4	-	-	-	-	-	31	31
(1812)	5	..	3	..	13	..	3	..	8	..	4	-	..	-	..	1	33	..
1815	5	6	2	3	9	12	-	1	2	4	-	-	2	2	4	-	14	25
1816	7	13	1	2	9	18	2	2	4	4	1	1	6	4	5	-	22	39
1817	6	12	4	6	12	22	-	1	1	3	1	-	2	-	-	-	15	30
1818	9	11	2	3	13	17	-	-	-	3	1	-	-	1	2	-	16	27
1819	10	10	4	4	15	16	-	-	-	1	-	1	4	1	1	-	18	24
1820	14	17	5	6	22	29	3	-	4	4	3	1	3	-	-	1	36	45

continues

TABLE 25 (continues)

Year	Boston		Salem		MA (total)		RI (total)		New York		Phil.	Charleston		Savannah		New Orl.	United States (total)	
	To Russia	To the Baltic	To Russia	To the Baltic	To Russia	To the Baltic	To Russia	To the Baltic	To Russia	To the Baltic	To Russia	To Russia	To the Baltic	To Russia	To the Baltic	To Russia	To Russia	To the Baltic
1821	8	14	2	6	12	26	1	1	4	5	1	2	6	-	-	-	22	45
1822	13	15	-	3	13	20	-	-	5	6	1	2	5	1	1	-	23	34
1823	6	12	2	2	8	15	1	1	-	2	-	1	4	-	1	-	14	29
1824	4	16	1	1	5	18	-	-	3	5	-	-	4	1	1	-	11	31
1825	9	25	1	1	10	26	-	-	4	4	-	1	9	-	-	-	16	44
1826	5	11	1	1	6	13	-	-	3	7	1	3	7	-	-	-	13	29
1827	6	14	1	1	8	16	-	-	6	7	1	1	6	-	-	-	16	32
1828	8	21	1	1	11	25	1	1	3	5	2	1	7	-	1	-	18	44
1829	6	7	-	1	6	8	-	-	4	8	-	-	5	-	1	-	11	24
1830	5	12	2	-	8	15	-	-	2	4	-	-	6	-	1	-	10	27
1831	7	18	1	-	8	21	-	-	5	8	-	2	5	-	1	-	15	38
1832	11	17	-	-	11	20	-	-	4	7	-	1	6	-	2	-	16	35
1833	8	15	-	-	9	17	1	1	6	8	-	2	8	-	-	-	18	35
1834	10	15	-	1	10	16	-	-	3	5	-	3	4	-	-	1	17	26
1835	13	17	1	-	15	20	-	-	-	-	-	2	6	-	-	-	17	26
1836	10	16	1	1	11	17	1	1	1	1	-	4	9	-	-	1	18	29
1837	15	18	1	3	16	21	1	1	2	2	1	2	2	-	-	-	22	27
1838	11	12	-	-	11	12	-	-	3	4	-	6	8	-	-	1	21	25
1839	17	18	-	-	18	19	-	-	6	7	-	4	5	-	-	-	28	31
1840	14	16	-	-	14	14	-	-	4	5	-	1	2	-	-	-	20	24
1841	15	18	-	-	15	18	1	1	2	6	-	-	1	-	-	-	18	26
1842	12	14	-	-	12	14	1	1	6	3	-	2	3	-	1	-	18	21
1843	10	11	-	-	10	13	-	-	6	8	-	-	1	1	1	1	19	25
1844	5	7	-	-	5	7	-	-	8	8	-	1	1	1	1	-	15	17
1845	7	10	-	-	7	11	-	-	3	6	1	1	1	1	1	-	20	28
1846	6	7	-	-	6	7	-	-	1	1	-	-	1	-	-	4	13	15
1847	8	8	-	-	8	8	-	-	3	3	-	1	1	-	-	3	15	15
1848	6	7	-	-	6	7	-	-	3	3	-	4	4	-	-	8	20	12
1849	7	9	-	-	7	8	-	-	4	4	-	4	5	-	-	4	21	24
1850	7	8	-	-	7	8	-	-	3	3	-	2	2	-	-	-	14	16
1851	3	4	-	-	3	4	-	-	5	5	-	4	4	-	-	5	19	20
1852	6	8	-	-	6	8	-	-	-	-	-	3	4	1	1	8	20	24
1853	6	6	-	-	6	6	-	-	-	-	-	1	1	-	-	14	23	27
1854	1	3	-	-	-	3	-	-	-	1	-	-	2	-	-	-	1	17
1855	-	6	-	-	-	6	-	-	-	4	-	-	1	-	-	-	-	15
1856	9	9	-	-	9	9	-	-	3	4	-	4	5	1	1	14	32	37
1857	5	5	-	-	5	5	-	-	3	5	-	2	2	2	2	15	34	38
1858	3	3	-	-	3	3	-	-	3	3	-	6	6	1	1	16	35	34
1859	8	6	-	-	6	6	-	-	2	4	-	5	5	-	-	22	43	46
1860	5	5	-	-	5	5	-	-	1	1	-	5	9	2	2	11	28	38

continues

TABLE 25 (continues)

Year	Cuba			South America	Spain and Portugal				France			
	West Indies		To Russia		Lisbon	São Migue	To Russia	To the Baltic	Le Havre	Bordeaux	To Russia	To the Baltic
	To Russia	To the Baltic			To Russia	To Russia			To Russia	To Russia		
1783	-	-	-	-	-	-	-	-	-	-	-	-
1784	-	-	-	-	-	-	-	-	-	-	1	1
1785	-	1	1	-	-	-	-	-	-	-	-	-
1786	-	-	-	-	-	-	-	-	1	-	1	1
1787	-	-	-	-	2	-	3	3	1	-	1	1
1788	-	-	-	-	2	-	3	3	1	-	1	1
1789	-	-	-	-	3	-	6	7	1	-	2	3
1790	-	-	-	-	4	-	5	5	1	1	2	2
1791	-	-	-	-	3	-	4	5	-	1	3	4
1792	-	-	-	-	5	-	6	6	1	1	2	2
1793	-	-	1	-	8	-	10	11	-	-	-	2
1794	-	-	-	-	2	1	5	7	-	-	-	9
1795	-	-	-	-	6	2	9	10	4	1	6	14
1796	-	-	-	-	6	5	12	14	-	-	-	-
1797	-	-	-	-	5	-	6	8	-	-	-	-
1798	-	-	-	-	1	2	4	5	1	-	1	1
1799	-	-	-	-	4	3	8	11	-	-	-	-
1800	-	-	-	-	1	1	4	4	-	-	-	-
1801	-	-	-	-	8	1	10	11	-	-	-	2
1802	-	-	1	-	9	6	17	18	1	2	4	6
1803	-	-	-	-	9	3	21	23	3	-	4	4
1804	-	-	-	-	7	4	12	12	-	-	3	3
1805	-	-	1	-	2	2	6	6	-	-	5	5
1806	-	-	1	-	8	3	14	14	-	-	3	4
1807	-	1	1	-	6	2	12	12	-	2	2	2
1808	-	1	1	-	1	1	4	4	-	-	-	-
(1808)	-	1	..	-	1	1	4	..	-	-	-	..
1809	-	-	-	-	3	-	4	5	-	-	2	2
(1809)	-	-	..	-	1	-	8	..	-	-	-	..
1810	-	-	-	-	-	3	4	12	-	-	-	-
(1810)	-	-	..	-	-	2	3	..	-	-	1	..
1811	-	-	-	-	3	1	4	4	-	-	-	-
(1811)	-	-	..	-	1	1	2	..	-	-	-	..
1812	-	-	-	-	1	6	7	7	-	-	-	-
(1812)	-	-	..	-	3	7	10	..	-	-	-	..
1815	2	2	2	-	-	1	3	3	3	-	2	2
1816	6	6	7	-	-	1	4	5	5	1	3	6
1817	6	6	7	-	1	-	4	4	4	-	1	2
1818	2	2	4	-	1	-	4	6	6	1	3	4
1819	1	1	1	-	-	1	1	2	2	-	2	3
1820	6	6	6	2	-	1	2	2	2	-	3	5

continues

TABLE 25 (continues)

Year	Cuba		West Indies		South America	Spain and Portugal				France			
	To Russia	To Russia	To the Baltic	To Russia		Lisbon	São Miguel	To Russia	To the Baltic	Le Havre	Bordeaux	To Russia	To the Baltic
					To Russia	To Russia	To Russia			To Russia			
1821	21	21	22	3	-	1	4	4	4	-	1	1	
1822	10	11	14	-	-	2	3	3	3	-	3	4	
1823	14	14	17	-	-	-	2	3	3	-	-	2	
1824	22	24	25	8	-	-	1	1	1	-	1	4	
1825	23	24	27	7	-	-	1	1	1	-	2	4	
1830	35	35	40	1	-	-	1	2	-	1	1	1	
1831	29	29	29	-	-	-	2	2	1	-	1	1	
1832	45	45	46	-	-	-	2	2	-	-	-	-	
1833	42	42	44	-	-	-	1	1	-	-	-	-	
1834	45	45	47	2	-	-	2	2	-	-	-	-	
1835	31	31	31	-	-	-	-	-	-	-	-	-	
1836	36	36	36	1	-	-	-	-	1	-	1	1	
1837	21	21	21	-	-	-	-	-	1	-	1	1	
1838	47	47	48	-	-	-	1	1	1	-	1	1	
1839	19	19	19	1	-	-	1	1	3	-	3	3	
1840	37	37	40	-	-	-	2	2	-	-	-	-	
1841	34	34	34	-	-	-	-	-	1	-	1	1	
1842	33	33	35	-	-	-	1	1	-	-	-	-	
1843	44	44	51	-	-	-	-	-	-	-	-	-	
1844	51	51	53	-	-	-	-	-	-	-	-	-	
1845	9	9	9	-	-	-	-	-	-	1	1	3	
1846	17	17	19	-	-	-	-	-	-	-	-	-	
1847	17	17	20	-	-	-	-	-	-	-	-	-	
1848	37	38	43	-	-	-	2	2	-	-	-	-	
1849	36	36	36	-	-	-	-	-	-	-	-	-	
1850	36	36	36	-	-	-	-	-	-	-	-	-	
1851	46	46	46	-	-	-	-	-	-	-	-	-	
1852	14	14	14	-	-	-	1	1	-	-	-	-	
1853	15	15	15	1	-	-	2	2	-	-	-	-	
1854	-	-	-	-	-	-	-	1	-	-	-	1	
1855	-	-	11	-	-	-	-	-	-	-	-	1	
1856	4	4	4	-	1	-	2	3	1	-	1	1	
1857	2	2	3	-	-	-	-	-	-	-	-	-	
1858	3	3	3	-	-	-	-	-	-	-	-	-	
1859	5	5	5	-	-	-	-	-	-	-	-	-	
1860	4	4	4	-	-	-	-	-	-	-	-	-	

continues

TABLE 25 (continues)

Year	Britain				North Sea							Others		GRAND TOTAL	
	London	Liver pool	To Russia	To the Baltic	A	B	C	D	E	To Russia	To the Baltic	To Russia	To the Baltic	To Russia	To the Baltic
	To Russia	To Russia			To Russia	To Russia	To Russia	To Russia	To Russia						
1783	1	-	1	1	-	-	-	-	-	-	1	-	-	1	2
1784	2	-	2	2	1	-	-	-	-	1	1	-	-	6	7
1785	1	-	1	1	-	1	-	-	-	2	3	-	-	7	10
1786	2	-	2	2	1	2	-	2	-	6	7	-	-	9	10
1787	1	-	3	3	-	-	-	-	-	1	1	-	-	8	12
1788	-	-	2	3	1	-	-	-	-	2	4	-	-	10	19
1789	-	-	-	-	1	-	-	-	-	1	2	-	-	10	24
1790	1	1	3	3	-	3	-	-	-	3	6	-	-	14	25
1791	2	1	3	3	-	-	-	1	-	3	4	-	-	13	23
1792	-	-	3	3	1	-	-	-	-	1	2	-	-	13	36
1793	1	1	4	4	3	1	-	-	1	6	7	-	-	22	43
1794	2	-	7	9	6	1	-	5	3	16	24	-	-	31	67
1795	2	-	6	6	2	1	-	11	1	15	15	-	-	39	65
1796	9	3	17	18	-	-	-	11	1	12	16	-	-	44	80
1797	2	1	4	5	1	-	-	3	-	4	6	-	3	14	39
1798	1	2	5	5	1	3	-	5	-	9	14	-	2	20	62
1799	7	-	11	12	-	-	-	2	-	12	14	-	-	31	78
1800	4	2	7	8	-	-	-	-	-	1	4	-	-	15	31
1801	13	2	22	25	2	8	-	7	1	19	20	-	-	53	79
1802	5	1	6	6	11	1	1	2	1	17	19	-	-	48	81
1803	2	3	10	10	10	3	3	2	1	19	19	-	2	55	97
1804	2	2	6	6	12	1	2	-	-	17	17	1	1	41	83
1805	2	2	4	4	16	6	2	-	-	27	28	1	1	48	84
1806	2	2	4	8	17	1	4	8	-	31	33	-	2	54	107
1807	3	2	3	8	15	3	5	-	-	37	39	2	2	64	97
1808	-	-	-	-	2	1	-	-	1	8	8	-	2	16	18
(1808)	-	-	-	..	2	1	-	-	1	8	..	2	-	16	..
1809	-	-	-	-	4	5	-	2	-	18	20	1	1	34	45
(1809)	-	-	-	..	5	1	-	1	-	17	..	12	..	50	..
1810	-	-	-	-	-	-	-	-	-	-	3	1	9	41	133
(1810)	-	-	-	..	-	-	-	-	-	35	..	38	..	106	..
1811	-	-	-	-	-	-	-	-	-	35	35	28	28	131	131
(1811)	-	-	-	..	-	-	-	-	-	36	..	20	..	123	..
1812	-	-	-	-	-	-	-	-	-	12	12	13	13	63	63
(1812)	1	-	4	..	-	-	-	-	-	14	..	8	..	66	..
1815	-	2	4	5	5	-	5	1	1	13	16	-	-	38	53
1816	1	-	2	5	6	-	2	5	-	13	21	3	3	53	86
1817	1	5	9	14	2	1	1	1	2	7	10	-	-	42	67
1818	-	6	6	7	5	-	2	3	5	15	16	6	7	52	71
1819	-	1	1	3	-	-	-	1	-	1	6	2	2	26	41
1820	-	2	2	5	2	1	2	1	-	6	15	5	8	62	86

continues

TABLE 25 (continues)

Year	Britain				North Sea								Others		GRAND TOTAL	
	Lon don	Liv pool			A	B	C	D	E							
	To Russia	To Russia	To Russia	To the Baltic	To Russia	To Russia	To Russia	To Russia	To Russia	To Russia	To the Baltic	To Russia	To the Baltic	To Russia	To the Baltic	
1821	-	4	4	5	2	2	3	2	3	12	16	-	3	67	96	
1822	1	7	11	12	4	3	10	7	2	27	34	5	8	83	109	
1823	-	-	-	5	2	1	1	-	-	5	23	1	2	33	81	
1824	-	-	-	1	2	-	2	-	-	4	10	4	14	53	86	
1825	-	5	5	12	2	3	3	4	-	12	23	1	9	68	120	
1830	-	-	-	-	-	-	-	-	-	-	7	-	1	48	78	
1831	2	-	2	3	-	-	-	2	4	7	12	-	2	56	87	
1832	-	-	-	-	3	-	1	1	3	8	10	1	3	73	96	
1833	-	-	-	-	1	-	1	-	-	2	4	-	-	63	84	
1834	-	-	-	-	-	-	-	-	-	1	5	-	4	67	84	
1835	-	-	-	-	-	-	1	-	-	1	3	-	-	49	60	
1836	-	-	-	1	1	-	-	1	-	2	3	-	2	58	72	
1837	-	-	-	1	-	-	-	-	1	1	1	-	-	45	51	
1838	-	1	1	1	-	-	1	-	-	1	2	-	-	72	78	
1839	1	1	2	3	1	-	-	-	-	1	1	-	-	54	58	
1840	2	1	3	3	-	-	-	-	-	-	-	-	2	62	71	
1841	-	1	1	1	-	-	-	-	-	-	-	-	1	54	63	
1842	-	-	-	-	-	-	-	-	-	-	-	-	-	52	57	
1843	-	-	-	-	-	-	-	-	-	-	-	-	-	63	76	
1844	-	-	-	-	-	-	-	-	-	-	-	-	-	66	70	
1845	-	-	-	1	-	-	-	-	-	-	-	-	-	30	41	
1846	-	-	-	-	-	-	1	1	-	2	2	-	-	32	36	
1847	-	2	5	5	-	-	1	-	-	1	1	-	-	38	41	
1848	-	-	-	-	1	-	1	-	-	2	2	-	-	62	71	
1849	-	-	-	-	-	-	-	-	-	-	-	-	-	57	60	
1850	-	-	-	-	-	-	1	1	-	1	1	-	-	51	53	
1851	-	-	-	-	-	-	-	-	-	-	-	-	-	65	66	
1852	-	-	-	-	-	-	-	-	-	-	1	-	-	35	40	
1853	2	1	5	5	-	-	-	-	-	-	-	-	-	45	49	
1854	-	-	-	2	-	-	-	-	-	-	-	-	2	1	23	
1855	-	-	-	1	-	-	-	-	-	-	-	-	-	-	28	
1856	1	-	6	8	-	-	-	-	-	-	3	1	1	46	57	
1857	1	-	2	2	-	-	-	-	-	-	2	-	-	38	46	
1858	-	4	5	5	-	-	-	-	-	1	1	2	4	44	47	
1859	-	1	2	2	-	-	-	-	-	-	-	-	-	52	53	
1860	-	2	2	2	1	-	-	-	-	1	2	1	2	36	46	

Notes: North Sea ports: A = Amsterdam, B = Rotterdam, C = Antwerp, D = Hamburg, E = Bremen. Parallel figures in 1808-12 are from Lewis's shipping list. See notes in table 24.

Sources: Years 1783-1806, 1815-50: STA, ØTA, DRA. Years 1807-12: CR, NA T-201/T1, NA T-195/T2, and NA M-81/3. Years 1851-60: CR, NA T-201/3, and NA M-81/ 5-6.

TABLE 26
The Baltic ports of destination (eastbound) and departure (westbound) of
American vessels passing through the Sound, 1783-1860.

Year	St Petersburg		Riga		Russia (total)		Copenhagen		Stockholm		German ports		Baltic Sea (total)	
	Eastbound	Westbound	Eastbound	Westbound	Eastbound	Westbound	Eastbound	Westbound	Eastbound	Westbound	Eastbound	Westbound	Eastbound	Westbound
1783	-	1 (2)	1	1	1	2	-	1	-	-	-	-	2	3
1784	5	7 (1)	-	-	5	7	1	1	-	-	-	-	6	8
1785	7	6 (7)	-	-	7	9	3	3	-	-	-	-	10	9
1786	9	10 (10)	-	-	9	10	1	1	-	-	1	-	10	11
1787	9	11 (11)	-	-	9	11	4	4	1	-	1	-	14	15
1788	9	11 (10)	-	-	9	11	7	7	1	1	1	-	19	19
1789	11	16 (17)	-	-	11	16	9	5	1	2	2	1	26	24
1790	14	22 (22)	-	-	14	21	6	2	-	2	1	1	25	27
1791	12	20 (20)	-	-	13	20	6	4	-	-	2	-	23	24
1792	12	24 (24)	-	1	13	27	18	10	-	-	3	1	37	37
1793	23	30 (30)	1	1	24	30	16	13	-	-	1	-	44	44
1794	27	43 (43)	4	4	31	46	28	21	-	-	2	-	68	68
1795	36	43 (42)	-	-	38	42	24	21	-	-	1	4	65	68
1796	43	63 (59)	1	7	44	70	27	15	-	-	1	18	80	103
1797	10	28 (26)	-	5	14	33	18	10	-	-	-	-	39	43
1798	20	37 (39)	-	-	20	37	36	19	-	-	-	-	62	56
1799	30	61 (62)	-	-	31	62	43	19	-	-	-	-	78	81
1800	14	22 (23)	1	-	15	23	13	5	-	-	1	-	31	28
1801	52	63 (61)	1	1	53	65	23	17	-	-	-	2	79	84
1802	48	64 (65)	-	-	48	64	30	14	-	-	1	2	81	80
1803	55	84 (84)	-	-	55	84	38	14	-	-	3	-	97	98
1804	40	65 (65)	-	-	41	66	38	16	-	-	-	1	83	85
1805	48	69	-	-	48	59	35	15	-	-	5	-	84	84
1806	54	75	-	1	54	76	46	22	-	-	1	3	107	102
1807	63	78	1	1	64	79	29	11	1	1	-	2	97	95
1808	16	16	-	-	16	16	-	-	-	-	6	-	18	18
1809	29	29	5	-	34	34	4	-	-	-	28	-	45	45
1810	120	120	2	-	122	122	4	-	2	-	-	-	133	133
1811	131	131	-	-	131	131	-	-	-	-	-	-	131	131
1812	63	63	-	-	63	63	-	-	-	-	-	-	63	63
1815	38	61	-	-	38	61	6	9	5	5	-	1	53	80
1816	53	60	-	2	53	62	13	7	10	14	2	2	86	85
1817	42	51	-	-	42	51	10	4	11	15	-	-	67	71
1818	52	59	-	1	52	60	9	6	3	3	1	-	71	69
1819	26	32	-	-	26	32	1	1	8	9	2	1	41	43
1820	62	65	-	-	62	66	6	1	12	14	2	1	86	82
1821	67	79	-	-	67	79	18	9	7	8	2	1	96	97
1822	81	88	2	3	83	91	8	3	10	12	2	1	109	108
1823	32	41	1	1	33	42	7	1	28	36	1	1	81	80
1824	52	57	1	-	53	57	14	3	14	20	2	3	86	83
1825	68	72	-	1	68	73	26	11	23	26	2	1	120	111

continues

TABLE 26 (continues)

Year	St Petersburg		Riga		Russia (total)		Copenhagen		Stockholm		German ports		Baltic Sea (total)	
	Eastbound	Westbound	Eastbound	Westbound	Eastbound	Westbound	Eastbound	Westbound	Eastbound	Westbound	Eastbound	Westbound	Eastbound	Westbound
1826	51	56	3	2	54	58	13	7	6	10	4	4	77	79
1827	62	62	1	2	65	64	12	5	18	22	2	5	97	96
1828	62	66	1	-	63	67	18	7	22	29	4	7	108	110
1829	60	60	2	2	62	62	9	3	14	22	4	3	90	90
1830	46	46	2	3	48	49	13	10	10	12	3	4	78	75
1831	55	59	1	1	56	60	14	8	10	17	3	5	87	90
1832	70	70	3	1	73	71	12	8	7	11	3	4	96	95
1833	61	61	2	2	63	63	14	10	4	6	2	3	84	82
1834	63	56	4	4	67	60	6	5	6	9	1	2	84	76
1835	47	49	2	2	49	51	7	5	2	6	1	2	60	64
1836	57	53	1	2	58	55	7	5	4	6	2	2	72	68
1837	45	45	-	-	45	45	2	2	2	3	1	1	51	53
1838	72	60	-	-	72	63	2	2	1	8	2	2	78	75
1839	54	51	-	-	54	52	-	-	2	4	2	3	58	59
1840	60	55	2	2	62	60	4	-	1	6	4	6	71	72
1841	54	51	-	-	54	52	4	1	2	3	3	4	63	60
1842	49	45	3	4	52	51	2	2	-	-	3	3	57	56
1843	61	56	2	4	63	64	3	3	1	1	9	8	76	76
1844	66	57	-	-	66	62	-	-	1	3	3	1	70	68
1845	30	29	-	1	30	31	1	1	3	5	6	3	41	41
1846	31	30	1	1	32	31	-	-	-	-	4	4	36	35
1847	38	37	-	-	38	37	2	1	-	-	1	1	41	40
1848	59	53	3	3	62	60	-	2	1	1	2	6	71	70
1849	55	49	2	2	57	55	-	-	-	3	1	3	60	61
1850	48	42	3	3	51	48	-	-	1	-	1	1	53	52
1851	63	50	2	2	65	57	1	-	-	5	-	2	66	65
1852	33	33	2	2	35	35	1	-	2	2	1	3	40	40
1853	51	40	3	1	45	42	-	-	-	3	1	1	49	48
1854	1	2	-	1	1	3	1	-	3	6	4	13	23	23
1855	-	-	-	-	-	-	2	3	4	6	7	15	28	26
1856	40	32	4	4	46	41	2	1	3	3	-	2	57	49
1857	35	42	2	3	38	47	-	-	-	2	-	2	46	54
1858	39	37	1	1	44	42	-	-	-	-	-	1	47	45
1859	50	38	1	2	52	48	-	-	-	2	-	1	53	52
1860	32	29	-	1	36	34	-	-	1	2	-	1	43	39

Notes: The parallel figures in 1783-1804 are vessels, which Pitkin (1816, 236-237) mentions to depart St Petersburg to U.S. According to Pitkin these figures were "taken from Russian accounts". In fact Pitkin repeats Jepson Oddy's (1805) research. In 1789-90 Swinemünde is included in this table as a German port.

Sources: Years 1783-1806, 1815-50: STA, ØTA, DRA. Years 1807-12: CR, NA T-201/T1, NA T-195/T2, and NA M-81/2-3. Years 1851-60: CR, NA T-201/3, and NA M-81/5-6.

TABLE 27
Ports of destination of American vessels passing through the Sound westward, 1783-1860.

Year	Boston		Salem		New bury port	Mbl head	MA (total)		RI (total)		Ports mouth	New York		Philad.	Balti more	Char leston	United States (total)		
	From Russia	From the Baltic	From Russia	From the Baltic	From Russia	From Russia	From Russia	From the Baltic	From Russia	From the Baltic	From Russia	From the Baltic	From Russia	From the Baltic	From Russia	From Russia	From Russia	From the Baltic	
1783	1	1	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	2	3
1784	1	3	1	1	-	-	4	4	-	1	-	-	-	1	1	1	-	6	7
1785	3	3	1	1	-	-	4	5	-	1	-	-	-	1	1	-	-	5	8
1786	4	4	3	4	-	-	8	9	1	1	-	1	4	-	-	-	-	10	11
1787	6	6	2	2	-	-	8	8	-	3	-	3	4	-	-	-	-	11	15
1788	1	2	1	3	-	-	3	6	2	5	-	1	1	2	2	-	-	10	18
1789	10	11	2	2	-	-	13	14	2	6	-	-	-	-	-	-	1	16	22
1790	7	8	3	3	-	1	13	14	3	3	-	3	3	3	3	-	-	22	24
1791	5	5	2	2	-	1	8	8	4	4	-	2	2	1	1	-	-	16	21
1792	9	10	5	6	1	-	15	17	6	7	-	3	3	1	1	-	-	25	36
1793	10	11	6	6	1	1	18	18	5	5	-	2	2	4	4	1	-	30	42
1794	18	20	7	7	2	-	28	30	4	4	-	2	2	6	6	-	-	42 (43)	59
1795	15	15	7	7	1	-	23	23	7	7	-	1	1	6	9	1	1	41 (42)	58
1796	20	20	13	14	1	2	40	40	5	6	1	4	4	5	5	1	1	58 (59)	71
1797	11	12	7	8	1	-	20	22	4	5	-	2	2	1	1	-	-	28 (26)	37
1798	10	11	7	8	1	-	21	23	5	5	1	6	6	3	3	-	1	37 (39)	54
1799	19	20	15	15	-	-	43	44	5	5	1	7	8	3	3	1	-	58 (62)	76
1800	6	7	5	7	3	-	16	19	2	2	2	1	1	-	-	-	-	20 (23)	24
1801	19	21	14	16	2	-	39	44	2	2	1	9	9	3	3	3	2	58 (61)	66
1802	13	24	14	16	7	3	41	44	7	7	1	5	5	3	3	-	1	59 (65)	69
1803	13	15	21	23	4	4	53	59	8	8	1	13	13	5	5	2	-	84 (84)	96
1804	9	10	15	18	6	3	40	47	6	6	1	10	12	4	5	4	-	65 (65)	81
1805	14	16	14	16	3	1	41	47	7	7	2	12	12	2	3	2	2	68	81
1806	16	19	14	15	6	-	43	50	5	7		13	15	6	7	1	-	70	88
1807	15	16	10	11	8	3	45	48	7	7	1	14	14	4	4	1	1	73	82
1811	32	32	10	10	2	3	54	54	9	9	2	19	19	11	11	5	1	102	102
1815	19	25	3	4	1	2	31	39	7	9	-	17	18	3	5	2	-	60	73
1816	25	29	6	7	-	2	36	44	4	6	-	12	19	4	4	1	-	59	79
1817	18	22	8	8	1	3	32	39	1	2	-	10	15	3	3	1	-	48	66
1818	18	23	5	5	1	1	36	36	2	2	3	12	14	1	1	2	-	56	60
1819	15	17	5	5	1	1	25	27	2	2	-	2	6	-	-	1	-	32	41
1820	26	31	7	7	2	1	38	44	4	5	-	12	13	4	4	2	-	63	78

continues

TABLE 27 (continues)

Year	Boston		Salem		New bury port	Mbl head	MA (total)		RI (total)		Ports-mouth	New York		Philad.		Balti more	Charl eston	United States (total)	
	From Russia	From the Baltic	From Russia	From the Baltic	From Russia	From Russia	From Russia	From the Baltic	From Russia	From the Baltic	From Russia	From the Baltic	From Russia	From the Baltic	From Russia	From Russia	From Russia	From Russia	From the Baltic
1821	33	36	8	8	-	3	49	52	5	5	5	13	15	3	4	2	-	76	84
1822	35	39	10	11	-	1	49	54	5	8	3	23	25	4	4	3	-	89	104
1823	28	41	4	5	-	-	31	47	1	5	-	2	14	1	1	2	-	39	75
1824	30	40	7	9	1	1	39	51	1	1	-	9	14	1	1	1	-	54	77
1825	44	57	2	4	-	-	47	62	2	4	1	9	23	5	5	1	-	68	101
1826	27	35	4	4	-	2	34	42	2	2	2	7	12	4	4	1	-	49	64
1827	29	44	5	5	-	1	36	52	3	4	2	10	19	5	5	2	-	58	89
1828	32	56	5	7	-	1	40	67	2	2	2	15	18	4	4	2	-	66	102
1829	40	46	2	5	-	-	43	53	1	1	1	11	19	1	1	1	-	59	75
1830	21	28	1	1	-	-	22	29	-	1	-	15	20	-	-	-	-	37	54
1831	37	42	2	2	-	-	39	48	1	1	-	12	20	5	5	1	-	57	76
1832	49	55	3	3	-	-	52	63	4	4	1	14	20	1	1	-	-	70	87
1833	38	43	1	1	-	-	39	47	-	-	-	16	17	2	2	1	-	61	72
1834	37	42	-	-	-	-	37	42	1	1	-	15	20	-	-	-	-	53	64
1835	35	38	-	-	-	-	35	40	1	1	-	10	13	1	1	1	-	48	56
1836	37	41	1	1	-	-	38	42	-	1	-	13	14	1	1	3	-	55	63
1837	24	28	-	1	-	-	24	29	1	1	-	11	12	1	1	-	-	38	44
1838	26	27	-	-	-	-	26	27	1	1	-	17	24	-	-	2	-	46	55
1839	22	24	-	-	-	-	22	24	-	-	-	28	30	1	1	-	-	51	55
1840	29	31	-	-	1	-	30	32	-	-	-	12	17	2	2	1	-	44	52
1841	25	26	-	-	-	-	25	26	1	1	-	11	14	1	1	-	-	38	42
1842	29	32	-	-	-	-	29	32	1	1	-	7	10	-	-	-	1	38	43
1843	20	22	1	1	1	-	22	24	1	1	-	12	14	2	2	-	-	44	48
1844	17	20	-	-	-	-	17	19	2	2	-	11	14	-	-	-	-	32	37
1845	16	19	-	-	-	-	16	19	1	1	-	9	9	1	1	-	-	27	35
1846	10	11	-	-	-	-	10	11	-	-	-	5	5	-	-	-	-	15	16
1847	17	17	-	-	1	-	18	18	-	-	-	8	8	-	-	-	-	28	28
1848	17	18	-	-	-	-	17	18	-	-	-	8	9	-	-	-	-	25	27
1849	23	25	-	-	-	-	23	25	-	-	-	9	11	-	-	-	-	32	37
1850	13	14	-	-	-	-	13	14	-	-	-	12	14	-	-	-	-	25	28
1851	16	18	-	-	-	-	16	18	-	-	-	13	18	-	1	-	-	29	37
1852	18	20	-	-	-	-	18	20	-	-	-	9	11	-	-	-	-	27	31
1853	14	17	-	-	-	-	14	17	-	-	-	6	9	-	-	-	-	20	26
1854	1	9	-	-	-	-	1	9	-	-	-	-	5	-	-	-	-	1	15
1855	-	6	-	-	-	-	-	6	-	-	-	-	2	-	-	-	-	-	9
1856	16	19	-	-	-	-	16	19	-	-	-	6	8	-	-	-	-	22	28
1857	13	13	-	-	-	-	13	13	-	-	-	9	12	-	-	-	-	22	25
1858	7	7	-	-	-	-	7	7	-	-	-	3	3	-	1	-	-	11	12
1859	11	11	-	-	-	-	11	11	-	-	-	7	7	-	-	-	-	18	20
1860	9	10	-	-	-	-	9	10	-	-	-	6	6	-	-	-	-	16	17

continues

TABLE 27 (continues)

Year	North Sea ports		Spain and Portugal		Britain		France		Other ports		Grand total	
	From Russia	From the Baltic	From Russia	From the Baltic	From Russia	From the Baltic	From Russia	From the Baltic	From Russia	From the Baltic	From Russia	From the Baltic
1783	-	-	-	-	-	-	-	-	-	-	2	3
1784	-	-	1	1	-	-	-	-	-	-	7	8
1785	-	-	1	1	-	-	-	-	3	-	6	9
1786	-	-	-	-	-	-	-	-	-	-	10	11
1787	-	-	-	-	-	-	-	-	-	-	11	15
1788	3	4	1	1	-	-	-	-	-	-	11	19
1789	-	-	-	2	-	-	-	-	-	-	16	24
1790	-	-	-	1	-	-	-	1	-	1	22	27
1791	-	-	1	1	-	-	-	-	-	-	20	24
1792	-	-	-	-	-	-	-	-	-	-	25	37
1793	-	-	-	1	-	-	-	-	-	1	30	44
1794	-	-	2	5	2	3	-	-	1	1	47	68
1795	-	1	2	2	-	2	-	2	-	1	41	68
1796	1	4	8	22	2	3	-	2	1	1	70	103
1797	-	-	4	5	1	1	-	-	-	-	33	43
1798	-	-	-	-	-	-	-	1	-	1	37	56
1799	-	1	2	2	1	1	1	1	-	-	62	81
1800	-	-	-	-	3	3	-	-	-	1	23	28
1801	-	8	2	2	5	6	-	-	-	-	65	64
1802	1	1	4	7	-	1	-	-	-	2	64	80
1803	-	1	-	1	-	-	-	-	-	1	84	98
1804	-	1	1	2	-	-	-	-	-	1	66	85
1805	-	3	1	1	-	-	-	-	-	1	69	84
1806	-	-	5	6	1	3	-	-	-	2	76	102
1807	-	-	6	9	-	3	-	1	-	-	79	95
1808	-	-	-	-	-	-	-	-	-	-	16	18
1809	-	-	-	-	-	-	-	-	-	-	34	45
1810	-	-	-	-	-	-	-	-	-	-	41	133
1811	-	-	-	-	-	-	-	-	27	29	129	131
1812	-	-	-	-	-	-	-	-	-	-	-	63
1815	-	6	-	-	-	-	-	-	1	1	61	80
1816	-	3	-	-	-	-	1	1	2	2	62	85
1817	-	1	1	-	-	-	-	-	2	4	51	71
1818	-	4	2	1	-	-	-	-	2	4	60	69
1819	-	1	-	1	-	-	-	-	-	-	32	43
1820	-	1	-	-	-	-	1	1	2	2	66	82
1821	-	6	2	2	1	2	-	-	-	-	79	97
1822	-	1	2	2	-	1	-	-	-	-	91	108
1823	-	-	2	3	-	1	-	-	1	1	42	80
1824	-	1	2	2	-	-	1	2	-	1	57	83
1825	1	4	1	2	-	-	-	-	3	4	73	111

continues

TABLE 27 (continues)

Year	North Sea ports		Spain and Portugal		Britain		France		Other ports		Grand total	
	From Russia	From the Baltic	From Russia	From the Baltic	From Russia	From the Baltic	From Russia	From the Baltic	From Russia	From the Baltic	From Russia	From the Baltic
1826	1	6	3	4	-	-	5	5	-	-	58	79
1827	-	1	1	1	1	1	1	1	3	3	64	96
1828	-	3	-	2	-	1	-	-	1	2	67	110
1829	-	2	1	2	-	1	2	3	-	7	62	90
1830	3	9	1	1	1	1	4	6	3	4	49	75
1831	-	7	1	1	-	-	-	-	2	6	60	90
1832	-	5	1	1	-	-	-	-	-	2	71	95
1833	-	6	1	1	-	-	-	1	1	2	63	82
1834	1	4	3	3	2	3	-	-	1	2	60	76
1835	2	5	1	1	-	-	-	1	-	1	51	64
1836	-	4	-	-	-	1	-	-	-	-	55	68
1837	2	4	1	1	1	1	2	2	1	1	45	53
1838	7	10	1	1	2	2	6	6	1	1	63	75
1839	-	-	-	-	-	-	-	2	1	2	52	59
1840	2	3	5	5	4	4	1	4	4	4	60	72
1841	4	6	1	2	1	1	6	7	2	2	52	60
1842	-	-	1	1	-	-	11	11	1	1	51	56
1843	3	5	1	1	-	3	14	15	2	4	64	76
1844	1	1	2	2	1	2	16	16	10	10	62	68
1845	2	2	-	-	-	-	1	1	1	3	31	41
1846	7	9	-	-	-	-	9	9	-	1	31	35
1847	-	1	-	-	-	-	8	10	1	1	37	40
1848	2	2	3	3	1	1	9	12	20	25	60	70
1849	1	1	-	-	-	-	8	9	14	14	55	61
1850	1	1	1	1	13	13	8	8	-	1	48	52
1851	1	1	1	1	17	17	8	8	1	1	57	65
1852	-	-	1	1	6	6	-	1	1	1	35	40
1853	1	1	-	-	19	19	1	1	1	1	42	48
1854	-	1	1	2	1	3	-	-	-	2	3	23
1855	-	2	-	2	-	10	-	1	-	2	-	26
1856	-	-	-	-	17	18	2	2	-	1	41	49
1857	1	3	-	-	16	18	1	1	7	7	47	54
1858	2	2	-	-	26	26	1	1	2	4	42	45
1859	5	5	-	-	22	23	2	2	1	2	48	52
1860	-	2	-	1	11	11	1	1	6	7	34	39

Note: For parallel figures in 1794-1804 (column: From Russia) see notes in table 26.

Sources: Years 1783-1806, and 1815-50: STA, ØTA,DRA. Years 1807-12: CR, NA T-201/T1, NA T-195/2, and NA M-81/2. Years 1851-60: CR, NA M-81/5-6, and NA T-201/3.

TABLE 28
American tonnage arriving and clearing St Petersburg in 1803-1860.

Years	From Boston	To Boston	From Massachusetts	To Massachusetts	From New York	To New York	From Southern ports	From the United States (Total)	To the United States (Total)	From Cuba	From other ports	To other ports	To St Petersburg (Total)	From St Petersburg (Total)
1803	-	2 180	-	8 550	190	3 800	-	190	16 550	-	12 270	-	12 460	16 550
1804	-	1 740	350	7 830	-	2 950	-	350	14 180	-	7 610	-	7 960	14 180
1805	-	2 670	630	7 710	320	3 170	-	950	14 820	-	9 230	-	10 180	14 820
1806	-	3 630	-	9 290	110	3 340	-	340	15 870	-	11 690	580	12 030	16 450
1807	200	3 620	200	10 270	580	3 870	-	1 950	17 980	-	13 610	1 020	15 560	18 980
1808	-	..	-	..	-	-	-	380	..	..	3 756	..	4 136	..
1809	2 204	..	4 129	..	1 220	..	1 937	9 292	..	..	4 187	..	13 479	..
1810	1 511	..	2 390	..	1 064	..	1 427	6 689	..	..	22 626	..	29 315	..
1811	3 976	..	5 933	..	3 907	..	2 821	17 062	..	..	16 778	..	33 840	..
1812	307	..	620	..	405	..	435	1 920	..	..	14 681	..	16 601	..
1830	1 130	7 070	1 430	7 320	710	2 690	470	2 840	10 010	8 850	1 530	2 220	13 220	12 320
1832	..	14 620	..	15 070	..	2 480	..	..	18 280	..	..	140	..	18 420
1834	2 020	10 540	2 020	10 540	800	4 270	1 180	4 000	14 810	12 030	1 210	1 010	17 240	15 820
1835	3 550	9 640	3 850	9 640	-	2 540	560	4 410	12 750	8 230	320	210	12 960	12 960
1836	2 390	12 190	2 620	12 190	1 510	3 260	1 750	5 910	16 790	11 390	860	590	18 160	17 380
1837	3 910	6 150	4 340	6 150	600	4 700	670	6 440	11 490	6 190	570	2 990	13 200	14 480
1838	3 570	7 010	3 570	7 010	1 130	7 070	2 190	6 890	15 180	13 290	1 440	6 100	21 620	21 280
1839	4 080	7 150	4 550	7 150	1 880	8 080	1 210	7 170	15 950	5 960	3 130	1 070	16 260	17 020
1840	3 950	8 080	3 950	8 080	1 590	3 970	700	6 240	13 040	11 300	850	5 380	18 390	18 420
1841	3 760	8 210	3 760	8 210	640	4 450	-	4 400	13 440	12 070	1 410	4 970	17 880	18 410
1842	3 400	7 390	3 400	7 390	1 220	2 920	620	5 600	10 640	9 790	220	4 970	15 610	15 610
1843	3 280	5 240	3 280	5 240	2 250	4 010	1 070	6 600	11 040	13 940	220	9 720	20 760	20 760
1844	1 480	5 330	1 480	5 330	2 890	4 510	670	5 270	10 390	16 430	-	11 310	21 700	21 700
1845	2 380	5 590	2 380	5 590	570	3 750	4 460	8 020	9 960	2 640	300	1 000	10 960	10 960
1846	2 430	4 550	2 430	4 550	210	1 230	2 210	5 320	5 780	5 040	630	5 210	10 990	10 990
1847	2 640	5 320	2 650	5 320	970	2 340	1 740	5 320	8 460	5 120	2 120	4 130	12 590	12 590
1848	2 190	5 570	2 190	5 570	830	3 120	4 840	7 860	9 250	10 430	1 100	9 690	19 390	17 640
1849	1 910	8 570	1 910	8 570	1 650	2 940	5 020	8 920	11 510	12 470	-	8 870	21 390	20 390
1850	2 480	4 740	2 460	4 740	1 220	3 950	1 870	5 550	8 690	12 410	580	9 250	18 540	17 940
1851	1 020	7 230	1 020	7 230	1 940	5 080	4 540	8 080	12 310	16 820	-	12 580	24 900	24 890
1852	2 410	6 460	2 410	6 460	-	3 970	5 110	7 520	10 430	5 440	680	3 210	13 640	13 640
1853	2 910	6 040	2 910	6 040	-	3 710	9 570	12 480	9 750	5 990	3 840	12 100	22 310	21 850
1856	4 170	9 450	4 170	9 450	1 340	1 940	14 110	19 620	11 390	1 890	3 990	10 780	25 500	22 170
1857	2 090	6 770	2 090	6 770	1 740	6 030	19 250	23 080	12 800	900	930	15 570	27 910	28 370
1858	1 320	3 980	1 320	3 980	1 670	2 140	18 270	22 030	7 020	1 830	4 680	18 340	28 540	25 360
1859	2 590	4 160	2 590	4 160	1 740	5 440	23 760	28 090	9 600	2 300	1 650	22 630	32 040	32 230
1860	2 540	5 630	2 540	5 630	330	3 460	16 350	19 220	9 490	1 520	1 890	12 240	22 260	21 730

Note: The tonnage of 27 vessels arriving at the end in 1810 is included in the column "From other ports", see note in table 24. Southern ports are New Orleans, Savannah, Mobile and Charleston.

Sources: Years 1803-07: CR, NA T-201/1. Years 1808-12: HSP, LNP, Lewis Letters 1810-41. Years 1830-60: CR, NA M-81/2-6.

TABLE 29
American and foreign tonnage engaged in Russian trade, 1790-1860.

Year	Tonnage cleared			Tonnage entered		
	American	Foreign	Total	American	Foreign	Total
1790	..	..	..	1 390	60	1 450
1791	..	..	..	2 590	450	3 040
1792	..	..	..	3 880	-	3 880
1821	4 520	-	4 520	13 380	-	13 830
1822	4 350	-	4 330	22 760	1 200	23 960
1823	2 770	-	2 770	15 140	920	16 060
1824	2 200	-	2 200	16 050	340	16 390
1825	3 280	-	3 280	12 310	310	12 620
1826	1 390	-	1 390	7 340	-	17 340
1827	3 510	120	3 630	15 310	360	15 670
1828	3 780	290	4 040	17 840	1 020	18 860
1829	2 940	-	2 940	16 420	1 020	17 440
1830	3 490	260	3 750	13 680	260	13 940
1831	4 310	-	4 310	8 930	570	9 500
1832	3 150	-	3 150	21 820	1 830	23 650
1833	6 500	-	6 500	17 080	1 140	18 220
1834	4 980	300	5 280	18 790	560	19 350
1835	3 420	600	4 020	14 460	500	14 960
1836	6 200	1 200	7 400	13 940	1 610	15 550
1837	6 640	4 150	10 790	15 150	5 090	20 240
1838	7 250	200	7 450	12 800	800	13 600
1839	8 540	360	8 900	15 440	2 010	17 450
1840	6 020	480	6 500	15 720	2 820	18 540
1841	7 410	810	8 220	18 370	670	19 040
1842	5 690	1 700	7 390	8 070	1 600	9 670
1843	4 130	280	4 400	8 200	280	8 470
1844	6 310	1 980	8 290	14 660	740	15 400
1845	9 110	1 910	11 020	12 600	1 760	14 360
1846	5 450	1 540	6 990	11 150	320	11 470
1847	4 140	1 360	5 500	6 800	-	6 800
1848	9 590	390	9 980	10 360	-	10 360
1849	10 350	1 330	11 680	9 130	-	9 130
1850	5 050	3 990	9 040	12 880	2 120	15 000
1851	9 240	3 240	12 480	9 820	3 270	13 090
1852	10 010	3 050	13 060	12 010	1 480	13 490
1853	11 960	5 300	17 260	10 460	1 010	11 470
1854	3 890	1 490	5 380	11 490	950	12 440
1855	1 580	-	1 580	2 140	-	2 140
1856	5 480	-	5 480	2 870	-	2 870
1857	24 550	3 060	27 610	12 680	1 890	14 570
1858	21 700	1 890	23 590	12 910	2 240	15 150
1859	30 660	7 840	38 500	8 380	570	8 950
1860	14 610	1 070	15 680	12 310	-	12 310

Source: ASPCN (1790-92); Commerce and Navigation (1821-60).

TABLE 30
Raw sugar passing through the Sound in 1784-1856 (1000 lbs).

Year	From the United States to		From West Indies to		From Britain to		From the Netherlands to		From Hamburg and Bremen to		Other ports to		Total to	
	Russia	Baltic Sea	Russia	Baltic Sea	Russia	Baltic Sea	Russia	Baltic Sea	Russia	Baltic Sea	Russia	Baltic Sea	Russia	Baltic Sea
1784	885	2 324	-	-	712	1 563	591	737	1 038	1 400	5 182	16 967	8 408	22 991
1785	245	905	-	-	812	1 690	575	725	853	984	3 372	13 938	5 857	18 242
1786	-	-	-	-	496	1 256	433	599	1 605	2 160	4 292	16 363	6 826	20 378
1787	-	24	-	-	316	820	612	766	2 041	2 400	4 785	14 502	7 754	18 512
1788	-	165	-	-	228	614	337	651	2 071	2 268	5 816	12 809	8 452	16 507
1789	-	412	-	-	184	1 305	783	1 014	1 302	1 501	6 290	17 331	8 559	21 563
1790	-	130	-	-	795	1 358	722	1 011	2 168	2 385	5 009	15 045	8 694	19 929
1791	-	-	-	-	990	2 582	745	1 195	2 589	2 810	5 117	10 652	9 441	17 239
1792	-	-	-	-	2 367	5 054	326	648	832	1 266	1 458	4 418	4 981	11 386
1793	48	291	-	-	338	1 592	61	185	186	280	168	347	801	2 695
1794	258	1 023	-	-	1 430	4 493	352	941	368	426	647	927	3 235	8 260
1795	102	996	-	-	1 510	3 410	2	97	224	524	891	1 494	2 729	6 521
1800-03	..	..	..	..	..	..	..	..	..	..	..	..	..	27 229
1805-07	..	..	..	..	..	..	..	..	..	..	..	..	..	42 819
1811-12	..	..	..	..	..	..	..	..	..	..	..	..	..	9 375
1815	..	88	..	4 901	..	30 173	..	16	..	419	..	8 492	18 192	44 089
1816	..	1 485	..	31 844	..	22 716	..	270	..	220	..	2 036	19 733	58 581
1817	..	3 517	..	10 294	..	20 137	..	779	..	1 489	..	5 177	24 670	41 393
1824	..	2 016	..	27 726	..	14 281	..	6	..	3 843	..	10 363	38 419	58 276
1825	..	4 571	..	19 295	..	18 210	..	159	..	4 876	..	9 503	41 120	56 614
1831	994	2 744	23 339	42 036	5 408	16 563	3	479	4 592	5 939	238	2 997	34 574	70 758
1832	846	2 153	44 300	53 348	4 960	19 842	208	682	2 441	3 716	791	12 583	53 563	92 324
1833	1 484	1 685	38 777	55 467	7 952	12 941	127	455	4 794	5 836	25	966	43 159	77 350
1834	12	1 160	46 783	60 881	1 587	11 210	3	1 918	976	1 918	5	464	49 366	77 551
1835	1 129	2 127	31 140	47 881	3 270	14 366	644	2 583	1 830	2 499	898	2 896	38 911	72 352
1836	2 898	4 476	44 546	62 525	2 263	7 224	672	6 015	1 000	1 397	240	2 041	51 619	83 678
1837	11 620	14 636	25 136	40 878	9 328	16 823	4 220	5 592	3 369	4 747	749	3 276	54 422	85 952
1838	7 227	7 268	45 018	60 491	4 099	11 918	1 346	1 884	1 298	1 299	64	4 469	59 052	87 329
1839	8 511	8 686	26 671	41 957	9 216	13 094	1 057	7 819	3 303	3 357	13	2 649	48 771	77 562
1840	7 113	8 123	42 043	58 769	3 720	7 595	626	4 652	2 847	2 968	-	2 064	56 349	84 171

continues

TABLE 30 (continues)

Year	From the United States to		From West Indies to		From Britain to		From Netherlands to		From Hamburg and Bremen to		Other ports to		<u>TOTAL TO</u>	
	Russia	the Baltic	Russia	the Baltic	Russia	the Baltic	Russia	the Baltic	Russia	the Baltic	Russia	the Baltic	Russia	the Baltic
1841	9 504	9 524	52 728	62 136	8 930	18 063	287	6 241	425	3 375	1 234	24 857	73 108	106 367
1842	6 566	6 925	41 371	66 487	3 399	10 531	975	11 204	3 300	7 891	501	3 329	56 113	99 505
1843	6 960	8 035	50 371	72 369	4 791	13 782	1 571	13 261	6 675	9 764	293	3 338	70 662	120 531
1844	5 246	6 487	50 383	75 742	4 819	14 746	3 740	19 854	7 727	10 599	109	2 999	72 024	130 428
1845	3 596	5 056	32 273	57 844	2 416	5 824	1 940	6 437	3 777	4 718	814	3 773	44 816	83 622
1846	5 497	7 126	35 597	60 349	1 835	4 872	2 740	5 397	3 398	4 990	2 223	7 695	51 290	90 429
1847	2 385	2 395	28 074	55 039	1 973	23 244	178	7 175	737	3 405	167	3 970	33 514	95 228
1848	4 520	4 520	37 874	77 605	2 431	26 388	-	10 542	3 450	11 722	895	5 571	49 170	136 348
1849	3 202	3 202	47 419	81 328	7 524	28 913	8 534	15 914	1 987	4 641	3 422	6 821	72 288	140 819
1850	3 610	3 610	48 004	84 504	6 591	26 389	6 876	15 292	1 112	3 302	2 487	7 679	68 680	140 776
1851	515	515	74 517	92 354	332	13 799	8 002	13 468	1 581	2 883	-	763	84 947	123 782
1852	675	675	36 430	61 580	2 239	17 281	9 750	9 809	1 913	2 479	-	5 035	51 007	96 856
1853	593	593	30 945	58 874	2 057	10 965	2 645	2 704	202	2 565	-	386	36 442	76 087
1854	116	156	-	29 290	-	12 655	-	6 468	219	7 241	-	5 170	335	60 998
1855	-	189	-	37 380	-	10 904	-	7 635	-	5 158	-	13 081	-	74 347
1856	726	726	10 519	39 407	1 581	13 720	26 833	27 726	1 406	2 770	38	8 061	41 103	91 960

Notes: South American sugar is included in the figures for the West Indies. The figures for the years 1800-12 are average. For 1784-95 the export area "America" is included with the United States, and "German North Sea coast" appears under Hamburg and Bremen.

Sources: Years 1784-95: Johansen 1983a, microfiches 1-4, table XII/d; Johansen 1980, 30. Years 1800-56: ST I and ST II, 1800-07, 1811-12, 1815-17, 1824-25, 1831-56, ØTA, DRA.

TABLE 31
Import of raw sugar to Russia in 1830 and 1845.

Countries	1830		1845	
	poods	%	poods	%
'America'	893 500	66.6	1 035 100	62.9
Great Britain	170 400	12.6	448 100	26.7
'Hansetowns'	166 300	12.3	132 100	7.9
Netherlands	58 900	4.4	34 600	2.1
France	28 400	2.1	5 000	0.3
Others	29 900	2.2	1 300	0.1
Total	1 347 400	100.0	1 647 200	100.0

Source: PRO, FO, 65/114,360.

TABLE 32
Raw sugar carried on American vessels through the Sound, 1783-1860 (1000 lbs).

Year	From the United States				From Cuba	From Brazil	To Riga	To St Petersburg	Total to the Baltic
	Boston	Salem	New York	Total					
1783	-	-	-	-	-	-	-	0	14
1784	-	885	-	885	-	-	-	1 009	1 009
1785	7	213	-	224	-	-	-	244	244
1786	-	-	-	-	-	-	-	299	299
1787	-	-	-	-	-	-	-	203	203
1788	-	-	-	-	-	-	-	323	323
1789	-	-	-	-	-	-	-	188	188
1790	-	-	-	-	-	-	-	783	738
1791	-	-	-	-	-	-	-	290	290
1792	-	-	-	-	-	-	-	160	186
1793	-	-	48	48	-	-	-	569	1 148
1794	67	-	-	258	-	-	-	373	1 584
1795	-	102	-	102	-	-	-	168	928
1796	-	-	-	-	-	-	-	24	558
1797	-	-	-	-	-	-	-	-	182
1798	-	135	-	135	-	-	-	135	3 139
1799	-	-	-	-	-	-	-	-	3 222
1800	178	359	-	537	-	-	-	546	1 269
1801	-	9	-	9	-	-	-	884	4 425
1802	-	94	-	94	-	-	-	94	2 301
1803	-	-	-	-	-	-	-	-	1 727
1804	-	-	-	-	-	-	-	-	5 205
1805	-	-	-	-	-	-	-	10	4 677
1806	-	-	-	5	-	-	-	250	3 545
1807	47	-	75	141	-	-	-	736	2 253
1811	..	..	..	..	..	..	..	..	7 420
1815	95	-	-	95	264	-	-	714	731
1816	915	23	65	1 040	1 532	-	-	2 628	2 837
1817	585	627	-	1 856	495	-	-	2 359	3 574
1818	652	659	-	713	628	-	-	1 910	3 375
1819	415	1 003	-	1 852	88	-	-	2 110	2 169
1820	2 362	1 558	358	5 879	1 680	344	-	7 903	9 263
1821	1 520	538	1 627	4 638	8 490	930	-	14 368	15 538
1822	519	-	162	736	2 298	-	333	2 701	4 684
1823	383	50	-	506	6 989	-	260	7 189	11 685
1824	376	271	241	925	14 873	4 559	379	20 056	22 412
1825	980	497	6	1 573	13 809	3 022	-	18 596	21 929

continues

TABLE 32 (continues)

Year	From the United States				From Cuba	From Brazil	To Riga	To St Petersburg	Total to the Baltic
	Boston	Salem	New York	Total					
1826	1 464	386	124	2 212	15 271	3 953	907	20 563	26 366
1827	388	410	56	1 223	15 174	1 520	-	17 917	20 797
1828	212	496	-	1 485	19 976	2 395	447	23 409	26 573
1829	676	-	-	1 083	29 011	4 766	1 106	33 754	37 057
1830	104	1 290	105	2 101	25 441	691	671	27 562	31 894
1831	175	398	596	1 169	21 323	-	647	22 198	24 736
1832	1 126	-	342	1 486	37 643	-	704	38 407	39 111
1833	711	-	221	932	33 162	-	1 688	33 077	36 268
1834	1 642	-	-	1 847	40 667	-	2 675	41 530	44 205
1835	1 524	-	-	2 328	27 928	-	1 858	28 398	30 256
1836	1 190	83	-	2 108	37 156	432	1 451	39 067	41 663
1837	7 660	1 193	-	9 926	18 874	-	-	30 128	31 796
1838	7 218	-	67	7 285	40 277	-	-	47 562	47 562
1839	6 168	-	2 232	8 400	21 184	-	-	29 584	29 584
1840	6 095	-	1 018	7 113	34 093	-	-	41 206	43 293
1841	8 450	-	1 074	9 524	37 804	-	-	47 343	47 853
1842	6 567	-	-	6 567	32 755	-	2 300	37 022	41 712
1843	8 070	-	71	8 141	43 469	-	1 788	49 832	54 050
1844	2 682	-	16	2 698	51 075	-	-	53 773	55 411
1845	923	-	-	923	9 449	-	-	10 372	10 372
1846	119	-	40	159	15 791	-	791	15 159	16 743
1847	945	-	182	1 127	16 656	-	-	17 738	17 783
1848	350	-	65	492	33 782	-	2 589	31 685	39 882
1849	1 575	-	473	2 048	36 524	-	1 964	36 608	38 600
1850	1 344	-	-	1 344	41 807	-	3 011	40 183	43 049
1851	515	-	-	515	52 596	-	1 103	53 111	55 180
1852	621	-	-	621	16 570	-	-	17 272	17 272
1853	593	-	-	593	17 336	-	-	17 929	19 261
1854	-	-	-	-	-	-	-	-	1 968
1855	-	-	-	-	-	-	-	-	10 824
1856	41	-	-	41	6 110	-	-	6 150	..
1857	116	-	-	116	2 431	-	..	2 547	..
1858	-	-	-	-	4 608	-	..	4 608	..
1859	-	-	-	-	6 408	-	..	6 408	..
1860	-	-	-	-	1 958	-	..	1 958	..

Sources: STA 1783-1806, 1815-50, ØTA, DRA; CR 1807, NA T-201/1; CR 1811, 1851-60, NA M-81/2, 5-6.

TABLE 33 American cotton as a proportion of Russian imports 1827-60.

Years	Cotton imports to Russia		
	Total (1000 roubles)	From the U.S. (1000 roubles)	%
1827-30	1 913	525	27.4
1836-38	6 995	1 173	16.9
1841-45	2 655	377	14.2
1846-50	6 914	940	13.6
1851-53	10 392	1 983	19.1
1856-60	18 190	5 926	32.6

Note: Values in 1827-38 are paper roubles and thereafter silver roubles.

Source: Kirchner 1975, 57, 59.

TABLE 34
Cotton and cotton yarn (twist) passing through the Sound, 1815-56 (1000 lbs).

Year	Cotton from U.S.		Cotton from Britain		Cotton yarn from Britain	
	to Russia	to Baltic Sea	to Russia	to Baltic Sea	to Russia	to Baltic Sea
1815	..	844	..	32	..	2 281
1816	..	165	..	8	..	2 001
1817	..	300	..	54	..	5 334
1824	..	601	..	914	..	11 478
1825	..	514	..	815	..	9 120
1826	..	833	..	1 015	..	12 139
1827	..	316	..	1 631	..	12 395
1828	..	629	..	1 957	..	14 776
1829	..	539	..	3 570	..	17 681
1831	714	1 418	1 268	1 960	13 548	13 789
1832	805	1 377	2 019	2 938	19 573	19 632
1833	962	1 357	1 220	1 316	19 272	19 304
1834	975	1 323	2 601	2 997	15 834	15 890
1835	1 011	1 476	4 876	5 496	20 944	20 987
1836	2 005	2 993	2 893	4 149	18 542	18 560
1837	900	1 300	5 022	6 269	24 059	24 083
1838	2 402	2 906	6 745	7 403	19 789	19 833
1839	2 203	2 474	7 521	8 071	18 654	18 757
1840	1 804	2 592	5 909	7 181	16 639	16 706
1841	560	879	5 883	6 099	17 330	17 590
1842	1 419	1 763	7 521	8 472	21 632	22 119
1843	2 516	2 955	6 658	7 376	21 320	22 055
1844	5 215	5 682	8 966	9 791	22 985	24 130
1845	7 316	8 251	10 842	11 761	16 819	18 324
1846	8 397	10 529	12 981	14 799	13 690	15 090
1847	5 385	5 432	21 177	24 301	12 585	13 557
1848	12 411	12 552	27 856	32 821	9 761	12 184
1849	18 799	18 897	36 997	39 344	9 325	11 347
1850	20 954	21 552	30 599	33 562	8 588	10 619
1851	6 908	7 259	39 597	42 671	2 375	3 782
1852	10 355	10 993	45 147	48 385	2 395	3 390
1853	20 108	21 138	47 881	50 368	2 421	3 684
1854	402	11 466	49	25 751	-	1 992
1855	-	6 383	-	30 030	-	2 942
1856	24 606	27 496	36 853	38 891	3 747	4 688

continues

TABLE 34 (continues)

Year	Cotton from other areas to		Cotton yarn from other areas to		Total amount of cotton to		Total amount of cotton yarn to	
	Russia	Baltic Sea	Russia	Baltic Sea	Russia	Baltic Sea	Russia	Baltic Sea
1815	..	92	..	96	633	968	2 297	2 377
1816	..	21	..	111	22	194	2 033	2 112
1817	..	154	..	73	181	508	5 339	5 407
1824	..	49	..	49	1 039	1 564	11 358	11 527
1825	..	88	..	51	991	1 417	8 982	9 171
1826	..	43	..	4	1 221	1 891	11 917	12 143
1827	..	75	..	3	1 269	2 022	12 218	12 398
1828	..	155	..	16	2 248	2 741	14 634	14 792
1829	..	352	..	10	3 219	4 461	17 577	17 691
1831	1	32	-	23	1 983	3 410	13 548	13 812
1832	132	197	2	25	2 956	4 512	19 573	19 657
1833	941	1 143	3	11	3 123	3 816	19 275	19 315
1834	348	390	-	22	3 924	4 710	15 834	15 912
1835	786	797	-	6	6 673	7 769	20 948	20 993
1836	159	194	-	25	5 057	7 336	18 553	18 585
1837	39	88	-	9	5 961	7 657	24 064	24 092
1838	292	505	-	10	9 439	10 914	19 804	19 843
1839	1 026	1 234	-	19	10 750	11 779	18 668	18 776
1840	1 124	1 451	-	11	8 837	11 224	16 639	16 717
1841	54	737	-	25	6 497	7 715	17 367	17 615
1842	699	759	-	30	9 639	10 994	21 632	22 149
1843	407	446	-	6	9 581	10 777	21 320	22 061
1844	606	699	-	87	14 787	16 172	22 985	24 217
1845	777	900	-	449	18 935	20 912	16 819	18 773
1846	1 278	1 532	129	834	22 656	26 860	13 819	15 924
1847	1 615	1 254	8	289	28 177	30 987	12 593	13 846
1848	1 321	4 559	-	330	41 588	49 932	9 761	12 514
1849	722	740	-	269	56 518	58 981	9 325	11 616
1850	848	912	21	312	52 401	56 026	8 609	10 931
1851	736	769	-	250	47 241	50 699	2 375	4 032
1852	687	726	-	141	56 189	60 104	2 395	3 531
1853	523	688	-	21	68 512	72 194	2 421	3 705
1854	0	2 207	-	10	451	39 424	-	2 002
1855	0	900	-	169	0	37 919	-	3 111
1856	7 604	8 846	0	47	69 063	75 233	3 747	4 735

Notes: In the years 1784-90 cotton was transported an average of 754,000 lbs through the Sound, in 1791-94 206 000 lbs, in 1800-03 275,000 lbs, and in 1811-12 3,478 000 lbs. In 1784-90 cotton yarn/twist was transported an average of 18 000 lbs, and in 1791-94 an average of 41 000 lbs.

Sources: Johansen 1983a, microfiches 1-4, table XI, codes 1810,812; ST I – ST II: 1800-03, 1805-07, 1811-12, 1815-17, 1824-29, 1831-56, ØTA, DRA.

TABLE 35
Cotton carried on American vessels through the Sound, 1815-60 (1000 lbs).

Year	FROM THE U.S. TO RUSSIA						Total from U.S.	Total to Russia	Total to the Baltic
	Boston	New York	Charles ton	Savannah	Mobile	New Orl.			
1815	122	2	-	315	-	-	453	453	1 051
1816	18	38	-	-	-	-	113	113	169
1817	233	185	-	-	-	-	497	585	674
1818	498	-	-	151	-	-	649	649	819
1819	346	-	50	222	-	-	633	633	711
1820	14	24	138	-	-	22	209	209	249
1821	61	50	252	-	-	-	400	400	681
1822	101	91	351	164	-	-	721	721	790
1823	32	-	158	-	-	-	190	190	788
1824	-	14	-	315	-	171	500	500	675
1825	219	16	-	-	-	-	235	508	735
1826	32	-	340	-	-	-	372	372	639
1827	27	42	-	-	-	-	169	169	315
1828	1 052	242	2	-	-	-	1 493	1 493	1 706
1829	77	288	-	-	-	-	366	366	514
1830	75	55	-	-	-	-	120	120	387
1831	663	298	-	-	-	-	961	961	2 033
1832	382	296	299	-	-	-	977	977	1 177
1833	216	682	510	-	-	-	1 408	1 453	1 609
1834	8	120	405	-	-	367	900	900	900
	<u>19</u>	<u>120</u>	<u>495</u>	-	-	<u>386</u>	<u>1 020</u>	<u>1 020</u>	.
1835	776	-	335	-	-	-	1 111	1 111	1 111
	<u>819</u>	-	<u>339</u>	-	-	-	<u>1 158</u>	<u>1 158</u>	.
1836	375	15	484	-	-	495	1 369	1 369	1 708
	<u>381</u>	<u>16</u>	<u>436</u>	-	-	<u>495</u>	<u>1 328</u>	<u>1 328</u>	.
1837	197	145	530	-	-	-	872	872	872
	<u>199</u>	<u>147</u>	<u>557</u>	-	-	-	<u>903</u>	<u>903</u>	.
1838	48	560	1 718	-	-	339	2 665	3 048	3 054
	<u>48</u>	<u>584</u>	<u>1 797</u>	-	-	<u>357</u>	<u>2 750</u>	<u>3 174</u>	.
1839	153	664	1 210	-	-	-	2 027	2 027	2 052
	<u>153</u>	<u>694</u>	<u>1 243</u>	-	-	-	<u>2 090</u>	<u>2 090</u>	.
1840	431	529	349	-	541	-	1 850	1 970	1 970
	<u>431</u>	<u>529</u>	<u>368</u>	-	<u>569</u>	-	<u>1 897</u>	<u>2 023</u>	.
1841	137	94	-	-	-	-	475	716	1 008
	<u>137</u>	<u>99</u>	-	-	-	-	<u>480</u>	<u>721</u>	.
1842	75	1 258	645	-	-	-	2 266	2 266	2 308
	<u>75</u>	<u>1 324</u>	<u>663</u>	-	-	-	<u>2 365</u>	<u>2 365</u>	.
1843	57	1 745	-	646	-	546	2 994	2 994	3 084
	<u>57</u>	<u>1 837</u>	-	<u>659</u>	-	<u>575</u>	<u>3 128</u>	<u>3 128</u>	.
1844	123	1 300	154	-	-	-	1 577	1 577	1 614
	<u>86</u>	<u>2 060</u>	<u>329</u>	<u>162</u>	-	-	<u>2 060</u>	<u>2 060</u>	.
1845	1 018	452	761	451	3 302	1 078	7 062	7 062	7 151
	<u>1 035</u>	<u>476</u>	<u>801</u>	<u>475</u>	<u>3 424</u>	<u>1 035</u>	<u>7 249</u>	<u>7 249</u>	.

continues

TABLE 35 (continues)

Year	FROM THE U.S. TO RUSSIA						Total from U.S.	Total to Russia	Total to the Baltic
	Boston	New York	Charles ton	Savannah	Mobile	New Orleans			
1846	1 509	-	-	-	759	2 593	4 861	4 861	4 881
	<u>1 572</u>	-	-	-	<u>799</u>	<u>2 730</u>	<u>5 101</u>	<u>5 101</u>	.
1847	1 132	725	672	-	-	1 693	4 222	4 392	4 406
	<u>986</u>	<u>978</u>	<u>708</u>	-	-	<u>1 837</u>	<u>4 509</u>	<u>4 686</u>	.
1848	563	773	1 608	-	-	4 713	8 679	8 679	8 914
	<u>1 257</u>	<u>799</u>	<u>711</u>	-	-	<u>4 934</u>	<u>8 547</u>	<u>8 547</u>	.
1849	1 064	1 087	1 206	458	859	3 384	8 058	8 058	8 103
	<u>1 080</u>	<u>1 201</u>	<u>1 246</u>	<u>473</u>	<u>887</u>	<u>3 491</u>	<u>8 376</u>	<u>8 378</u>	.
1850	294	628	299	-	-	-	1 221	1 221	1 221
	<u>310</u>	<u>661</u>	<u>308</u>	-	-	-	<u>1 279</u>	<u>1 279</u>	.
1851	<u>561</u>	<u>2 250</u>	<u>1 329</u>	-	<u>747</u>	<u>3 757</u>	<u>8 644</u>	<u>8 644</u>	<u>8 644</u>
1852	<u>888</u>	-	<u>1 000</u>	<u>631</u>	<u>981</u>	<u>4 871</u>	<u>8 371</u>	<u>8 371</u>	<u>9 574</u>
1853	<u>653</u>	-	<u>273</u>	-	<u>984</u>	<u>13 623</u>	<u>15 064</u>	<u>17 064</u>	<u>19 189</u>
1854	<u>403</u>	-	-	-	-	-	<u>43</u>	<u>1 204</u>	<u>12 189</u>
1855	-	-	-	-	-	-	-	-	<u>5 099</u>
1856	<u>1 717</u>	<u>1 268</u>	<u>2 339</u>	<u>1 504</u>	<u>2 848</u>	<u>14 981</u>	<u>24 657</u>	<u>24 290</u>	<u>24 656</u>
1857	<u>508</u>	<u>1 088</u>	<u>2 020</u>	<u>1 929</u>	<u>6 402</u>	<u>19 476</u>	<u>31 427</u>	<u>31 421</u>	..
1858	<u>1 651</u>	<u>1 750</u>	<u>4 429</u>	<u>1 772</u>	<u>5 769</u>	<u>16 779</u>	<u>32 565</u>	<u>33 578</u>	..
1859	<u>1 328</u>	<u>2 207</u>	<u>4 850</u>	-	<u>6 184</u>	<u>25 976</u>	<u>40 864</u>	<u>41 021</u>	..
1860	<u>1 450</u>	<u>250</u>	<u>2 219</u>	<u>2 050</u>	<u>1 449</u>	<u>12 179</u>	<u>20 861</u>	<u>21 664</u>	..

Notes: The parallel amounts underlined from 1834 onwards are figures reported by the consuls adding together the figures for each vessel in the shipping lists. Sometimes totals are not the same as the consuls reported. Totals for the years 1851-56 are from the reports of the consuls in Elsinore. Other parallel figures are from reports by the consuls in St Petersburg.

Sources: STA 1815-50, ØTA, DRA; CR 1834-60, NA M-81/3-6.

TABLE 36
Rice passing through the Sound, 1784-1856 (1000 lbs)

Years	From the United States to		From Britain to		From other areas to		Total to	
	Russia	Baltic Sea	Russia	Baltic Sea	Russia	Baltic Sea	Russia	Baltic Sea
1784-90	..	..	..	..	..	..	..	4 256
1791-95	..	..	..	..	..	..	..	4 437
1803	..	3 290	..	..	..	..	..	5 730
1805	..	986	..	..	..	..	..	2 569
1806	..	2 787	..	..	..	..	..	4 839
1807	..	6 878	..	..	..	..	..	8 893
1811-12	..	..	..	..	..	..	..	1 584
1815	..	3 695	..	1 739	..	416	1 866	5 850
1816	..	7 092	..	393	..	837	3 332	8 322
1817	..	-	..	728	..	629	49	1 357
1824	..	1 933	..	1 697	..	248	678	3 878
1825	..	4 867	..	581	..	183	993	5 631
1831	400	4 613	0	0	159	1 589	559	6 202
1832	789	6 376	60	385	50	82	908	6 843
1833	1 499	4 452	51	210	239	469	1 789	5 131
1834	425	3 985	68	298	63	992	556	5 275
1835	506	4 213	120	1 519	350	614	976	6 346
1836	1 137	5 101	236	593	243	955	1 616	6 649
1837	283	3 509	-	-	270	1 142	553	4 651
1838	167	2 633	272	2 194	202	440	641	5 267
1839	243	2 362	402	2 225	1 262	1 388	1 906	5 975
1840	359	2 887	1 359	3 533	814	1 444	2 532	7 864
1841	220	4 498	86	996	214	1 785	520	7 279
1842	652	4 076	136	1 464	305	1 223	1 093	6 763
1843	556	3 494	0	1 292	434	578	990	5 364
1844	416	4 814	125	-	276	1 663	817	6 477
1845	224	3 269	136	1 064	252	479	612	4 812
1846	590	4 717	487	3 329	518	8 046	1 595	9 405
1847	680	3 312	349	12 295	700	15 607	1 729	20 491
1848	241	5 963	586	7 385	1 389	3 723	2 216	17 071
1849	1 868	5 402	266	8 409	1 846	2 422	3 980	16 233
1850	1 413	5 011	417	6 678	1 899	2 488	3 729	14 177
1851	630	4 023	873	9 907	390	2 519	1 893	16 449
1852	548	5 937	2 254	14 236	784	2 892	3 586	23 065
1853	418	3 724	1 753	13 891	243	2 201	2 414	19 816
1854	80	3 248	-	12 940	7	3 027	87	19 215
1855	-	717	-	26 679	-	11 482	-	38 878
1856	554	2 986	1 597	18 740	432	13 330	2 583	35 056

Notes: Figures for 1784-90, 1791-95, and 1811-12 are averages.

Sources: Johanson 1983a, microfiches 1-4, table XI, code 150 ; ST I and ST II 1803-07, 1811-12, 1815-17, 1824-25, 1831-56, ØTA, DRA.

TABLE 37
Rice carried through the Sound on American vessels, 1783-1860 (1000 lbs).

Year	T O R U S S I A				From other areas	Total to Russia	Total to the Baltic
	FROM Boston	THE New York	U. S. Charleston	U. S. total			
1783	-	-	-	-	15	15	15
1784	-	-	-	-	10	10	10
1785	8	-	-	42	117	117	117
1786	-	-	-	-	145	145	145
1787	-	-	-	-	221	221	831
1788	-	-	98	98	192	200	735
1789	35	-	-	35	-	70	1 679
1790	-	-	-	-	-	-	881
1791	-	-	-	-	48	48	800
1792	-	-	-	-	-	-	3 399
1793	-	-	-	-	-	-	1 484
1794	-	-	-	187	150	337	1 685
1795	-	-	-	-	-	-	1 618
1796	-	-	-	-	89	89	5 057
1797	-	-	-	-	-	-	2 539
1798	-	-	-	-	-	-	1 794
1799	-	-	-	-	-	-	1 887
1800	-	-	-	-	-	-	118
1801	-	-	-	-	35	35	396
1802	-	6	143	149	-	149	1 727
1803	-	59	-	59	23	82	2 385
1804	-	-	-	30	30	60	4 105
1805	-	-	-	10	-	10	57
1806	-	41	-	104	-	104	1 886
1807	98	122	1 128	1 572	-	1 572	4 102
1815	415	21	-	861	-	861	2 860
1816	314	104	415	1 849	100	1 949	3 972
1817	-	-	-	-	-	-	268
1818	61	-	-	155	12	167	390
1819	237	-	162	554	-	554	1 656
1820	242	53	168	720	-	720	1 275
1821	448	362	307	1 821	80	1 901	4 080
1822	302	265	-	596	-	596	1 860
1823	88	-	217	405	-	405	625
1824	112	21	-	162	-	162	1 937
1825	253	94	351	708	112	820	4 574
1826	164	50	134	348	-	348	3 199
1827	684	246	-	1 327	-	1 327	3 895
1828	438	180	533	1 510	-	1 510	4 711
1829	60	-	10	70	-	70	2 995
1830	33	31	-	64	-	64	3 655
1831	642	400	-	1 042	-	1 042	3 988
1832	615	291	334	1 240	-	1 240	5 072
1833	423	481	694	1 598	32	1 630	6 139
1834	209	-	689	898	-	898	1 234
(1834)	<u>270</u>	-	<u>434</u>	<u>704</u>	-	<u>704</u>	.

continues

TABLE 37 (continues)

Year	T O R U S S I A				From other areas	Total	Total to the Baltic
	FROM THE		U. S.				
	Boston	New York	Charleston	Total			
1835	279	-	454	733	-	733	3 285
(1835)	287	-	740	927	-	927	.
1836	230	97	919	1 246	-	1 246	5 400
(1836)	<u>207</u>	<u>97</u>	<u>1 314</u>	<u>1 619</u>	-	<u>1 618</u>	.
1837	73	-	220	293	-	293	293
(1837)	<u>73</u>	-	<u>234</u>	<u>307</u>	-	<u>307</u>	.
1838	58	-	329	387	-	387	1 225
(1838)	<u>58</u>	-	<u>343</u>	<u>401</u>	-	<u>401</u>	.
1839	386	209	601	1 196	-	1 196	1 713
(1839)	<u>311</u>	<u>292</u>	<u>679</u>	<u>1 282</u>	-	<u>1 282</u>	.
1840	234	-	123	359	-	359	935
(1840)	<u>234</u>	-	<u>139</u>	<u>373</u>	-	<u>373</u>	.
1841	207	-	-	524	-	524	1 386
(1841)	<u>211</u>	-	-	<u>528</u>	-	<u>528</u>	.
1842	301	86	443	830	-	830	3 238
(1842)	<u>301</u>	<u>96</u>	<u>471</u>	<u>868</u>	-	<u>868</u>	.
1843	299	588	-	1 120	-	1 120	2 253
(1843)	<u>303</u>	<u>516</u>	-	<u>1 079</u>	-	<u>1 079</u>	.
1844	451	323	217	1 214	108	1 322	2 006
(1844)	<u>451</u>	<u>373</u>	<u>241</u>	<u>1 301</u>	<u>108</u>	<u>1 409</u>	.
1845	771	86	-	844	-	844	907
(1845)	<u>769</u>	<u>87</u>	-	<u>892</u>	-	<u>892</u>	.
1846	688	125	-	813	-	813	1 331
(1846)	<u>730</u>	<u>125</u>	-	<u>855</u>	-	855	.
1847	550	60	-	610	99	709	709
(1847)	<u>586</u>	<u>36</u>	-	<u>622</u>	<u>99</u>	<u>641</u>	.
1848	554	254	442	1 250	-	1 250	1 325
(1848)	<u>802</u>	<u>279</u>	<u>491</u>	<u>1 572</u>	-	<u>1 572</u>	.
1849	667	282	609	1 558	-	1 558	1 953
(1848)	<u>576</u>	<u>282</u>	<u>609</u>	<u>1 467</u>	-	<u>1 476</u>	.
1850	245	161	587	993	-	993	1 034
(1850)	<u>286</u>	<u>161</u>	<u>588</u>	<u>1 035</u>	-	<u>1 035</u>	.
1851	<u>158</u>	-	<u>76</u>	<u>234</u>	-	<u>234</u>	.
1852	<u>35</u>	-	<u>189</u>	<u>321</u>	-	<u>321</u>	.
1853	<u>352</u>	-	<u>73</u>	<u>425</u>	<u>67</u>	<u>492</u>	.
1854	-	-	-	-	-	-	.
1855	-	-	-	-	-	-	.
1856	-	-	-	-	-	-	.
1857	-	-	<u>146</u>	-	-	<u>146</u>	.
1858	<u>319</u>	<u>68</u>	<u>126</u>	<u>513</u>	-	<u>513</u>	.
1859	<u>201</u>	<u>54</u>	<u>651</u>	<u>906</u>	-	<u>906</u>	.
1860	<u>42</u>	-	<u>164</u>	<u>206</u>	-	<u>206</u>	.

Notes: The figures underlined for 1834 and thereafter are the amounts reported by consuls in St Petersburg.

Sources: STA 1783-1806, 1815-50, ØTA, DRA ; CR 1807, NA T-201/T1; CR 1834-60, NA M-81/3-6.

TABLE 38
Tobacco passing through the Sound, 1784-1856 (1000 lbs).

Years	From the United States to		From Bremen to		Others to		Total to	
	Russia	Baltic Sea	Russia	Baltic Sea	Russia	Baltic Sea	Russia	Baltic Sea
1784-90	..	..	..	..	..	..	..	3 407
1791-95	..	..	..	..	..	..	..	3 346
1803	..	637	..	..	..	..	..	3 961
1805	..	1 932	..	..	..	..	..	4 665
1806	..	311	..	..	..	..	..	2 630
1807	..	444	..	..	..	..	..	2 021
1811-12	..	..	..	..	..	..	..	2 426
1815	..	582	..	-	..	2 401	199	2 983
1816	..	780	..	15	..	1 592	126	2 387
1817	..	637	..	185	..	1 371	64	2 193
1824	..	858	..	258	..	723	324	1 839
1825	..	1 085	..	162	..	1 030	290	2 277
1831	-	1 395	685	756	256	991	941	3 142
1832	8	927	1 282	1 583	267	1 450	1 557	3 960
1833	5	450	1 471	1 629	81	809	1 557	2 888
1834	33	689	1 050	1 314	137	1 336	1 220	3 339
1835	45	800	1 164	1 349	270	938	1 479	3 132
1836	142	907	1 579	1 702	175	526	1 896	3 135
1837	2	540	1 321	1 647	295	825	1 618	3 012
1838	-	488	1 032	1 140	310	895	1 342	2 523
1839	-	164	875	1 200	163	1 776	1 038	3 141
1840	-	496	1 056	1 607	325	1 232	1 381	3 335
1841	-	621	1 133	1 457	154	801	1 287	2 879
1842	-	464	894	1 262	205	933	1 099	2 659
1843	-	308	852	1 168	203	922	1 055	2 398
1844	-	325	918	1 198	273	1 075	1 191	2 598
1845	-	440	867	1 111	274	1 164	1 114	2 715
1846	489	751	860	1 453	233	1 463	1 682	3 667
1847	16	184	1 451	1 973	353	1 016	1 820	3 173
1848	-	126	979	1 555	312	1 210	1 291	2 891
1849	-	117	1 546	2 493	487	1 964	2 033	4 574
1850	-	115	907	1 930	334	1 664	1 241	3 709
1851	351	542	1 537	2 363	305	907	2 193	3 812
1852	141	569	1 907	3 047	285	1 043	2 333	4 659
1853	33	128	1 993	2 894	273	1 269	2 299	4 291
1854	-	84	124	1 987	10	794	134	2 865
1855	-	288	-	2 830	-	939	-	4 057
1856	-	182	1 874	2 890	520	1 087	2 394	4 159

Note: Figures for 1784-90, 1791-95, and 1811-12 are averages.

Sources: Johansen 1983a, microfiches 1-4, table XI, code 292; Johansen 1983b, 174; Johansen 1986, 130; ST I and ST II, 1803, 1805-07, 1811-12, 1824-25, 1831-56, ØTA, DRA.

TABLE 39
Tobacco carried through the Sound on American vessels, 1783-1856 (1000 lbs).

Years	T O R U S S I A			Total to the Baltic	Years	T O R U S S I A			Total to the Baltic
	From Boston	From U.S.	Total			From Boston	From U.S.	Total	
1783	-	-	-	-	1826	6	6	6	430
1784	-	-	-	-	1827	114	114	119	1 057
1785	-	-	-	1	1828	23	35	35	957
1786	-	-	1	1	1829	-	-	2	141
1787	-	-	-	49	1830	35	38	38	700
1788	-	124	124	125	1831	-	-	148	1 331
1789	20	20	20	550	1832	51	51	51	565
1790	-	-	-	250	1833	38	38	40	272
1791	-	-	-	669	1834	38	46	46	402
1792	-	-	5	1 907	(1834)	<u>35</u>	<u>43</u>	<u>43</u>	.
1793	-	-	-	544	1835	45	45	48	155
1794	-	-	-	261	(1835)	<u>52</u>	<u>52</u>	<u>55</u>	.
1795	-	-	-	347	1836	212	212	268	354
1796	-	6	6	1 012	(1836)	<u>142</u>	<u>204</u>	<u>204</u>	.
1797	-	-	-	751	1837	72	72	105	235
1798	-	-	-	506	(1837)	<u>11</u>	<u>11</u>	<u>66</u>	.
1799	-	-	-	2 665	1838	-	-	-	80
1800	-	-	-	410	1839	-	-	2	60
1801	-	-	-	450	1840	-	55	55	457
1802	-	-	-	272	1841	-	-	-	83
1803	-	-	-	658	1842	-	-	-	6
1804	-	-	-	1 218	1843	-	1	5	7
1805	-	174	174	636	(1843)	-	<u>1</u>	<u>5</u>	.
1806	-	-	-	487	1844	3	3	3	4
1807	-	-	-	-	(1844)	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>
1808	-	-	-	-	1845	-	491	491	728
1809	..	157	..	..	(1845)	-	<u>588</u>	<u>588</u>	.
1810	..	1 754	..	..	1846	-	595	595	596
1811	..	1 480	..	..	(1846)	<u>1</u>	<u>661</u>	<u>662</u>	.
					1847	-	16	24	24
1815	-	-	-	228	(1847)	<u>1</u>	<u>17</u>	<u>25</u>	.
1816	-	22	22	301	1848	-	-	33	754
1817	30	31	31	265	(1848)	-	-	<u>33</u>	.
1818	-	125	125	1 008	1849	-	317	317	330
1819	31	23	23	262	(1849)	-	<u>339</u>	<u>339</u>	.
1820	23	226	226	306	1850	-	1 313	1 313	1 661
1821	27	28	28	802	(1850)	-	<u>1 484</u>	<u>1 484</u>	.
1822	162	165	165	467	1851	-	<u>427</u>	<u>438</u>	<u>438</u>
1823	100	104	104	646	1852	-	<u>1</u>	1	<u>284</u>
1824	-	8	8	483	1853	-	<u>17</u>	<u>17</u>	<u>17</u>
1825	45	45	45	675	1854	-	-	-	-
					1855	-	-	-	<u>723</u>
					1856	-	<u>1</u>	<u>1</u>	<u>381</u>

Notes: The underlined figures for 1834-37 and 1844-56 have been counted from the St Petersburg consuls' shipping lists. The totals for 1851-56 are the figures reported by the consuls in Elsinore. The figures for 1808-11 are according to Pitkin (1816,130). He argues that in 1800-1808 there were no exports from the U.S. to Russia. According to Consul Harris in 1811 American vessels carried altogether 751 000 lbs of tobacco through the Sound. This was about half the amount that Pitkin mentions. Sources: STA 1783-1806, 1815-50, ØTA, DRA; CR 1807, NA T-201/T1; CR 1834-56, NA M-81/3-6; CR 1851-56, NA T-201/ 3.

TABLE 40
Coffee passing through the Sound, 1784-1850 (1000 lbs).

Years	From U.S. to		From West Indies and South America to		From Britain to		From other areas to		Total to	
	Russia	Baltic Sea	Russia	Baltic Sea	Russia	Baltic Sea	Russia	Baltic Sea	Russia	Baltic Sea
1784-90	..	..	..	..	..	..	..	..	..	7 386
1791-95	..	..	..	..	..	..	..	..	..	4 424
1800-03	..	..	..	..	..	..	..	..	..	8 278
1805-07	..	..	..	..	..	..	..	..	..	10 196
1811-12	..	..	..	..	..	..	..	..	..	3 433
1815	..	335	..	-	..	9 418	..	1 425	2 242	11 178
1816	..	837	..	99	..	9 019	..	2 475	4 116	12 430
1817	..	913	..	92	..	7 458	..	2 454	3 179	10 917
			..							
1824	..	1 167	..	1 170	..	6 928	..	1 281	3 172	10 546
1825	..	1 955	..	1 690	..	6 617	..	1 233	3 987	11 495
1826	..	495	..	1 018	..	5 742	..	637	2 478	7 892
1827	..	1 553	..	2 148	..	7 910	..	2 036	4 951	13 647
1828	..	1 561	..	3 688	..	6 400	..	3 073	6 078	14 722
1829	..	263	..	2 227	..	4 439	..	1 682	2 795	8 611
1831	553	1 193	2 020	6 004	2 048	4 362	148	420	4 769	11 979
1832	963	2 266	1 099	6 627	1 420	3 268	88	343	3 570	12 504
1833	406	1 188	3 122	7 406	226	1 482	60	344	3 814	10 420
1834	126	813	1 112	4 416	872	2 952	454	762	2 564	8 943
1835	382	608	140	2 812	1 296	2 411	256	809	2 074	6 640
1836	207	667	777	3 505	229	318	216	513	1 429	5 003
1837	1 015	1 245	655	4 443	395	1 106	636	869	2 701	7 663
1838	49	70	53	3 899	513	745	377	568	992	5 282
1839	536	676	19	2 439	131	434	522	676	1 208	4 225
1840	565	690	125	2 612	427	690	740	1 601	857	5 593
1841	446	456	21	4 345	414	912	1 589	4 109	2 470	9 822
1842	269	537	-	4 365	52	215	3 489	6 895	3 810	12 012
1843	810	1 033	42	2 802	576	794	4 690	7 547	6 118	12 176
1844	997	1 252	-	2 655	646	799	4 782	7 872	6 425	12 578
1845	1 451	1 952	1 005	5 667	897	1 085	6 006	10 404	9 359	19 108
1846	928	1 593	1 247	7 040	687	877	7 364	12 352	10 226	21 862
1847	82	90	1 007	9 748	384	1 712	2 277	6 563	3 750	18 086
1848	1 228	1 256	1 291	10 063	1 290	3 410	4 358	12 215	8 167	26 944
1849	184	273	2 810	16 106	1 040	2 783	2 361	8 622	6 429	27 784
1850	98	157	2 437	13 860	857	2 117	2 529	9 240	5 921	25 374
1851	0	65	2 616	17 852	1 464	2 963	2 482	9 028	6 562	29 908
1852	7	222	2 817	20 274	1 445	2 693	3 577	10 502	7 846	33 391
1853	11	24	4 054	15 149	583	6 312	2 997	8 966	7 645	30 451
1854	-	155	456	12 938	9	4 787	30	6 881	495	24 806
1855	-	54	-	22 796	-	6 933	-	10 138	-	39 921
1856	-	-	799	22 347	1 925	6 657	2 487	9 209	5 211	35 213

Sources: Johansen 1983b, microfiches 1-4, code 200; Johansen 1986, 130; ST I and ST II, 1800-1803, 1805-07, 1811-12, 1831-56, ØTA, DRA.

TABLE 41
Coffee carried through the Sound on American vessels, 1783-1853 (1000 lbs).

Years	T O R U S S I A					Total to the Baltic
	From Boston	From New York	Total from U.S.	From Havana	Total to Russia	
1783	-	-	-	-	-	-
1784	-	-	-	-	-	-
1785	1	-	13	-	14	14
1786	-	-	-	-	17	17
1787	-	-	-	-	9	9
1788	-	-	-	-	-	61
1789	-	-	-	-	-	-
1790	-	-	-	-	-	2
1791	-	-	-	-	-	10
1792	-	-	-	-	14	67
1793	-	1	1	-	278	753
1794	14	-	144	-	158	913
1795	-	-	225	-	261	1 219
1796	-	-	74	-	84	554
1797	-	-	-	-	-	254
1798	-	-	64	-	64	2 523
1799	-	-	-	-	5	610
1800	77	-	77	-	77	430
1801	16	-	63	-	79	1 155
1802	-	18	22	-	77	584
1803	-	-	4	-	4	553
1804	-	-	28	-	63	1 316
1805	-	84	93	-	177	953
1806	-	17	19	-	72	522
1807	-	136	136	-	136	1 048
1815	40	-	133	80	213	257
1816	253	293	888	491	1 412	1 572
1817	291	-	613	984	1 597	2 159
1818	196	-	219	-	264	568
1819	422	114	534	274	974	974
1820	801	19	1 849	118	1 967	2 072
1821	202	60	707	460	1 167	1 692
1822	619	-	719	908	1 627	1 925
1823	624	-	900	292	1 192	1 700
1824	384	-	395	365	919	1 596
1825	384	-	443	235	694	2 797
1826	76	-	82	265	388	793
1827	569	215	924	910	1 834	2 726
1828	1 104	84	1 355	933	2 829	4 036
1829	220	10	230	799	1 032	1 302
1830	164	-	191	1 311	1 502	2 165

continues

TABLE 41 (continues)

Years	T O R U S S I A					Total to the Baltic
	From Boston	From New York	Total from U.S.	From Havana	Total to Russia	
1831	364	268	645	1 348	2 041	2 273
1832	981	254	1 235	942	2 177	3 131
1833	151	239	406	2 486	2 893	3 734
1834	129	-	129	510	639	639
(1834)	<u>129</u>	-	<u>129</u>	<u>638</u>	<u>766</u>	.
1835	324	-	324	139	463	575
(1835)	<u>324</u>	-	<u>354</u>	<u>77</u>	<u>431</u>	.
1836	101	-	101	754	855	1 187
(1836)	<u>108</u>	-	<u>108</u>	<u>700</u>	<u>808</u>	.
1837	835	24	882	476	1 378	1 378
(1837)	<u>943</u>	<u>24</u>	<u>1 002</u>	<u>476</u>	<u>1 498</u>	.
1838	52	-	52	51	103	123
(1838)	<u>49</u>	-	<u>49</u>	<u>53</u>	<u>103</u>	.
1839	524	50	574	14	588	640
(1839)	<u>478</u>	<u>55</u>	<u>533</u>	<u>16</u>	<u>550</u>	.
1840	254	-	254	118	371	412
(1840)	<u>267</u>	-	<u>267</u>	<u>115</u>	<u>381</u>	.
1841	507	-	507	18	252	534
(1841)	<u>486</u>	-	<u>486</u>	<u>16</u>	<u>484</u>	.
1842	238	9	334	117	451	641
(1842)	<u>238</u>	<u>9</u>	<u>338</u>	<u>154</u>	<u>492</u>	.
1843	2	11	13	41	54	105
(1843)	<u>2</u>	<u>11</u>	<u>13</u>	<u>49</u>	<u>62</u>	.
1844	157	22	179	63	241	319
(1844)	<u>194</u>	<u>22</u>	<u>216</u>	<u>63</u>	<u>279</u>	.
1845	58	-	58	-	141	280
(1845)	<u>58</u>	-	<u>58</u>	-	<u>149</u>	.
1846	192	-	192	-	192	424
(1846)	<u>192</u>	-	<u>192</u>	-	<u>192</u>	.
1847	-	15	15	67	82	90
(1847)	<u>1</u>	<u>17</u>	<u>18</u>	<u>8</u>	<u>26</u>	.
1848	-	103	103	-	103	210
(1848)	-	<u>112</u>	<u>112</u>	-	<u>112</u>	.
1849	82	102	184	21	205	266
(1849)	<u>82</u>	<u>101</u>	<u>183</u>	<u>21</u>	<u>204</u>	.
1850	101	-	101	35	136	202
(1850)	<u>168</u>	-	<u>168</u>	<u>13</u>	<u>181</u>	.
1851	<u>17</u>	-	<u>17</u>	-	<u>17</u>	.
1852	<u>7</u>	-	<u>7</u>	-	<u>7</u>	.
1853	<u>12</u>	-	<u>12</u>	<u>3</u>	<u>15</u>	.

Notes: Underlined figures for 1834-53 derive from the shipping lists of the consuls in St Petersburg.

Sources: STA 1783-1806, 1815-50 ØTA, DRA ; CR 1807, NA T-201/ T1; CR 1834-53, NA M-81/3-6.

TABLE 42
U.S. exports to Russia, 1790-1820.

Year	Sugar 1000 lbs	Cotton 1000 lbs	Rice 1000 lbs	Coffee 1000 lbs	Domestic Exports \$1000	Foreign exports \$1000	Total exports to Russia \$1000	(U.S. total exports \$1000)
1790	-	-	-	-	-	..	-	20 205
1791	-	-	-	-	..	..	4	19 012
1792	-	-	-	-	..	..	5	3 753
1793	57	-	-	0	..	..	6	26 110
1794	829	-	102	362	..	..	90	33 044
1795	393	-	-	125	..	..	69	47 989
1796	68	17	-	108	..	..	47	67 064
1797	-	-	78	-	..	..	3	58 850
1798	101	-	51	177	..	..	61	61 527
1799	261	-	38	-	..	..	46	78 666
1800	0	-	-	-	-	-	-	70 972
1801	0	-	-	-	..	..	9	94 116
1802	61	-	-	101	11	62	74	72 483
1803	-	-	-	-	-	-	-	55 800
1804	-	-	-	-	-	-	-	77 699
1805	44	-	-	130	12	59	71	95 566
1806	0	-	-	-	4	9	13	101 537
1807	351	-	499	149	79	366	446	108 343
1808	-	-	-	-	68	167	243	22 431
1809	2 193	625	766	1 283	146	738	884	52 203
1810	11 397	3 769	5 270	4 049	1 049	2 928	3 977	66 758
1811	14 608	9 369	1 205	5 114	1 631	4 507	6 138	61 317
1812	-	784	-	-	157	1 589	1 746	38 572
1813	-	308	-	-	50	1	61	27586
1814	-	-	-	-	-	-	-	6 297
1815	141	677	-	303	248	327	575	52 558
1816	817	92	-	796	181	526	707	81 920
1817	1 250	-	-	636	135	506	640	87 672
1818	-	-	-	-	87	354	441	93 281
1819	-	-	-	-	144	486	630	70 143
1820	-	-	-	-	160	1 222	1 382	69 692

Notes and sources: Domestic exports and re-exports were not separated before 1803. The figures for sugar, coffee and cotton exported in 1800-11 are from Pitkin's (1816,145-149, 196) research. Pitkin is also the source of the figures for export of domestic and foreign articles in 1805-13. Total U.S. exports: North 1960, 590, 605. Pitkin (p.51-53 reports the same figures in 1791-1810.

TABLE 43
U. S. exports to Russia, 1821 - 60.

Year	SUGAR		COTTON		RICE		COFFEE		Others	Domestic exports	Foreign exports	Total exports to Russia	By American vessels to Russia	By foreign vessels to Russia	(U.S. total exports)
	1000 lbs	\$1000	1000 lbs	\$1000	1000 lbs	\$1000	1000 lbs	\$1000							
1821	2 489	253	305	44	1 494	31	258	58	243	128	501	629	629	-	54 596
1822	608	48	714	111	1 553	25	796	177	168	177	352	529	529	-	61 350
1823	951	71	310	24	1 821	17	1 041	198	339	52	597	649	649	-	68 236
1824	295	21	502	75	1 883	5	223	31	100	93	139	232	232	-	68 972
1825	725	66	134	34	1 925	16	76	14	157	55	232	287	287	-	90 738
1826	1 103	105	15	2	1 917	2	45	5	61	11	164	175	175	-	72 281
1827	724	59	147	15	2 344	23	572	68	217	45	337	382	379	3	74 310
1828	414	34	650	64	2 621	27	872	82	243	108	342	450	440	10	64 021
1829	872	69	228	22	2 514	8	313	27	261	52	335	384	387	-	67 435
1830	2 833	247	111	11	1 987	6	143	7	142	36	381	417	416	1	71 671
1831	1 253	78	762	74	2 016	19	577	58	230	115	348	463	459	-	72 296
1832	971	65	839	88	2 334	22	663	104	303	120	462	582	573	9	81 521
1833	3 082	184	1 477	175	2 744	45	608	79	221	224	480	704	704	-	87 529
1834	305	19	1 260	131	2 122	26	132	16	139	169	162	331	319	12	100 260
1835	2 272	203	975	197	2 210	26	338	46	113	131	354	858	571	14	115 216
1836	3 422	343	1 416	269	2 548	32	177	29	238	326	585	911	844	67	124 339
1837	11 687	869	997	122	2 309	10	1 248	117	189	144	1 163	1 307	1 219	88	111 443
1838	7 027	602	2 788	293	1 722	6	49	6	141	359	689	1 048	1 048	-	104 979
1839	7 464	589	2 105	332	2 102	62	572	70	184	455	803	1 239	1 216	21	112 252
1840	8 846	783	2 203	212	1 927	13	267	31	131	235	935	1 170	1 161	9	123 669
1841	9 736	729	986	115	945	21	279	33	127	145	880	1 025	956	69	111 817
1842	5 710	343	2 991	249	1 569	30	288	28	187	316	521	837	717	120	99 978
1843	145	10	3 429	233	1 675	28	31	2	114	310	77	387	367	20	82 826
1844	498	32	2 766	241	2 182	53	188	17	212	414	141	555	408	147	105 746
1845	770	54	7 495	508	2 160	18	150	12	135	537	190	727	656	71	106 040
1846	331	30	4 293	405	2 565	49	124	10	138	535	97	632	520	112	109 583
1847	1 116	80	5 619	524	1 084	30	152	12	104	626	124	750	488	262	156 742
1848	613	51	10 267	975	1 737	44	83	6	80	1 048	108	1 156	1 107	49	138 191
1849	1 791	111	10 651	852	2 569	71	212	16	86	938	198	1 136	1 056	80	140 351
1850	1 552	100	4 339	540	2 631	65	154	17	14	666	199	865	386	479	144 378
1851	1 192	83	10 098	1 297	2 171	21	-	-	211	1 466	146	1 612	1 309	303	188 915
1852	301	21	10 475	962	2 471	25	7	1	191	1 061	139	1 200	974	226	166 984
1853	601	39	21 287	2 254	200	6	11	1	157	2 313	143	2 456	1 910	546	203 489
1854	1 082	55	2 915	301	2 634	22	12	1	102	336	145	481	388	93	237 044
1855	100	6	449	48	1 718	2	16	2	11	49	20	69	69	-	218 910
1856	51	4	4 643	514	2 390	14	14	2	73	537	70	607	607	-	281 219
1857	692	71	31 934	4 267	132	11	10	1	152	4 357	145	4 502	4 125	377	293 824
1858	138	15	32 110	4 123	1 871	14	6	1	182	4 463	72	4 335	4 032	303	272 011
1859	0	1	43 623	5 423	2 207	19	13	1	206	5 546	104	5 650	4 946	704	292 902
1860	0	10	21 698	2 644	2 567	18	7	1	71	2 714	30	2 744	2 381	363	333 576

Note: From 1821 to 1842 the fiscal year was from 1st October to 31st September. The fiscal year 1843 contained only nine months (from 1st October to 30th June). After that the fiscal year began on 1st July and ended on 30th June.

Source: Commerce and Navigation, 1821-60.

TABLE 44
Bar iron passing through the Sound, 1784 -1856 (tons).

Year	From Russia			From Sweden			From the Baltic		
	To the U.S.	To Britain	Total	To the U.S.	To Britain	Total	To the U.S.	To Britain	Total
1784	774	39 016	49 661	129	13 032	32 129	903	52 097	82 419
1785	580	27 710	36 387	32	14 306	40 408	629	42 145	72 162
1786	562	26 742	32 048	-	13 596	32 919	613	40 355	65 177
1787	225	23 452	26 726	81	16 177	44 148	323	40 194	66 839
1788	225	32 774	38 888	242	19 081	37 826	500	52 597	77 645
1789	483	25 742	33 339	65	21 016	45 758	581	47 323	80 806
1790	1 371	25 339	31 516	-	20 742	38 855	1 435	47 000	71 839
1791	839	38 667	41 580	81	21 161	41 645	968	56 210	84 306
1792	2 258	28 177	35 339	48	26 597	42 710	2 790	54 887	78 887
1793	3 016	35 984	42 516	-	17 855	29 410	3 565	53 839	73 016
1794	4 081	25 935	36 694	48	20 226	34 355	4 903	43 016	72 145
1795	3 468	30 290	39 726	258	16 645	31 016	4 661	46 968	72 500
1800	..	..	..	..	..	..	..	..	46 629
1801	..	..	..	..	..	..	..	..	47 742
1802	..	..	..	..	..	..	..	..	77 742
1803	..	..	..	..	..	..	..	..	71 726
1805	..	..	..	..	..	..	6 403	..	49 548
1806	..	..	..	..	..	..	8 129	..	54 774
1807	..	..	..	..	..	..	9 806	..	37 097
1808-10	..	..	..	..	..	..	903	..	1 403
1811	..	..	..	..	..	..	4 355	..	7 629
1812	..	..	..	..	..	..	-	..	9 056
1815	..	..	12 549	..	..	38 210	14 177	16 629	56 806
1816	..	..	8 581	..	..	31 710	13 323	7 290	42 113
1817	..	..	6 258	..	..	20 677	9 000	8 726	27 629
1824	..	..	9 871	..	..	32 306	12 196	12 516	42 226
1825	..	..	16 242	..	..	39 435	18 161	18 500	56 129

continues

TABLE 44 (continues)

Year	From Russia			From Sweden			From the Baltic		
	To the U.S.	To Britain	Total	To the U.S.	To Britain	Total	To the U.S.	To Britain	Total
1831	9 403	5 677	15 919	10 548	9 645	33 645	20 161	15 403	49 855
1832	13 258	6 694	20 516	9 483	9 326	32 048	23 371	16 048	53 710
1833	8 629	4 903	14 081	10 081	11 290	34 200	19 339	16 000	49 419
1834	5 258	2 129	8 500	7 887	10 645	32 597	13 694	12 790	41 774
1835	6 226	4 726	11 968	11 710	11 226	39 581	18 113	32 081	51 871
1836	952	6 661	15 774	14 145	14 677	40 887	22 355	21 387	65 173
1837	4 258	5 645	10 677	7 371	9 968	29 823	11 629	15 613	40 516
1838	4 403	5 758	11 226	10 694	11 871	41 710	15 097	17 630	53 177
1839	7 113	3 484	11 629	14 871	13 871	47 242	21 984	17 355	59 016
1840	3 097	3 097	10 129	7 935	16 129	36 000	11 032	19 226	48 709
1841	6 435	2 226	9 548	8 210	12 452	34 565	14 645	14 742	44 403
1842	5 274	2 032	8 065	7 887	10 483	31 548	13 758	12 483	40 645
1843	4 565	1 677	7 177	8 210	9 677	29 097	13 581	11 354	37 612
1844	6 581	1 532	8 758	8 758	10 452	30 710	18 066	11 984	41 129
1845	6 291	1 403	8 194	11 345	8 516	31 306	18 500	9 935	40 823
1846	952	2 419	3 806	5 032	26 194	49 194	5 846	28 613	53 355
1847	-	2 532	4 516	7 699	22 645	45 226	8 484	25 274	50 145
1848	-	4 097	5 695	4 145	15 048	33 048	4 145	19 145	38 790
1849	-	7 419	8 629	5 145	17 097	38 226	5 145	24 500	47 242
1850	-	8 032	10 952	5 936	15 435	36 274	5 968	23 935	48 597
1851	-	3 984	4 355	8 893	23 903	45 758	7 935	27 887	50 900
1852	145	1 355	1 677	2 258	19 387	34 387	2 403	20 742	36 065
1853	145	5 242	5 661	4 548	21 774	38 016	4 695	27 032	43 887
1854	210	16	419	7 274	22 952	40 258	7 484	22 968	40 677
1855	-	-	-	9 695	19 500	35 758	4 855	19 500	35 774
1856	196	12 355	13 048	5 032	18 290	36 597	5 226	31 145	49 645

Note: The figures for 1808-10 have been worked out from the total amount according to ST I.

Sources: Years 1784-95: Johansen 1983, microfiches 1-4, table XII/m. Years 1800-56: ST I and ST II, 1800-03, 1805-07, 1808-10, 1811-12, 1815-17, 1824-25, 1831-56, ØTA, DRA.

TABLE 45
Bar iron carried through the Sound on American vessels, 1783-1856 (tons).

Years	F r o m S t P e t e r s b u r g t o												U.S. TOTAL	Total from St Petersburg	Total from the Baltic to the U.S.	Total from the Baltic
	Boston	Salem	Newburyport	Portsmouth	New Bedford	RI (total)	New England (total)	New York	Philadelphia	Baltimore	Charleston					
1783	40	-	-	-	-	-	40	-	-	-	-	40	(107)	40	40	40
1784	435	135	-	-	-	-	570	-	51	51	-	687	(107)	687	687	687
1785	313	106	-	-	-	-	419	-	102	-	-	521	(591)	532	541	551
1786	299	164	-	-	-	20	534	16	-	-	-	550	(551)	550	588	588
1787	122	16	-	-	-	-	146	49	-	-	-	195	(196)	195	246	246
1788	86	20	-	-	-	50	167	18	20	-	-	399	(295)	471	675	747
1789	314	38	-	-	-	66	428	-	-	-	-	431	(430)	431	527	691
1790	573	238	-	-	-	120	1 237	92	109	-	-	1 438	(1 301)	1 438	1 562	2 230
1791	396	170	-	-	-	172	745	38	-	-	51	834	(831)	1 000	888	1 052
1792	868	408	109	-	-	442	1 827	243	102	-	-	2 172	(2 183)	2 172	2 737	2 737
1793	1 040	514	118	-	-	605	2 348	132	470	61	-	3 011	(2 943)	3 011	3 643	3 643
(1793)	<u>807</u>	<u>458</u>	<u>118</u>	-	-	<u>437</u>	<u>2 006</u>	<u>132</u>	<u>746</u>	-	-	<u>2 894</u>		<u>2 894</u>	<u>3 526</u>	<u>3 526</u>
1794	1 939	718	170	-	-	476	3 289	195	456	-	88	4 089	(4 182)	4 191	4 955	5 224
1795	1 386	434	180	-	-	791	2 792	40	454	54	33	3 457	(3 352)	3 457	4 270	4 409
1796	2 035	660	165	81	216	609	3 899	519	573	103	75	5 252	(4 921)	5 329	6 068	6 163
1797	790	374	38	-	-	351	1 553	110	91	-	-	1 856	(1 836)	1 907	2 552	2 601
1798	818	335	46	-	81	478	1 800	292	310	71	30	2 503	(2 331)	2 503	3 024	3 024
1799	1 575	1 095	-	109	56	390	3 225	547	203	-	-	4 004	(3 879)	4 137	4 649	4 811
1800	464	337	24	260	-	210	1 570	128	-	-	-	1 699	(2 325)	1 764	1 287	2 352
1801	1 514	1 139	641	122	102	257	3 856	482	160	86	41	4 625	(4 364)	4 638	5 426	5 447
1802	875	1 215	711	86	-	483	3 828	463	224	-	-	4 709	(4 991)	4 717	5 297	5 302
1803	812	1 445	405	105	168	645	4 748	1 464	386	33	-	6 753	(6 679)	6 753	7 306	7 306
(1803)	<u>1 249</u>	<u>1 196</u>	<u>405</u>	<u>105</u>	<u>168</u>	<u>584</u>	<u>4 516</u>	<u>1 455</u>	<u>432</u>	<u>33</u>	-	<u>6 753</u>		<u>6 753</u>	<u>7 306</u>	<u>7 306</u>
1804	614	1 154	374	109	157	390	3 340	700	152	279	-	4 472	(4 488)	4 472	5 236	5 269
1805	1 016	949	206	190	158	427	3 525	623	86	149	61	4 514	(4 505)	4 514	5 243	5 246
(1805)	<u>1 541</u>	<u>700</u>	<u>206</u>	<u>190</u>	<u>158</u>	<u>446</u>	<u>3 241</u>	<u>676</u>	<u>86</u>	<u>221</u>	<u>61</u>	<u>4 502</u>		<u>4 502</u>	<u>5 231</u>	<u>5 234</u>
1806	1 904	1 008	478	-	203	605	4 747	1 312	-	49	-	6 522	(6 836)	6 555	8 156	8 204
(1806)	<u>3 523</u>	<u>1 184</u>	<u>478</u>	-	<u>203</u>	<u>557</u>	<u>5 219</u>	<u>1 224</u>	-	<u>49</u>	-	<u>6 835</u>		<u>6 835</u>	<u>8 436</u>	<u>8 484</u>
1807	<u>1 951</u>	<u>808</u>	<u>753</u>	<u>482</u>	<u>482</u>	<u>942</u>	<u>5 894</u>	<u>1 740</u>	<u>487</u>	<u>102</u>	<u>208</u>	<u>8 731</u>	(9 108)	<u>8 949</u>	<u>9 365</u>	<u>9 763</u>
1808	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1809	..	..	..	..	..	..	..	..	..	..	..	<u>1 785</u>	(1 875 )	..	..	..
1810	..	..	..	..	..	..	..	..	..	..	..	<u>7 633</u>	(7 908 )	..	..	..
1811	<u>3 007</u>	<u>727</u>	<u>243</u>	<u>362</u>	<u>183</u>	<u>929</u>	<u>6 360</u>	<u>2 694</u>	<u>1 547</u>	<u>327</u>	<u>127</u>	<u>11 088</u>	(13 199)	<u>13 199</u>	..	..
1815	2 507	307	428	-	508	901	5 043	1 880	266	162	-	7 351		7 371	10 235	10 255
(1815)	<u>2 714</u>	<u>307</u>	<u>428</u>	-	<u>254</u>	<u>895</u>	<u>4 720</u>	<u>1 620</u>	<u>266</u>	<u>162</u>	-	<u>6 768</u>		<u>6 786</u>	..	..

continues

TABLE 45 (continues)

F r o m S t P e t e r s b u r g t o															
Years	Boston	Salem	Newburyport	Portsmouth	New Bedford	RI (total)	New England (total)	New York	Philadelphia	Baltimore	Charleston	<u>U.S. TOTAL</u>	Total from St Petersburg	Total from the Baltic to U.S.	Total from the Baltic
1816	2 400	337	-	-	-	300	3 382	1 388	272	51	-	5 856	5 909	10 399	10 455
(1816)	<u>3 082</u>	<u>337</u>	-	-	-	<u>97</u>	<u>3 831</u>	<u>1 868</u>	<u>763</u>	<u>51</u>	-	<u>6 970</u>	<u>7 026</u>	..	..
1817	812	274	51	-	-	102	1 668	1 559	240	36	-	3 543	3 572	8 187	8 317
(1817)	<u>796</u>	<u>374</u>	<u>51</u>	-	-	<u>175</u>	<u>1 724</u>	<u>1 438</u>	<u>240</u>	<u>36</u>	-	<u>3 457</u>	<u>3 486</u>	..	..
1818	1 727	320	30	340	289	314	3 155	1 375	-	-	-	5 006	5 159	6 294	6 447
1819	971	239	20	-	76	183	1 633	291	-	-	-	2 281	2 281	6 057	6 057
1820	1 662	491	-	-	12	380	2 904	1 149	-	-	-	4 550	4 602	8 340	8 392
1821	2 017	259	-	257	113	351	3 176	1 358	132	81	-	4 809	4 811	7 313	7 315
1822	2 633	834	-	396	51	493	4 646	2 356	168	147	-	7 320	7 351	12 069	12 099
1823	3 232	281	-	-	-	56	3 569	409	81	127	-	4 185	4 365	12 723	12 904
1824	2 680	533	132	-	-	619	4 018	1 151	132	15	-	5 317	5 367	10 988	11 038
1825	3 701	122	-	152	20	479	4 596	1 329	618	102	-	6 646	6 730	14 085	14 407
1826	1 836	142	-	259	15	81	2 345	670	294	30	-	3 421	3 691	6 988	7 258
1827	2 792	228	-	-	41	334	3 423	894	371	117	-	5 023	5 023	11 637	11 637
1828	3 464	165	-	223	61	215	4 128	2 401	864	122	-	7 516	7 516	16 784	16 784
1829	7 699	318	-	238	-	132	8 724	2 316	127	81	-	11 270	11 362	16 607	17 699
(1829)	<u>8 525</u>	<u>813</u>	-	<u>238</u>	-	<u>285</u>	<u>9 470</u>	<u>2 316</u>	<u>127</u>	<u>81</u>	-	<u>11 997</u>	<u>12 089</u>	..	..
1830	3 796	56	-	-	-	-	3 852	2 725	-	-	-	6 587	6 587	11 055	11 055
(1830)	<u>3 961</u>	<u>56</u>	-	-	-	-	<u>4 016</u>	<u>2 730</u>	-	-	-	<u>6 746</u>	<u>6 746</u>	..	..
1831	6 088	102	-	-	-	155	6 345	1 757	619	71	-	8 792	8 792	13 693	13 693
1832	9 987	355	-	-	-	156	10 774	2 370	264	-	-	13 408	13 408	17 335	17 355
1833	5 526	61	-	25	-	-	5 713	2 770	155	61	-	8 700	8 719	11 366	11 366
(1833)	<u>5 791</u>	<u>61</u>	-	<u>25</u>	-	-	<u>6 081</u>	<u>2 869</u>	<u>155</u>	<u>61</u>	-	<u>9 177</u>	<u>9 177</u>	..	..
1834	4 105	-	-	-	-	-	4 105	1 448	-	-	-	5 714	5 714	10 590	10 590
(1834)	<u>3 916</u>	-	-	-	-	-	<u>3 916</u>	<u>1 810</u>	-	-	-	<u>5 725</u>	<u>5 725</u>	..	..
1835	4 912	-	-	-	-	305	5 217	1 355	102	51	-	6 725	6 725	9 399	9 399
(1835)	<u>5 028</u>	-	-	-	-	-	<u>5 028</u>	<u>1 863</u>	<u>102</u>	<u>51</u>	-	<u>7 044</u>	<u>7 044</u>	..	..
1836	5 962	102	-	-	-	-	6 064	3 105	152	282	-	9 604	9 604	12 309	13 026
(1836)	<u>6 995</u>	<u>102</u>	-	-	-	-	<u>7 097</u>	<u>2 798</u>	<u>152</u>	<u>282</u>	-	<u>10 329</u>	<u>10 329</u>	..	..
1837	2 921	-	-	-	-	188	3 109	1 695	91	-	-	4 895	4 911	6 419	6 427
(1837)	<u>2 948</u>	-	-	-	-	<u>188</u>	<u>3 135</u>	<u>1 626</u>	<u>91</u>	-	-	<u>4 915</u>	<u>4 931</u>	..	..
1838	2 205	-	-	-	-	102	2 307	1 865	-	163	-	4 366	4 374	7 524	7 721
(1838)	<u>2 411</u>	-	-	-	-	<u>102</u>	<u>2 513</u>	<u>1 859</u>	-	<u>163</u>	-	<u>4 576</u>	<u>4 576</u>	..	..
1839	3 769	-	-	-	-	-	3 769	4 577	81	-	-	8 401	8 401	10 612	10 656
(1839)	<u>3 461</u>	-	-	-	-	-	<u>3 563</u>	<u>4 831</u>	<u>81</u>	-	-	<u>8 475</u>	<u>8 475</u>	..	..
1840	2 032	-	152	-	-	-	2 185	1 506	102	-	-	3 894	4 259	5 231	5 596
(1840)	<u>2 027</u>	-	-	-	-	-	<u>2 131</u>	<u>1 491</u>	<u>102</u>	-	-	<u>4 095</u>	<u>4 095</u>	..	..

continues

TABLE 45 (continues)

Years	F r o m S t P e t e r s b u r g t o												Total from St Petersburg	Total from the Baltic to U.S.	Total from the Baltic
	Boston	Salem	Newburyport	Portsmouth	New Bedford	RI (total)	New England (total)	New York	Philadelphia	Baltimore	Charleston	<u>U.S. TOTAL</u>			
1841	3 000	-	-	-	-	179	3 179	1 700	-	-	-	4 879	4 879	5 955	6 090
(1841)	<u>3 007</u>	-	-	-	-	<u>193</u>	<u>3 187</u>	<u>1 837</u>	-	-	-	<u>5 018</u>	<u>5 018</u>	..	..
1842	1 514	-	-	-	-	193	1 707	723	-	-	-	2 430	2 430	2 932	3 600
(1842)	<u>1 606</u>	-	-	-	-	<u>193</u>	<u>1 800</u>	<u>969</u>	-	-	-	<u>3 101</u>	<u>3 101</u>	..	..
1843	1 586	-	102	-	-	102	1 790	377	51	-	-	2 218	2 317	2 549	2 649
(1843)	<u>1 260</u>	-	<u>102</u>	-	-	<u>432</u>	<u>1 692</u>	<u>427</u>	<u>51</u>	-	-	<u>2 169</u>	<u>2 169</u>	..	..
1844	2 005	-	-	-	-	203	2 208	1 445	-	-	-	3 651	3 651	4 917	4 917
(1844)	<u>1 911</u>	-	-	-	-	<u>203</u>	<u>2 113</u>	<u>1 590</u>	-	-	-	<u>3 704</u>	<u>3 805</u>	..	..
1845	2 690	-	-	-	-	216	2 906	1 386	55	-	-	4 347	4 347	7 553	7 553
(1845)	<u>2 179</u>	-	-	-	-	<u>216</u>	<u>2 395</u>	<u>1 633</u>	<u>55</u>	-	-	<u>4 083</u>	<u>4 083</u>	..	..
1846	1 816	-	-	-	-	-	1 816	917	-	-	-	2 735	2 735	2 735	2 735
(1846)	<u>2 177</u>	-	-	-	-	-	<u>2 177</u>	<u>957</u>	-	-	-	<u>3 095</u>	<u>3 095</u>	..	..
1847	1 809	-	51	-	-	-	1 860	1 243	-	-	-	3 103	3 254	3 103	3 254
(1847)	<u>1 886</u>	-	<u>51</u>	-	-	-	<u>1 937</u>	<u>1 251</u>	-	-	-	<u>3 285</u>	<u>3 285</u>	..	..
1848	951	-	-	-	-	-	951	616	-	-	-	1 567	1 567	2 263	2 263
(1848)	<u>927</u>	-	-	-	-	-	<u>927</u>	<u>568</u>	-	-	-	<u>1 575</u>	<u>1 575</u>	..	..
1849	1 441	-	-	-	-	-	1 441	702	-	-	-	2 143	2 143	3 215	3 215
(1849)	<u>1 085</u>	-	-	-	-	-	<u>1 085</u>	<u>944</u>	-	-	-	<u>2 029</u>	<u>2 059</u>	..	..
1850	1 024	-	-	-	-	-	1 024	715	-	-	-	1 739	1 749	4 016	4 016
(1850)	<u>1 021</u>	-	-	-	-	-	<u>1 021</u>	<u>691</u>	-	-	-	<u>1 712</u>	<u>1 712</u>	..	..
1851	1 670	-	-	-	-	-	1 670	655	-	-	-	2 394	2 394	4 629	5 267
1852	1 153	-	-	-	-	-	1 153	706	-	-	-	1 859	1 859	3 062	3 069
1853	1 210	-	-	-	-	-	1 210	1 290	-	-	-	2 500	2 500	5 721	5 721
1854	203	-	-	-	-	-	203	-	-	-	-	203	203	3 848	3 848
1855	-	-	-	-	-	-	-	-	-	-	-	-	-	3 046	4 222
1856	956	-	-	-	-	-	956	679	-	-	-	1 635	1 788	1 913	2 065
1857	789	-	-	-	-	-	789	1 769	-	-	-	2 558	2 558	2 558	2 558
1858	873	-	-	-	-	-	837	394	-	-	-	1 231	1 231	1 231	1 231
1859	881	-	-	-	-	-	881	862	-	-	-	1 743	1 743	..	..

Notes and sources: To the figures for St Petersburg have been added the following amounts taken from Riga: 19 tons (1792), 81 tons (1794), 22 tons (1796), 151 tons (1807), 53 tons (1816), 230 tons (1822), 73 tons (1836) and from Narva 142 tons (1796). Export from Russia to the U.S. in 1813 was 64 tons; USR 1980, 116. Parallel figures for 1783-1804 are from Pitkin's work (1817, 272-274). Parallel figures for 1805-15 are from USR 1980 (p. 1113-1114). Amounts underlined are from the returns of the consuls in Elsinore, Copenhagen and St Petersburg (CR, NA T-201/1-2, T-195/3, M-81/3-6) excluding the years 1815-17 (Lewis Letters 1810-41, HSP, LNP). The main sources for 1783-1806, and 1815-50: STA, ØTA, DRA.

TABLE 46
Hemp passing through the Sound, 1784-1856 (tons).

Years	From Russia			From the Baltic Sea			
	To the U.S.	To Britain	Total	To the U.S.	To Britain	Total	
1784	850	20 890	40 850	580	20 970	43 730	
1785	290	18 470	37 240	310	18 530	40 390	
1786	1 050	12 920	26 770	1 080	13 160	30 310	
1787	1 150	19 890	31 130	1 260	20 100	33 790	
1788	610	26 770	46 600	660	27 110	49 550	
1789	1 110	23 270	38 810	1 290	23 350	41 790	
1790	2 420	29 650	49 110	2 520	29 890	50 890	
1791	1 270	16 450	34 650	1 520	16 580	36 050	
1792	1 840	29 850	44 560	2 180	29 870	46 150	
1793	2 680	26 900	37 260	3 130	26 920	38 530	
1794	3 970	30 440	43 560	4 610	30 480	45 020	
<u>1795</u>	2 340	25 240	32 840	3 100	25 370	35 100	
1805	..	..	42 470	5 590	..	43 900	
1806	..	..	44 430	14 360	..	45 990	
<u>1807</u>	..	..	30 470	9 240	..	31 150	
1815	..	..	47 660	5 620	34 270	49 070	
1816	..	..	30 120	6 270	16 910	31 520	
<u>1817</u>	..	..	28 280	1 910	18 070	29 710	
1824	...	..	39 030	3 870	24 360	39 700	
<u>1825</u>	..	..	38 960	5 090	24 670	39 620	
1831	4 600	25 780	33 080	4 610	26 000	34 410	
1832	5 590	24 170	36 270	5 650	24 500	37 170	
1833	3 590	25 590	37 690	5 200	25 810	38 870	
1834	2 640	26 350	39 340	2 660	26 500	40 240	
1835	4 390	29 870	42 680	4 560	29 960	43 030	
1836	6 120	26 190	40 620	6 200	27 460	40 990	
1837	2 450	28 730	40 020	2 450	28 740	40 070	
1838	4 050	30 660	44 430	4 050	30 700	44 500	
1839	3 600	37 620	50 380	3 600	37 920	50 880	
1840	3 400	29 730	42 060	3 410	29 450	42 280	
1841	2 460	22 300	30 340	2 460	22 390	30 520	
1842	2 170	20 900	28 580	2 170	21 010	28 940	
1843	2 030	21 830	29 240	2 030	21 960	27 980	
1844	2 400	23 700	31 250	2 420	23 840	31 640	
1845	1 680	25 940	32 860	1 680	26 340	33 670	
1846	380	31 280	37 680	380	31 280	37 730	
1847	1 890	69 720	77 910	1 930	69 720	78 000	
1848	1 030	27 870	33 730	1 030	27 870	33 750	
1849	1 280	30 730	37 060	1 280	30 730	37 190	
1850	1 400	28 360	34 520	1 400	28 390	34 530	
1851	1 420	34 410	44 560	1 420	34 430	43 110	
1852	1 810	25 520	34 840	1 890	25 560	35 000	
1853	1 260	42 200	51 520	1 580	42 330	51 470	
1854	360	890	1 760	680	22 510	28 520	
1855	-	20	20	40	20 680	26 660	
1856	2 310	27 760	39 390	2 400	34 110	47 800	

Notes :In addition to the figures ST I records the total amounts (tons) transported from the Baltic as follows:
1800 28 240
1801 47 950
1802 40 040
1803 51 600
1808-10 6 390
(average)
1811 4 820
1812 2 770

Sources: Years 1784-95:Johansen 1983, microfiches 1-4, table XII/q. Years 1805-56: ST I and ST II, 1805-1807, 1815-17, 1824-25, 1831-56, ØTA, DRA.

TABLE 47
Hemp carried through the Sound on American vessels, 1783-1859 (tons).

Year	FROM ST PETERSBURG TO							U.S. TOTAL	From Riga to U.S.	From Russia to U.S. (total)	From Russia (total)	From the Baltic (total)	
	Boston	Salem	RI (total)	New England (Total)	New York	Philadelphia	Baltimore						
1783	96	-	-	96	-	-	-	96 (128)	-	96	96	96	
1784	150	118	-	435	-	-	-	435 (142)	-	435	435	435	
1785	199	68	-	267	-	31	-	298 (433)	-	298	298	300	
1786	466	325	41	894	65	-	-	959 (902)	-	959	959	1 003	
1787	632	45	-	677	295	-	-	972 (967)	-	972	972	1 081	
1788	119	72	111	350	66	107	-	620 (780)	-	620	820	864	
1789	751	93	138	982	-	-	-	982 (982)	-	982	982	1 172	
1790	903	182	168	1 571	412	282	-	2 266 (2 260)	-	2 266	2 266	2 302	
1791	351	215	255	844	166	46	-	1 056 (1 173)	-	1 056	1 328	1 569	
1792	576	340	442	1 455	243	102	-	1 800 (1 813)	35	1 835	1 836	1 969	
1793	712	385	441	1 714	177	550	105	2 546 (2 858)	-	2 546	2 546	2 992	
(1793)	<u>687</u>	<u>310</u>	<u>299</u>	<u>1 613</u>	<u>177</u>	<u>763</u>	-	<u>2 553</u>	-	<u>2 553</u>	<u>2 553</u>	<u>2 999</u>	
1794	1 578	545	496	2 880	250	704	-	3 927 (4 026)	157	4 084	4 445	5 091	
1795	849	260	419	1 547	60	514	84	2 340 (2 220)	-	2 340	2 340	2 852	
1796	1 425	448	297	2 400	564	118	102	3 328 (3 035)	204	3 532	3 551	4 088	
1797	602	265	232	1 168	81	156	-	1 488 (1 459)	89	1 577	1 634	1 655	
1798	707	338	591	1 839	566	222	125	2 753 (2 779)	-	2 753	2 778	3 487	
1799	1 538	1 537	416	3 491	642	346	-	4 564 (4 145)	-	4 564	4 599	5 151	
1800	173	40	158	414	144	-	-	558 (567)	-	558	632	632	
1801	1 097	1 072	31	2 588	479	199	212	3 515 (3 603)	13	3 528	3 528	3 667	
1802	631	1 014	324	3 000	467	258	-	3 882 (3 897)	-	3 882	3 882	4 036	
1803	745	1 082	505	3 643	1 358	388	218	5 760 (5 840)	-	3 760	5 760	6 139	
(1803)	<u>1 028</u>	<u>1 002</u>	<u>553</u>	<u>3 621</u>	<u>1 529</u>	<u>433</u>	<u>187</u>	<u>5 845</u>	-	<u>5 845</u>	<u>5 845</u>	<u>5 845</u>	
1804	583	950	368	2 759	962	240	349	4 424 (4 428)	-	4 424	4 424	4 601	
1805	905	925	365	3 288	1 263	130	318	5 201 (5 205)	-	5 201	5 201	5 300	
(1805)	<u>1 383</u>	<u>615</u>	<u>417</u>	<u>3 093</u>	<u>1 349</u>	<u>145</u>	<u>412</u>	<u>5 205</u>	-	<u>5 205</u>	<u>5 205</u>	<u>5 205</u>	
1806	1 258	842	501	3 530	1 532	484	159	5 861 (6 182)	-	5 861	5 861	6 453	
(1806)	<u>1 467</u>	<u>977</u>	<u>385</u>	<u>3 638</u>	<u>1 475</u>	<u>471</u>	-	<u>6 178</u>	-	<u>6 178</u>	<u>6 178</u>	<u>6 178</u>	
1807	<u>1 240</u>	<u>798</u>	<u>564</u>	<u>4 212</u>	<u>1 566</u>	<u>508</u>	<u>103</u>	<u>6 461</u>	(7 023)	-	<u>6 461</u>	<u>6 481</u>	<u>6 373</u>
1808	-	-	-	-	-	-	-	-	-	-	-	-	
1809	..	..	..	..	..	..	..	(3 390)	..	..	..	..
1810	..	..	..	..	..	..	..	(9 085)	..	..	..	..
1811	<u>2 104</u>	<u>606</u>	<u>790</u>	<u>4 812</u>	<u>1 767</u>	<u>695</u>	<u>203</u>	<u>7 750</u>	(11 307)	-	<u>7 750</u>	<u>7 750</u>	<u>7 750</u>
1812	..	..	..	..	..	..	..	(7 556)	..	..	..	..
1815	1 216	308	400	3 047	1 682	231	51	4 727 (4 983)	-	4 727	4 747	5 826	
(1815)	<u>1 571</u>	<u>306</u>	<u>402</u>	<u>3 050</u>	<u>1 651</u>	<u>232</u>	<u>51</u>	<u>4 983</u>	..	..	..	..
1816	1 011	223	119	1 761	1 122	280	13	3 178	70	3 248	3 657	3 830	
(1816)	<u>1 040</u>	<u>306</u>	<u>96</u>	<u>1 557</u>	<u>1 417</u>	<u>497</u>	<u>13</u>	<u>3 590</u>	..	..	..	..
1817	496	326	89	1 042	578	114	25	1 759	-	1 759	1 902	1 902	
(1817)	<u>279</u>	<u>326</u>	<u>100</u>	<u>578</u>	<u>335</u>	<u>114</u>	<u>30</u>	<u>1 531</u>	..	..	..	..
1818	1 403	302	289	2 680	1 294	200	111	4 286	175	4 461	4 461	4 461	
1819	1 071	236	242	1 689	359	-	-	2 176	303	2 479	2 479	2 524	
1820	1 348	410	361	2 510	1 237	243	114	4 226	-	4 226	4 226	4 838	

continues

TABLE 47 (continues)

FROM ST PETERSBURG TO												
Year	Boston	Salem	RI (total)	New England (total)	New York	Philadelphia	Baltimore	U.S. TOTAL	From Riga to U.S.	From Russia to U.S. (total)	From Russia (total)	From the Baltic (total)
1821	2 138	410	502	3 742	1 405	182	173	5 541	-	5 541	5 541	5 541
1822	3 093	812	508	5 429	2 562	417	317	8 725	303	9 028	9 028	9 103
1823	2 821	163	45	3 030	218	191	77	3 516	-	3 516	3 649	3 649
1824	2 055	364	141	2 796	844	197	29	3 869	-	3 869	4 222	4 222
1825	2 450	123	170	2 997	1 049	857	187	5 089	125	5 222	5 243	5 243
1826	1 161	228	90	1 839	747	304	63	2 953	-	2 953	3 439	3 439
1827	1 590	288	458	2 696	967	541	150	4 354	1 829	6 183	6 253	6 308
1828	1 779	231	240	2 614	1 476	67	260	4 418	-	4 418	4 418	4 544
1829	1 390	-	155	1 706	626	122	101	2 555	125	2 681	2 681	2 681
(1829)	<u>1 128</u>	-	<u>57</u>	<u>1 242</u>	<u>626</u>	<u>122</u>	<u>25</u>	<u>2 471</u>	..	..	..	..
1830	910	54	-	964	621	-	-	1 583	-	1 585	1 600	1 600
(1831)	<u>865</u>	<u>54</u>	-	<u>920</u>	<u>664</u>	-	-	<u>1 584</u>	..	..	..	..
1831	1 890	132	-	2 022	1 254	713	190	4 180	-	4 180	4 182	4 196
1832	3 576	127	278	3 982	1 264	154	-	5 400	-	5 400	..	..
1833	2 392	81	-	2 726	1 826	150	173	4 875	436	5 311	5 311	5 311
1834	1 179	-	-	1 234	1 153	-	-	2 396	-	2 396	2 396	2 396
(1834)	<u>1 150</u>	-	-	<u>1 150</u>	<u>1 211</u>	-	-	<u>2 333</u>	..	..	..	..
1835	2 534	-	-	2 564	1 183	104	180	4 319	-	4 319	4 319	4 319
(1835)	<u>2 367</u>	-	-	<u>2 363</u>	<u>1 515</u>	<u>104</u>	<u>180</u>	<u>4 416</u>	..	..	..	..
1836	3 137	110	-	3 247	1 359	203	140	4 949	233	5 182	5 182	5 191
(1836)	<u>3 749</u>	<u>115</u>	-	<u>3 864</u>	<u>1 537</u>	<u>203</u>	<u>140</u>	<u>5 744</u>	..	..	..	..
1837	1 354	-	153	1 508	894	57	-	2 456	-	2 456	2 660	2 660
(1837)	<u>1 489</u>	-	<u>153</u>	<u>1 642</u>	<u>1 007</u>	<u>85</u>	-	<u>2 734</u>	..	..	..	..
1838	1 908	-	-	1 908	1 655	-	224	3 786	149	3 935	4 050	4 050
(1838)	<u>1 908</u>	-	-	<u>1 908</u>	<u>1 717</u>	-	<u>224</u>	<u>3 860</u>	..	..	..	..
1839	1 404	-	-	1 307	1 511	185	-	3 003	559	3 562	3 562	3 588
(1839)	<u>1 171</u>	-	-	<u>1 581</u>	<u>1 723</u>	<u>185</u>	-	<u>3 489</u>	..	..	..	..
1840	1 709	-	-	1 798	767	162	-	2 727	686	3 413	3 502	3 502
(1840)	<u>1 827</u>	-	-	<u>1 888</u>	<u>768</u>	<u>162</u>	-	<u>2 818</u>	..	..	..	..
1841	1 447	-	-	1 447	614	-	-	2 142	-	2 142	2 166	2 288
(1841)	<u>1 550</u>	-	-	<u>1 550</u>	<u>816</u>	-	-	<u>2 371</u>	..	..	..	..
1842	1 162	-	51	1 213	471	-	-	1 684	559	2 243	2 268	2 268
(1842)	<u>1 309</u>	-	-	<u>1 366</u>	<u>645</u>	-	-	<u>2 001</u>	..	..	..	..
1843	931	-	49	980	656	115	-	1 751	693	2 445	2 519	2 519
(1843)	<u>831</u>	-	-	<u>980</u>	<u>656</u>	<u>127</u>	-	<u>1 763</u>	..	..	..	..
1844	770	-	45	815	567	-	-	1 382	-	1 382	1 401	1 401
(1844)	<u>541</u>	-	-	<u>486</u>	<u>576</u>	-	-	<u>1 163</u>	..	..	..	..
1845	527	-	51	578	525	100	-	1 203	152	1 355	1 371	1 392
(1845)	<u>637</u>	-	-	<u>688</u>	<u>525</u>	<u>100</u>	-	<u>1 313</u>	..	..	..	..
1846	327	-	-	327	51	-	-	378	-	378	389	389
(1846)	<u>327</u>	-	-	<u>327</u>	<u>51</u>	-	-	<u>378</u>	..	..	..	..

continues

TABLE 47 (continues)

FROM ST PETERSBURG TO												
Year	Boston	Salem	RI (total)	New England (total)	New York	Philadelphia	Baltimore	U.S. TOTAL	From Riga to U.S.	From Russia to U.S. (total)	From Russia (total)	From the Baltic total)
1847	1 025	-	-	1 066	949	-	-	2 015	-	2 015	2 015	2 015
(1847)	<u>982</u>	-	-	<u>1 022</u>	<u>809</u>	-	-	<u>1 831</u>	..	..	..	..
1848	1 241	-	-	1 241	424	-	-	1 666	-	1 666	1 671	1 671
(1848)	<u>1 331</u>	-	-	<u>1 331</u>	<u>529</u>	-	-	<u>1 860</u>	..	..	..	..
1849	1 621	-	-	1 621	779	-	-	2 400	120	2 520	2 551	2 569
(1849)	<u>1 956</u>	-	-	<u>1 956</u>	<u>661</u>	-	-	<u>2 617</u>	..	..	..	..
1850	875	-	141	2 633	868	-	-	3 501	172	3 673	3 673	3 673
(1850)	<u>1 004</u>	-	<u>141</u>	<u>2 641</u>	<u>748</u>	-	-	<u>3 389</u>	..	..	..	..
1851	<u>1 264</u>	-	149	1 413	1 257	-	-	2 670	..	..	..	..
1852	<u>1 993</u>	-	-	<u>1 994</u>	<u>1 346</u>	-	-	<u>3 340</u>	..	..	..	..
1853	1 892	-	-	<u>1 892</u>	<u>898</u>	-	-	2 790	..	..	..	..
1856	<u>2 926</u>	-	-	<u>2 926</u>	<u>290</u>	-	-	<u>3 216</u>	..	..	..	..
1857	<u>1 813</u>	-	-	<u>1 813</u>	<u>1 025</u>	-	-	<u>3 016</u>	..	..	..	..
1858	<u>1 185</u>	-	-	<u>1 185</u>	<u>712</u>	-	-	<u>1 942</u>	..	..	..	..
1859	<u>2 010</u>	-	-	<u>2 010</u>	<u>1 780</u>	-	-	<u>3 790</u>	..	..	..	..

Notes and sources: The parallel figures 1783-1804: Pitkin 1817, 271-274. Parallel figures 1805-15: USR 1980, 115-116. Figures underlined are from the reports of consuls in Elsinore, Copenhagen, and St Petersburg; CR, NA T-201/1-2, T-195/3, and M-81/3-6. To the imports of Boston have been added the imports of Beverly. According to Minister Adams in foreign vessels were carried to the U.S in 1810 16,488 tons hemp, Adams to the Secretary of State, 5 January 1811, NA M-35/2. The main sources for 1783-1806, and 1815-50: STA, ØTA, DRA.

TABLE 48
Flax passing through the Sound 1784-1856 (tons).

Year	From Russia			From the Baltic		
	To the U. S.	To Britain	Total	To the U.S.	To Britain	Total
1784	-	4 870	16 390	80	5 110	18 790
1785	-	8 550	26 000	-	9 230	29 050
1786	-	7 400	20 050	-	7 760	21 940
1787	-	6 820	19 320	-	6 820	21 680
1788	-	8 000	21 180	-	7 370	22 950
1789	-	3 900	11 950	-	4 240	13 130
1790	-	6 520	17 030	-	7 290	18 840
1791	-	10 350	27 550	-	11 080	29 760
1792	-	7 900	21 650	-	8 340	23 950
1793	-	7 790	16 660	-	7 840	17 610
1794	-	7 450	22 900	-	7 600	24 290
1795	-	7 930	16 680	-	7 980	17 290
1815	..	..	12 850	-	10 040	14 150
1816	..	..	15 500	0	5 910	14 070
1817	..	..	19 450	-	13 770	22 080
1824	..	..	21 990	-	19 550	28 300
1825	..	..	29 050	80	29 060	39 950
1831	-	17 790	20 220	-	22 310	24 820
1832	220	26 720	29 900	220	33 330	36 820
1833	240	29 020	32 940	270	36 170	40 280
1834	30	18 060	20 480	40	22 520	25 040
1835	10	12 680	15 830	10	16 710	19 990
1836	290	38 360	43 860	320	45 900	51 450
1837	80	26 730	31 840	100	27 900	33 100
1838	-	43 000	43 330	-	48 400	53 310
1839	180	22 980	26 860	180	26 670	30 620
1840	10	31 310	36 000	40	36 510	41 290
1841	140	17 660	19 380	150	18 690	22 130
1842	200	26 640	31 160	200	30 080	34 710
1843	330	25 600	29 560	330	28 120	32 220
1844	300	27 970	32 530	300	31 590	36 360
1845	260	24 150	28 320	260	28 632	33 000
1846	40	23 460	30 260	40	26 250	33 560
1847	140	18 900	26 640	140	23 850	32 090
1848	160	47 330	54 580	200	53 220	60 180
1849	-	53 830	62 720	-	60 710	69 900
1850	-	46 650	54 370	-	53 140	61 510
1851	170	29 910	42 490	200	35 130	47 850
1852	100	33 340	49 130	270	39 960	55 880
1853	100	44 040	57 760	170	54 840	69 100
1854	-	3 350	4 010	100	38 520	44 130
1855	-	-	-	490	48 240	60 100
1856	230	42 090	54 770	690	58 850	41 340

Notes: In addition to the figures in the table ST I records that flax was carried from the Baltic as follows: 21,000 tons (1800), 19 640 tons (1801), 16,450 tons (1802), 21,190 tons (1803), 29,720 tons (1805), 24,180 (1806), and 16,240 tons (1807).

Sources: Years 1784-95: Johansen 1983, microfiches 1-4, table XII/o. Years 1800-56: ST I and ST II, 1800-03, 1805-07, 1815-17, 1824-25, 1831-56, ØTA, DRA.

TABLE 49
Flax carried through the Sound on American vessels, 1783-1859 (tons).

Years	From St Petersburg to			From Russia to the U. S.	From the Baltic (total)
	Boston	New York	U. S. (total)		
1783	-	-	0 (0)	-	-
1784	-	-	0 (17)	-	-
1785	-	-	0 (0)	-	-
1786	1	-	4 (3)	4	4
1787	7	-	7 (7)	7	7
1788	-	-	3 (2)	3	3
1789	-	-	15 (-)	15	15
1790	12	-	17 (17)	17	17
1791	-	-	0 (0)	0	0
1792	4	-	102 (46)	102	102
1793	4	-	14 (10)	14	168
1794	3	15	59 (7)	59	62
1795	1	-	99 (13)	99	117
1796	33	4	63 (26)	63	89
1797	-	-	10 (-)	10	38
1798	3	-	3 (3)	3	3
1799	3	-	3 (-)	3	85
1800	-	-	- (-)	-	207
1801	-	4	14 (14)	14	99
1802	-	-	- (-)	-	55
1803	-	5	5 (5)	5	5
1804	1	-	1 (51)	5	52
1805	-	2	4	4	58
1806	-	-	6	38	67
1807	-	-	-	-	161
1808	-	-	-	-	-
1809	-	-	-	-	-
1810	-	-	-	6	6
1811	-	61	86	299	..
1815	-	-	-	-	-
1816	2	-	2	2	2
1817	-	-	-	-	-
1818	-	-	-	-	-
1819	5	-	5	5	5
1820	9	-	16	16	16

continues

TABLE 49 (continues)

Year	From St Petersburg to			From Russia to the U.S.	From the Baltic (total)
	Boston	New York	U.S. (total)		
1821	15	-	15	15	21
1822	3	-	3	3	41
1823	-	-	-	32	68
1824	-	-	-	-	41
1825	16	51	67	67	116
1826	59	97	156	156	348
1827	183	72	275	323	408
1828	178	231	421	421	632
1829	119	212	336	336	439
1830	-	87	100	135	194
1831	0	-	0	0	0
1832	10	208	219	219	224
1833	46	25	78	78	105
1834	9	23	32	32	32
1835	-	53	53	53	53
1836	68	201	276	276	276
1837	57	-	57	57	57
1838	-	-	-	-	4
1839	15	163	178	178	178
1840	50	-	50	50	99
1841	67	46	116	116	116
1842	60	24	94	94	96
1843	24	51	75	75	80
1844	-	133	133	133	133
1845	20	3	24	24	24
1846	13	25	38	96	96
1847	51	92	143	142	142
1848	152	42	273	273	273
1849	149	46	195	195	195
1850	117	97	214	214	214
1851	227	109	386	368	368
1852	92	139	231	231	243
1853	20	52	72	72	93
1856	317	10	414	..	..
1857	147	25	173	..	..
1858	10	-	10	..	..
1859	67	-	67	..	..

Notes and sources: Years 1783-1806, 1815-50: STA, ØTA, DRA. The parallel figures in 1783-1804: Pitkin 1816, 263-273. Years 1807-09: CR, NA T-201/1. Year 1810: Adams to the Secretary of State, 5 January 1811, NA M-35/2/35. According to Minister Adams foreign vessels carried 6,234 tons of flax (!) to the U.S. Year 1811: Harris to Monroe, 10/22 December 1811, NA M-81/2. Years 1851-59: CR, NA M-81/5-6. The main sources for 1783-1806, and 1815-50: STA, ØTA, DRA. Only 12 head flax is included in the table.

TABLE 50
Hemp and flax manufactures passing through the Sound, 1784 -1807 (pieces).

Year	Sailcloth	Ravenduck	Flems	Diaper	Crash
1784	35 000	126 200	2 200	51 500	82 900
1785	35 600	110 100	5 000	84 700	100 000
1786	37 500	88 000	50	61 600	85 900
1787	43 100	118 800	8 900	70 800	98 500
1788	25 300	151 500	18 300	59 300	64 000
1789	38 700	141 900	6 300	54 400	76 500
1790	30 800	159 000	5 500	61 000	69 100
1791	29 200	106 400	3 400	45 200	51 700
1792	35 600	123 400	9 000	78 200	68 400
1793	55 048	135 000	16 000	49 300	34 900
1794	49 500	168 700	9 400	46 100	28 100
1795	33 300	192 800	7 400	39 800	40 800
1800	15 900	105 700	39 600	23 000	37 500
1801	49 600	120 400	59 800	51 200	89 700
1802	30 700	127 100	37 000	37 800	169 100
1803	43 900	107 100	28 200	40 000	110 100
1805	49 700	117 100	40 500	27 100	60 000
1806	34 800	104 800	34 900	26 300	65 000
1807	75 900	76 200	33 100	18 500	27 700

Note: *Blårlærred* and *lærred hør* (in ST I) are added to the figures of crash in 1800-03 and 1805-07.

Sources: Years 1784 - 95: Johansen 1983a, microfiches 1-4, tables XI-XII, 19-20, code 838 (sejldug/canvas), code 79 (ravndug/ duck), code 801 (flems, see the following table), code 784 (dreijl / drill), code 804 (crash, see the following table). Years 1800-1807: ST I 1800-03, 1805-07, ØTA, DRA

TABLE 51
Linen passing through the Sound, 1784-95 (pieces).

Year	From Russia		From the Baltic Sea	
	To the U.S.	Total	To the U.S.	Total
1784	700	31 200	700	131 800
1785	3 400	19 300	3 400	201300
1786	1 800	20 900	1 900	134 400
1787	5 200	50 700	5 200	161 200
1788	3 100	53 300	3 200	259 800
1789	600	38 200	600	149 200
1790	700	21 700	700	117 500
1791	-	12 100	300	97 600
1792	1 800	42 900	2 000	150 000
1793	5 300	34 600	5 300	100 900
1794	6 900	19 000	7 100	78 000
1795	4 100	12 400	4 200	179 600

Source: Johansen 1983a, microfiches 1-4, table XII,17/p.

Notes: In the group "linen" there are seven articles together: lærred/linen (code 795), hørlærred/ flax linen (code 796), ordinart lærred / ordinary linen (code 797), pommersk lærred / Pomeranian linen (code 798), hollandsk lærred / Dutsch linen (code 799), flamsk lærred /Flemish linen (code 801), blårlærred/ tow cloth (code 804). In table Russia is identical with "Russia and the Baltic Provinces" and the United States is identical with "America". The total figures include also flems and crash (see table 50).

TABLE 52
Sailcloth and raveduck passing through the Sound, 1815-56 (pieces).

Year	S A I L C L O T H				R A V E N D U C K			
	From Russia		From the Baltic		From Russia		From the Baltic	
	To the U.S.	Total	To the U.S.	Total	To the U.S.	Total	To the U.S	Total
1815	..	41 600	10 900	49 900	..	68 300	12 300	72 600
1816	..	41 200	22 300	47 000	..	57 800	16 800	58 600
1817	..	38 400	29 600	41 100	..	32 300	17 500	33 600
1824	..	39 400	33 400	39 700	..	46 100	39 800	46 300
1825	..	53 900	44 500	54 900	..	77 300	63 500	77 800
1831	53 200	57 400	53 800	57 600	30 500	39 500	30 500	39 800
1832	40 600	47 900	40 600	48 100	43 500	54 600	43 500	55 600
1833	47 200	48 300	47 600	59 400	50 500	68 400	50 700	69 000
1834	41 700	51 100	41 800	51 400	42 700	57 600	42 900	58 800
1835	47 300	59 700	49 600	62 300	44 500	64 300	45 000	66 400
1836	31 700	45 600	31 700	46 000	39 200	54 000	39 200	54 600
1837	34 500	43 700	34 500	43 900	25 000	43 100	25 200	43 600
1838	33 400	42 000	33 400	42 200	40 200	57 100	40 200	57 200
1839	34 600	43 500	34 600	43 600	51 900	65 700	51 900	66 300
1840	39 500	49 600	39 500	49 700	32 100	51 400	32 100	51 600
1841	34 900	48 300	34 900	48 600	34 900	48 300	34 900	48 600
1842	27 800	34 600	27 800	34 800	31 800	43 800	31 800	44 800
1843	28 900	26 500	28 900	36 600	35 900	48 100	35 900	48 100
1844	32 900	41 300	32 900	41 600	40 900	50 900	40 900	50 900
1845	28 400	37 500	28 400	37 800	35 900	47 100	35 900	47 100
1846	7 400	16 200	7 400	16 800	24 100	34 400	24 100	37 000
1847	9 200	14 400	9 200	14 900	18 500	27 000	18 500	28 300
1848	3 900	10 700	3 900	10 900	9 700	15 600	9 700	17 700
1849	4 600	14 800	4 600	14 800	8 600	9 600	6 600	18 300
1850	6 500	14 100	6 500	14 100	6 500	7 000	6 500	14 100
1851	4 500	7 900	4 500	8 000	7 300	7 600	7 300	15 500
1852	5 400	7 800	5 400	7 800	6 300	7 600	6 300	12 500
1853	1 300	4 900	1 300	5 400	10 500	16 600	10 500	17 500
1854	2 600	2 900	2 600	3 000	1 300	1 500	1 300	1 700
1855	-	-	-	-	-	-	-	-
1856	200	2 700	200	2 900	2 300	8 800	2 300	9 100

Sources: ST I and ST II, 1815-17, 1824-25, 1831-56, ØTA, DRA.

TABLE 53
Flems, diaper and crash passing through the Sound, 1815-53 (pieces).

Year	F L E M S				D I A P E R				C R A S H			
	From Russia		From the Baltic		From Russia		From the Baltic		From Russia		From the Baltic	
	To the U.S.	Total	To the U.S.	Total	To the U.S.	Total	To the U.S.	Total	To the U.S.	Total	To the U.S.	Total
1815	..	36 300	14 400	38 200	..	24 400	10 400	25 000	..	35 500	2 700	46 100
1816	..	34 700	22 000	35 800	..	10 600	3 400	10 600	..	8 400	300	26 800
1817	..	46 400	39 000	46 400	..	35 200	29 300	35 200	..	5 800	3 800	9 300
1824	..	60 200	59 000	60 400	..	56 100	56 100	64 900	..	8 700	4 100	37 100
1825	..	89 200	81 500	89 200	..	72 900	73 000	77 200	..	25 600	19 600	60 600
1831	71 900	75 400	71 900	75 400	99 900	102 000	99 900	102 100	13 100	22 200	13 100	27 500
1832	53 400	57 700	53 400	57 700	64 800	74 200	64 800	74 200	14 000	14 200	14 000	44 700
1833	67 600	81 600	67 600	81 600	73 900	83 600	74 000	85 400	10 500	12 100	10 800	49 500
1834	63 300	82 500	63 400	82 700	88 200	95 100	88 200	95 300	-	-	2 100	26 800
1835	70 600	95 600	70 600	95 700	117 800	126 300	117 800	126 300	1 500	8 300	6 700	33 400
1836	61 000	67 600	61 000	67 600	83 400	90 800	83 400	90 900	32 900	53 500	35 100	85 000
1837	32 200	51 000	32 400	51 100	70 300	79 600	71 100	80 300	17 300	27 800	17 600	41 100
1838	30 000	40 200	30 000	40 300	101 900	107 400	101 900	107 600	19 600	44 400	24 900	76 000
1839	27 600	40 900	27 600	40 900	105 800	122 200	105 800	122 300	31 400	39 900	32 100	65 000
1840	24 700	45 700	24 700	45 700	132 300	139 500	132 300	139 500	22 700	32 700	32 700	47 200
1841	20 000	30 300	20 000	30 300	83 200	89 500	83 200	89 500	54 500	61 900	56 800	64 700
1842	19 600	19 600	19 600	24 500	118 000	135 600	118 000	135 600	33 800	51 400	33 800	54 400
1843	21 900	27 000	21 900	27 000	128 500	132 100	128 500	146 800	28 900	41 400	25 900	47 400
1844	23 900	28 400	23 900	28 400	159 400	176 100	159 400	176 100	51 300	56 900	51 300	75 000
1845	24 800	26 400	24 800	29 300	183 700	196 700	183 700	196 700	60 600	77 200	60 900	85 500
1846	7 000	9 500	7 000	9 500	37 000	43 400	37 000	43 400	36 700	74 900	36 800	107 700
1847	1 100	1 500	1 100	1 500	7 600	8 900	7 600	8 900	48 600	75 300	48 600	105 500
1848	1 400	3 100	1 400	3 100	-	-	-	-	39 400	50 400	39 400	110 000
1849	1 700	1 800	1 700	4 200	6 500	6 600	6 500	7 000	53 800	86 400	53 900	97 500
1850	1 800	1 900	1 800	3 500	6 000	6 100	6 000	6 400	43 500	64 200	43 500	74 700
1851	100	100	100	200	10 200	10 400	10 200	10 400	53 200	88 700	54 400	100 000
1852	300	300	300	300	2 100	2 300	2 100	2 300	31 600	57 900	31 600	67 300
1853	-	1 200	-	1 300	2 000	2 100	2 000	2 100	73 900	103 600	73 900	113 800

Sources: ST I and ST II, 1815-17, 1824-25, 1831-53, ØTA, DRA.

TABLE 54
Sailcloth carried through the Sound on American vessels, 1783-1859 (pieces).

Year	F R O M		S T	P E T E R S B U R G			Total	From the Baltic (total)
	Boston	Salem	New England (total)	New York	United States (total)			
1783	-	-	-	-	-	(500)	-	-
1784	2 500	300	2 800	-	3 800	(400)	5 200	5 200
1785	740	100	2 300	-	3 300	(4 100)	4 000	5 100
1786	4 200	1 600	6 500	300	6 800	(6 900)	6 800	6 900
1787	5 700	2 300	8 000	1 200	9 200	(9 200)	9 200	9 500
1788	1 600	1 000	4 300	500	6 800	(7 800)	8 300	8 800
1789	8 300	2 000	11 300	-	11 300	(11 700)	11 300	13 300
1790	4 200	200	6 300	900	8 100	(-)	8 100	8 700
1791	1 300	100	3 600	1 500	5 200	(5 200)	5 300	6 500
1792	4 800	2 000	10 900	2 500	14 100	(16 600)	14 100	16 800
1793	8 100	1 900	11 300	300	13 700	(13 400)	13 700	17 300
1794	14 500	5 700	24 500	1 000	27 000	(25 800)	27 700	32 400
1795	3 900	1 700	8 400	400	11 700	(11 900)	11 700	16 500
1796	4 200	2 800	10 100	800	12 300	(9 300)	12 900	15 600
1797	3 200	2 600	6 500	400	7 600	(7 900)	7 600	8 000
1798	9 400	8 200	26 900	5 000	34 300	(35 300)	34 300	48 400
1799	12 500	7 100	23 600	3 100	26 700	(22 100)	28 400	31 200
1800	1 900	1 000	5 800	-	6 500	(6 600)	6 500	6 600
1801	12 200	9 300	24 400	3 200	32 600	(33 000)	32 600	37 100
1802	1 900	2 400	8 200	1 300	10 400	(11 000)	12 000	13 200
1803	7 700	5 300	21 600	9 300	35 300	(32 700)	35 300	36 700
1804	4 500	5 200	19 700	6 100	30 500	(32 200)	30 500	34 200
1805	8 200	5 200	20 600	10 100	37 200	(36 500)	37 200	37 200
1806	1 500	3 400	11 500	5 300	20 200	(21 400)	20 400	21 000
1807	4 700	10 000	28 200	5 000	36 600	(38 000)	37 700	38 200
1808	-	-	-	-	-	-	-	-
1809	..	..	..	..	..	( 28 300 )	..	..
1810	..	..	..	..	..	( 67 600 )	..	..
1811	9 900	2 100	17 200	8 200	..	(30 400)	30 300	30 300
1815	6 300	1 300	15 900	8 700	28 600	(28 400)	29 300	30 100
1816	7 500	1 400	12 800	5 500	27 700		20 700	20 900
1817	12 300	5 300	23 600	6 700	31 700		33 400	34 300
1818	14 900	2 700	23 000	7 200	32 300		32 300	32 300
1819	11 500	3 000	17 700	200	18 900		18 900	18 900
1820	9 600	2 200	18 100	3 000	23 000		23 300	23 300

continues

TABLE 54 (continues)

Year	F R O M S T P E T E R S B U R G						From the Baltic (total)
	Boston	Salem	New England (total)	New York	United States (total)	Total	
1821	21 100	4 100	32 900	1 800	34 900	34 900	34 900
1822	22 400	5 600	33 100	4 700	41 300	41 300	41 300
1823	24 300	4 200	29 100	2 000	33 200	33 200	33 200
1824	24 700	2 400	31 200	2 900	34 100	34 100	34 100
1825	33 300	2 500	39 100	4 800	44 400	44 700	45 400
1826	55 500	3 800	29 900	2 300	32 300	32 400	32 400
1827	29 500	3 100	35 500	4 100	55 000	55 100	55 100
1828	26 400	4 600	34 000	9 900	45 500	45 500	45 500
1829	9 500	700	10 400	2 800	13 800	13 800	13 800
1830	12 200	1 400	13 700	5 500	19 200	19 200	19 200
1831	41 900	1 100	43 000	10 500	53 900	53 900	53 900
1832	29 600	2 100	32 000	7 000	39 300	39 300	39 300
1833	32 100	800	34 000	11 800	47 100	47 700	48 100
1834	32 200	-	32 200	11 500	43 700	43 700	43 700
1835	35 300	-	35 300	10 100	45 600	45 600	45 600
1836	31 000	400	31 600	3 700	35 300	35 300	35 300
1837	22 600	-	23 000	13 600	36 600	36 600	36 600
1838	24 100	-	24 300	7 800	32 500	32 500	32 500
1839	20 400	-	20 400	14 400	34 800	34 800	34 800
1840	25 700	-	26 400	15 600	42 400	44 100	44 100
1841	21 700	-	22 000	13 800	36 500	36 900	36 900
1842	19 400	-	19 400	6 600	26 000	26 000	26 000
1843	8 400	100	8 700	2 900	11 600	11 600	11 600
1844	12 600	-	12 900	2 000	14 900	14 900	14 900
1845	8 000	-	8 200	4 500	12 700	12 700	12 000
1846	6 200	-	6 200	1 100	7 300	7 300	7 300
1847	6 600	-	6 700	2 500	9 200	9 200	9 200
1848	3 900	-	3 900	200	4 100	4 900	4 900
1849	2 000	-	2 000	200	2 200	2 500	2 500
1850	600	-	600	1 000	1 600	1 600	1 600
1851	1 400	-	1 400	1 000	2 600	2 600	..
1852	2 300	-	2 300	1 500	5 400	5 400	..
1853	700	-	700	500	1 200	1 200	..
1856	200	-	200	-	200	200	..
1857	500	-	500	-	500	500	..
1858	700	-	700	-	700	700	..
1859	200	-	200	-	200	200	..

Notes and sources: 1) The parallel figures in 1783-1804: Pitkin 1816, 236-237, Oddy 1817 I, 125). Parallel figures in 1805-15: USR 1980,115-116. Year 1807: CR , NA T-201/1. Years 1851-59: CR , NA M-81/5-6. The destination ports in 1811: Harris to Monroe 10/22 December 1811, NA M-81/2. Same figures also: CR 1811, NA M-41/2/12. According to Minister Adams 6,900 pieces were carried from St Petersburg by foreign vessels in 1810, Adams to the Secretary of State, 5 November 1810, NA M-35/2/35. According to NWR the US imported from Russia in 1816 12,300 pieces sailcloth (95 percent of total imports). For 1817 the figure was 22,200 pieces (86 percent), and for 1818 27,900 pieces (90 percent), NWR 1818, vol.15; 1819, vol. 16; 1820, vol.19. The main sources 1783-1806, 1815-50: STA , ØTA, DRA.

TABLE 55
Ravenduck carried through the Sound on American vessels,1783-1859
(pieces).

Year	F R O M		S T	P E T E R S B U R G			Total	From the Baltic (total)
	Boston	Salem	New England (total)	New York	U. S. (total)			
1783	-	-	-	-	- (600)			
1784	500	-	500	-	2 500 (-)		3 500	3 500
1785	-	-	-	-	- (300)		1 200	1 200
1786	900	400	1 400	800	2 200 (1 500)		2 200	2 300
1787	1 000	1 600	3 100	700	3 800 (2 800)		3 800	3 900
1788	200	400	900	-	3 800 (1 800)		3 800	3 900
1789	1 300	-	1 500	-	1 500 (1 600)		1 500	1 500
1790	1 100	-	1 900	600	2 600 (900)		2 600	2 700
1791	1 500	1 200	3 100	200	3 800 (3 400)		3 800	3 800
1792	2 600	900	5 100	1 100	6 000 (6 000)		6 000	6 100
1793	3 700	900	5 600	-	5 600 (5 100)		5 600	5 900
1794	9 200	6 700	17 500	800	18 400 (14 100)		18 400	19 000
1795	2 700	2 700	9 200	100	14 700 (10 800)		14 700	16 200
1796	4 200	3 600	9 700	600	13 700 (10 200)		13 700	13 700
1797	3 500	6 600	10 700	1 100	12 200 (7 900)		12 200	13 900
1798	2 100	2 200	5 600	2 100	8 000 (14 200)		8 000	11 000
1799	11 300	8 400	22 500	800	23 300 (20 000)		24 500	25 500
1800	1 100	6 200	9 700	500	10 200 (9 000)		10 100	10 400
1801	8 700	8 700	21 900	8 000	29 900 (33 800)		29 900	34 700
1802	3 600	2 400	9 700	1 500	14 000 (10 400)		14 500	15 400
1803	5 200	5 000	14 100	3 400	27 400 (10 700)		27 400	28 000
1804	1 500	8 200	16 100	5 800	34 600 (23 000)		34 600	35 700
1805	11 900	14 300	39 200	8 700	60 100 (30 500)		60 100	61 200
1806	6 100	4 700	18 700	4 200	31 300 (21 600)		32 800	33 300
1807	5 800	1 600	13 200	4 900	20 800 (20 800)		20 800	20 800
1808	-	-	-	-	- (-)		-	-
1809	..	..	..	..	( 25 300 )		..	..
1810	..	..	..	..	64 800 (74 000 )		..	..
1811	14 800	4 400	23 200	3 400	35 000 (35 800)		35 800	..
1815	6 000	2 400	16 300	12 200	31 700 (25 600)		31 900	31 900
1816	11 200	100	15 000	4 000	20 600		20 600	20 600
1817	18 900	5 700	30 400	1 000	33 900		33 900	33 900
1818	15 600	4 300	27 900	5 100	33 900		33 900	33 900
1819	11 300	500	14 600	400	15 000		15 000	15 000
1820	9 100	200	13 100	3 400	16 600		16 600	16 600

continues

TABLE 55 (continues)

Year	F R O M S T P E T E R S B U R G					Total	From the Baltic (total)
	Boston	Salem	New England (total)	New York	U. S. (total)		
1821	14 600	7 400	30 400	3 100	33 500	33 500	33 500
1822	39 000	13 300	57 300	11 400	72 300	72 300	72 300
1823	34 000	4 400	38 400	1 800	43 100	43 100	43 100
1824	34 300	700	37 100	10 100	47 400	47 500	47 500
1825	45 700	1 400	47 700	8 200	60 700	60 700	60 700
1826	26 700	3 200	30 300	2 100	35 200	35 200	35 200
1827	38 700	6 900	46 400	4 600	57 500	57 800	57 800
1828	18 400	300	19 200	1 800	26 000	26 000	26 000
1829	5 800	1 400	7 200	1 300	8 900	8 900	8 900
1830	13 200	1 700	14 900	8 100	23 000	25 800	25 800
1831	24 700	1 200	25 900	3 100	31 500	31 500	31 500
1832	28 800	2 700	31 600	7 100	39 100	39 100	39 100
1833	37 900	1 000	41 100	8 800	50 000	51 500	51 500
1834	33 100	-	33 100	6 900	40 000	40 000	40 000
1835	42 100	-	42 100	7 100	49 700	49 700	49 700
1836	33 700	800	34 500	1 800	38 200	38 200	38 200
1837	10 700	-	11 400	9 200	20 600	23 600	23 600
1838	24 700	-	25 400	14 300	40 100	40 100	40 100
1839	29 700	-	29 700	20 000	49 700	49 700	49 700
1840	23 400	-	23 500	8 600	32 800	32 800	32 800
1841	10 300	-	11 000	21 700	32 400	32 400	32 400
1842	10 300	900	11 200	4 300	14 900	14 900	11 400
1843	3 600	-	4 700	8 900	13 600	13 600	13 600
1844	11 000	-	11 200	9 500	20 600	20 700	20 700
1845	8 200	-	8 200	10 700	18 900	18 900	18 900
1846	17 000	-	17 100	5 000	22 000	22 000	22 000
1847	11 200	-	11 200	7 400	18 600	18 800	18 800
1848	7 800	-	7 800	1 500	9 300	11 800	11 800
1849	5 200	-	5 200	3 200	8 400	9 300	9 300
1850	200	-	500	2 400	2 900	2 900	2 900
1851	5 000	-	5 000	5 600	10 600	5 600	..
1852	4 500	-	4 500	2 100	6 700	7 300	..
1853	7 000	-	7 000	2 600	9 600	9 600	..
1856	1 400	-	1 400	-	1 400	1 400	..
1857	1 400	-	1 400	600	2 000	2 000	..
1858	1 800	-	1 800	-	1 800	1 800	..
1859	200	-	200	-	200	200	..

Notes and sources: 1) Parallel figures for 1783-1804: Pitkin 1816, 236-237; Oddy 1817, I, 125. Parallel figures for 1805-15: USR 1980,115-116. Year 1807: CR , NA T-201/1. Years 1851-59: CR, NA M-81/5-6. The ports of destination in 1811: Harris to Monroe 10/12 December 1811, NA M-81/2. Same figures also: CR 1811, NA M-41/2/12. Year 1810: Adams to the Secretary of State, 5 January 1811, NA M-35/2/12. According to Minister Adams 42,300 pieces of raven duck were carried on foreign vessels from St Petersburg to the U.S. According to NWR the US imported from Russia in 1816 11,500 pieces of raven duck (95 percent of total imports). For 1817 the figures were 16 900 pieces (94 percent), and for 1818 19,500 pieces (83 percent), NWR 1818, vol.15; 1819, vol. 16; 1820, vol.19. The main sources for 1783-1806, 1815-50: STA , ØTA, DRA,

TABLE 56
Flems carried through the Sound on American vessels, 1783-1849 (pieces).

Year	F R O M S T P E T E R S B U R G					Total	From the Baltic (total)
	Boston	Salem	New England (total)	New York	U. S. (total)		
1783	-	-	-	-	- (4 600)	-	-
1784	100	200	800	-	800 (15 200)	800	800
1785	100	-	100	-	1 700 (700)	1 700	1 700
1786	-	-	-	-	- (- -)	-	-
1787	300	-	300	900	1 200 (2 100)	1 200	1 300
1788	-	-	200	200	1 400 (6 800)	1 400	1 400
1789	-	600	600	-	600 (800)	600	600
1790	-	700	700	-	700 (12 300)	700	700
1791	-	-	-	-	- (500)	-	-
1792	-	600	600	-	1 800 (2 800)	1 800	1 800
1793	1 200	300	1 600	200	6 200 (6 600)	6 200	6 200
1794	300	2 800	3 300	200	7 100 (12 100)	7 800	7 800
1795	-	-	400	-	2 500 (7 500)	2 500	2 500
1796	500	-	600	400	3 900 (5 800)	3 900	3 900
1797	600	3 400	4 500	-	6 200 (10 900)	6 200	9 900
1798	5 400	6 500	13 900	300	20 100 (18 800)	20 100	23 800
1799	1 600	8 300	11 300	2 600	20 300 (21 100)	21 500	23 100
1800	5 500	-	9 300	-	13 700 (14 800)	13 700	13 700
1801	16 500	10 600	27 900	600	42 700 (35 100)	42 700	42 700
1802	-	300	1 600	-	5 400 (9 900)	5 400	5 400
1803	900	100	1 100	200	2 800 (14 300)	2 800	2 800
1804	200	300	1 200	2 600	7 400 (20 700)	7 400	10 000
1805	2 200	-	2 200	-	2 200	2 200	2 200
1806	-	2 900	2 900	-	2 900	2 900	2 900
1807	2 200	7 100	12 800	2 700	17 900	17 900	17 900
1808	-	-	-	-	-	-	-
1810	..	..	..	..	55 300	..	..
1811	23 900	9 100	36 100	3 400	55 000	56 200	56 200
1815	5 000	-	5 500	-	8 700	10 800	10 800
1816	5 800	6 300	12 300	100	17 000	24 000	24 000
1817	6 500	1 200	7 700	3 200	22 300	27 700	30 000
1818	1 300	3 000	4 800	5 100	14 600	19 100	19 100
1819	1 700	8 500	10 200	200	10 400	10 400	10 400
1820	12 200	9 700	23 900	-	32 700	36 200	36 200

continues

TABLE 56 (continues)

Year	F R O M		S T P E T E R S B U R G			Total	From the Baltic (total)
	Boston	Salem	New England (total)	New York	U.S. (total)		
1821	29 600	2 600	32 200	3 800	42 100	42 100	42 100
1822	14 900	3 000	17 900	2 800	21 400	21 400	21 400
1823	7 800	-	7 800	-	7 900	7 900	7 900
1824	37 200	11 600	50 400	1 800	53 100	53 100	53 100
1825	76 300	7 500	84 000	4 000	79 900	88 000	88 000
1826	25 500	6 200	32 200	1 600	41 500	41 500	41 500
1827	39 200	13 100	52 700	3 700	71 300	71 300	71 300
1828	47 400	9 400	58 100	3 600	70 800	70 800	70 800
1829	14 900	3 800	18 700	4 900	27 100	27 100	27 100
1830	36 700	3 400	40 100	17 500	57 600	60 100	60 100
1831	55 800	2 300	58 100	15 300	81 400	81 400	81 400
1832	45 200	2 700	47 900	1 100	49 200	49 200	49 200
1833	53 400	800	54 200	10 900	65 900	67 200	67 200
1834	46 300	-	46 300	12 000	58 300	58 300	58 300
1835	32 900	-	32 900	13 800	49 600	49 600	49 600
1836	43 300	500	43 800	9 100	59 800	59 800	59 800
1837	24 600	-	24 600	7 700	32 300	40 000	40 000
1838	14 400	-	14 900	13 700	29 300	29 400	29 400
1839	19 800	-	19 800	6 600	26 400	26 400	26 400
1840	13 800	-	13 800	6 700	24 700	27 500	27 500
1841	12 300	-	12 600	6 300	18 900	18 900	18 900
1842	3 700	-	3 700	1 500	5 100	5 400	5 400
1843	3 100	-	3 100	1 500	4 600	4 600	4 600
1844	1 800	-	1 800	1 900	3 700	3 700	3 700
1845	2 200	-	2 200	3 000	3 200	5 200	5 200
1846	4 100	-	4 100	1 900	6 000	6 000	6 500
1847	600	-	600	-	600	600	600
1848	-	-	-	700	700	700	700
1849	300	-	300	2 100	2 400	2 400	2 600
1850	600	-	600	2 200	2 800	2 800	2 800
1851	100	-	100	-	100	100	..
1852	100	-	100	1 300	1 400	1 400	..
1853	-	-	-	100	100	100	..
1856	-	-	-	-	-	-	..
1857	-	-	-	100	100	100	..
1858	500	-	500	-	500	500	..
1859	-	-	-	-	-	-	..

Notes and sources: The parallel figures for 1783-1804: Pitkin 1816, 236-237, Oddy 1817, I, 125. Flems and drillings are put together in both of them. Years 1807-08: CR, NA T-201/1. Year 1810: Adams to the Secretary of State, 5 January 1811, NA M-35/2/35. According to Adam 19,300 pieces were carried on foreign vessels from St Petersburg to the U.S. Year 1811: Harris to Monroe 19/12 December 1811, NA M-81/2 (also: NA M-41/2/12). Years 1851-59: CR, NA M-81/5-6. The main sources for 1783-1806, 1815-50: STA, ØTA, DRA.

TABLE 57
Diaper carried through the Sound on American vessels, 1783-1859 (pieces).

Year	F R O M S T P E T E R S B U R G					Total	From the Baltic (total)
	Boston	Salem	New England (total)	New York	U.S. (total)		
1783	-	-	-	-	- (1 700)	-	-
1784	500	400	1 800	-	3 000 (800)	3 000	3 000
1785	100	-	100	-	700 (100)	700	700
1786	-	-	-	300	400 (400)	400	400
1787	-	-	-	-	- (-)	-	-
1788	-	-	-	300	700 (500)	900	900
1789	100	200	300	-	300 (200)	300	300
1790	100	-	100	-	100 (200)	100	100
1791	-	-	-	600	600 (700)	600	600
1792	100	-	400	1 300	2 000 (1 600)	2 000	2 000
1793	300	-	300	200	1 200 (500)	1 200	1 200
1794	300	100	400	-	1 100 (500)	1 200	1 200
1795	600	2 200	3 000	-	8 000 (6 100)	8 000	13 300
1796	200	900	1 300	700	4 900 (5 000)	4 900	4 900
1797	400	500	1 000	600	1 800 (1 800)	1 800	1 800
1798	500	-	700	400	1 700 (1 300)	1 700	2 200
1799	1 100	1 400	3 800	1 100	4 900 (4 600)	5 200	5 500
1800	1 900	500	3 000	-	3 200 (3 600)	3 200	3 200
1801	2 900	400	3 700	2 700	8 900 (6 700)	8 900	8 900
1802	500	700	1 900	200	5 400 (6 800)	5 400	5 400
1803	2 800	300	4 700	4 500	20 400 (18 700)	20 400	20 400
1804	-	600	1 000	1 000	5 000 (3 800)	5 000	5 000
1805	200	1 000	1 700	1 700	3 500	3 500	3 500
1806	3 000	200	5 800	1 400	9 200	9 200	9 200
1807	1 600	200	3 100	6 900	11 400	11 400	11 400
1808	-	-	-	-	-	-	-
1810	..	..	..	..	48 000	..	..
1811	14 000	4 000	21 400	300	13 700	37 100	..
1815	100	1 500	3 900	4 200	13 700	14 200	14 200
1816	100	300	500	2 400	3 400	3 400	3 400
1817	4 000	500	6 600	18 100	31 300	31 400	31 400
1818	6 300	1 900	6 900	13 900	26 900	26 900	26 900
1819	4 400	-	4 400	100	6 200	6 200	6 200
1820	2 100	600	5 700	800	10 100	10 400	10 400

continues

TABLE 58 (continues)

Year	F R O M S T P E T E R S B U R G					Total	From the Baltic (total)
	Boston	Salem	New England (total)	New York	U.S. (total)		
1821	12 600	2 800	17 400	1 500	21 900	21 900	21 900
1822	26 200	6 700	36 200	6 600	48 200	48 200	48 200
1823	24 200	-	24 200	400	26 700	26 700	26 700
1824	47 100	400	48 300	3 600	52 100	52 100	52 100
1825	46 900	3 100	50 200	5 500	58 100	62 300	62 300
1826	29 600	-	29 600	8 600	39 100	39 100	39 100
1827	21 800	1 800	23 700	2 000	28 500	28 500	33 700
1828	46 500	7 400	54 700	9 400	64 900	64 900	64 900
1829	55 400	3 700	59 100	11 000	73 300	73 300	73 300
1830	39 300	5 200	44 500	14 100	58 700	58 700	58 700
1831	52 300	2 700	55 100	33 400	94 100	94 100	94 100
1832	50 100	3 800	54 000	7 800	61 800	61 800	61 800
1833	60 500	1 200	62 700	12 400	75 500	75 900	75 900
1834	63 500	-	65 500	16 500	82 000	82 000	82 000
1835	84 500	-	84 500	25 300	111 900	111 900	111 900
1836	50 200	1 900	52 100	26 300	81 300	81 300	81 300
1837	38 400	-	38 400	29 100	67 800	68 200	68 200
1838	41 700	-	41 700	57 900	103 900	103 900	103 900
1839	61 500	-	61 500	47 900	109 400	109 400	109 400
1840	88 500	-	88 500	40 800	131 300	131 300	131 300
1841	50 200	-	53 400	49 100	102 500	102 500	102 500
1842	19 600	-	24 000	1 200	25 200	26 200	26 200
1843	19 400	200	2 600	10 100	42 700	42 700	42 700
1844	7 000	-	7 000	11 400	19 800	19 800	19 800
1845	17 600	-	21 600	21 300	44 600	44 600	44 600
1846	33 500	-	33 500	3 100	36 600	36 600	36 600
1847	18 600	-	18 600	5 500	24 100	24 100	24 100
1848	3 900	-	3 900	2 100	6 000	6 000	6 000
1849	12 500	-	12 500	4 700	17 200	17 200	17 200
1850	1 500	-	1 500	2 800	4 300	4 300	4 300
1851	5 600	-	5 600	5 900	11 600	11 600	..
1852	1 200	-	1 200	1 000	2 200	2 200	..
1853	2 000	-	2 000	-	2 000	2 000	..
1856	100	-	100	-	100	100	..
1857	1 000	-	1 000	-	1 000	1 000	..
1858	1 200	-	1 200	100	1 300	1 300	..
1859	1 200	-	1 200	1 000	2 200	3 200	..

Notes and sources: 1) The parallel figures for 1783-1804: Pitkin 1816, 236-239, Oddy 1817, I, 125. Diaper includes the products named broad diaper, narrow diaper, broad linen and narrow linen. Pitkin's figures are the same as Oddy's, Years 1851-59: CR, NA M-81/5-6. Years 1807-08: CR, NA T-201/1. Year 1810: Adams to the Secretary of State, 5 January 1811, NA M-35/2/35. According to Adams 130 200 pieces of diaper were carried on foreign vessels from St Petersburg to the U.S. Year 1811: Harris to Monroe, 10/12 December 1811 (also: NA M-41/2/12). NWR (vol. 16, 1819; vol.18-19, 1820) reports in 1818 the amount imported from Russia as 660 870 arshines and in 1819 as 158,000 arshins (piece of diaper is equal to 25 arshins). In the table the imports of Boston and Beverley have been put together. The main source for years 1783-1806, 1815-50: STA, ØTA, DRA.

TABLE 59
Crash carried through the Sound on American vessels, 1810 – 59 (pieces).

Years	F R O M S T P E T E R S B U R G				From the Baltic (total)
	Boston	New England (total)	New York	U.S. (total)	
1810	3 600	3 900	1 600	5 500	..
1811	..	..	..	5 500	..
1819	3 200	3 200	-	5 200	5 200
1820	-	-	-	-	-
1821	800	800	-	800	1 000
1822	1 600	3 200	-	4 300	4 300
1823	4 300	4 300	-	4 300	4 300
1824	-	-	-	-	2 900
1825	1 400	1 400	2 800	5 700	6 200
1826	2 800	2 800	-	3 200	3 200
1827	2 300	2 300	-	3 600	3 600
1828	3 100	4 100	600	5 100	6 300
1829	6 700	11 000	4 700	15 800	15 800
1830	6 200	6 200	2 200	8 400	8 400
1831	10 200	10 200	500	10 700	10 700
1832	14 500	14 700	1 000	15 500	15 500
1833	13 500	13 500	3 400	16 900	16 900
1834	2 900	2 900	700	3 600	3 600
1835	9 800	9 800	100	9 900	9 900
1836	12 900	12 900	8 300	24 600	24 600
1837	20 100	20 100	6 000	26 100	26 100
1838	5 300	5 700	12 400	19 600	19 600
1839	12 600	12 600	14 000	28 700	28 700
1840	19 900	19 900	4 500	24 400	24 400
1841	13 500	15 300	19 200	34 500	34 500
1842	20 400	22 000	5 800	27 800	27 800
1843	13 600	13 600	10 100	23 700	23 700
1844	14 400	15 600	23 500	39 100	39 100
1845	22 600	24 600	28 200	53 100	53 100
1846	25 800	25 800	10 700	36 500	36 500
1847	31 000	31 000	19 100	50 100	50 100
1848	19 200	19 200	1 800	21 000	21 000
1849	57 700	57 700	10 800	68 500	68 500
1850	64 200	64 200	13 800	78 000	78 000
1851	26 600	26 600	22 000	48 600	..
1852	20 400	20 400	10 800	31 000	..
1853	54 100	54 100	19 500	73 600	..
1856	31 400	31 400	8 700	40 100	..
1857	45 700	45 700	22 100	67 800	..
1858	22 800	22 800	8 500	31 300	..
1859	2 400	2 400	2 600	5 000	..

Notes and sources: In 1783-1804 240 pieces (a piece of crash is equal to 50 arshins) per year from St Petersburg to the U.S.; Pitkin 1816, 236-239, Oddy 1817, I, 125. Year 1810: Adams to the Secretary of State, 5 January 1811, NA M-35/2/12. According to Adams 51 300 pieces were carried on foreign vessels from St Petersburg to the U.S. Years 1811: Harris to Monroe, 10/22 December 1811, NA M-81/2 (also: NA M-41/2/12). Years 1819-50: STA, ØTA, DRA. Years 1851-59: CR, NA M-81/5-6.

TABLE 60
Cordage passing through the Sound, 1784-1807 (tons).

Years	Tons	Years	Tons	Years	Tons	Years	Tons
1784	1 005	1789	982	1794	881	1803	662
1785	1 548	1790	707	1795	1 841	1805	916
1786	1 110	1791	969	1800	1 289	1806	1 639
1787	852	1792	678	1801	3 010	1807	1 398
1788	630	1793	566	1802	2 056		

Sources: Johansen 1983a, microfiches 1-4, tables 11 (code 836); ST I, 1800-03, 1805-07, ØTA, DRA.

TABLE 61
Cordage passing the Sound, 1824-56 (tons).

Years	FROM RUSSIA			FROM THE BALTIC		
	To the U. S.	To Britain	Total	To the U.S.	To Britain	Total
1824	..	..	1 879	307	1 146	1 912
1825	..	..	1 950	811	933	2 008
1831	534	1 263	2 007	534	1 265	2 079
1832	1 331	1 053	2 915	1 332	1 071	3 011
1833	1 882	1 560	4 434	1 882	1 566	4 458
1834	1 223	1 735	3 518	1 223	1 765	3 560
1835	816	1 250	2 445	823	1 273	2 497
1836	485	1 103	2 090	485	1 139	2 147
1837	494	1 079	2 106	495	1 126	2 173
1838	544	1 345	2 416	549	1 340	2 476
1839	1 226	1 605	3 594	1 226	1 562	3 661
1840	863	1 135	3 196	863	1 137	3 223
1841	1 217	774	2 634	1 217	774	2 635
1842	871	813	2 042	871	813	2 218
1843	1 055	347	1 876	1 055	347	1 910
1844	1 284	265	2 039	1 284	265	2 077
1845	1 439	202	2 206	1 439	202	2 263
1846	698	1 855	3 658	698	1 860	3 731
1847	1 529	519	2 623	1 529	556	2 692
1848	1 981	416	2 866	2 119	416	3 095
1849	950	329	2 729	950	329	2 761
1850	1 519	747	2 892	1 519	747	2 892
1851	3 079	953	5 076	3 085	961	5 090
1852	1 913	879	3 315	1 918	897	3 315
1853	2 745	1 511	4 753	2 755	1 556	4 790
1854	652	490	1 155	876	947	1 445
1855	-	-	-	-	-	-
1856	2 684	1 523	5 277	2 684	1 674	5 485

Source: ST I and ST II, 1824-25, 1831-56, ØTA, DRA.

TABLE 62
Cordage carried through the Sound on American vessels, 1783-1859 (tons).

Years	F R O M S T P E T E R S B U R G				Total	From the Baltic (total)
	Boston	New England (total)	New York	United States (total)		
1783	-	-	-	- (155)	-	-
1784	26	26	-	26 (28)	37	37
1785	22	57	-	7 (277)	81	81
1786	78	92	-	92 (26)	92	100
1787	22	158	22	180 (189)	180	180
1788	-	-	-	53 (34)	58	58
1789	11	58	-	58 (73)	58	58
1790	-	25	-	25 (-)	25	25
1791	-	10	-	10 (9)	47	47
1792	-	-	-	- (3)	-	-
1793	4	25	-	46 (35)	46	46
1794	12	74	12	97 (80)	97	112
1795	-	211	35	383 (381)	383	418
1796	210	573	16	697 (481)	854	900
1797	120	216	3	219 (212)	219	221
1798	43	92	26	177 (178)	177	308
1799	173	382	7	421 (360)	561	687
1800	72	250	32	282 (280)	282	408
1801	389	707	86	923 (800)	293	969
1802	68	156	-	319 (372)	559	655
1803	106	153	-	153 (200)	153	209
1804	12	209	18	247 (220)	247	248
1805	33	122	42	164 (207)	164	257
1806	33	44	19	72 (218)	237	252
1807	55	96	32	165 (166)	236	283
1808	-	-	-	- (-)	-	-
1809	..	..	..	.. ( - )	..	..
1810	..	..	..	51 (51)	..	..
1811	132	176	57	409 (409)	409	..
1812	..	..	..	739 (739)	739	..
1815	19	19	88	137 (-)	137	137
1816	6	19	-	19	19	20
1817	-	10	-	96	96	98
1818	20	30	2	31	31	31
1819	-	11	3	14	14	14
1820	29	39	-	241	241	241
1821	138	180	-	361	361	361
1822	174	229	40	269	269	269
1823	192	192	-	357	357	357
1824	72	100	21	123	123	123
1825	443	463	156	746	746	746
1826	150	217	10	246	246	246
1827	451	538	62	1 007	1 007	1 007
1828	913	1 021	86	1 327	1 327	1 327
1829	517	869	216	1 155	1 155	1 155
1830	155	160	13	173	173	173
1831	483	483	56	577	577	577
1832	941	946	193	1 145	1 146	1 146

continues

TABLE 62 (continued)

Years	F R O M S T P E T E R S B U R G				Total	From the Baltic (total)
	Boston	New England (total)	New York	United States (total)		
1833	1 091	1 126	576	1 766	1 929	1 929
1834	925	925	177	1 102	1 102	1 102
1835	628	628	149	808	808	808
1836	466	466	-	478	478	478
1837	344	344	142	486	557	557
1838	476	476	46	534	534	534
1839	890	890	243	1 133	1 133	1 133
1840	679	679	161	930	930	930
1841	564	564	73	637	644	644
1842	251	251	126	377	381	381
1843	144	146	205	351	358	358
1844	313	313	797	1 110	1 118	1 118
1845	742	742	254	996	1 038	1 083
1846	32	32	561	593	595	595
1847	963	966	421	1 387	1 459	1 459
1848	922	922	1 026	1 948	2 084	2 084
1849	1 953	1 953	832	2 785	2 862	2 862
1850	1 380	1 380	1 172	2 550	2 550	2 550
1851	1 821	1 821	1 038	2 890	2 890	..
1852	1 383	1 383	450	1 833	2 076	..
1853	1 039	1 039	404	1 443	1 443	..
1856	1 943	1 943	291	2 234	2 429	..
1857	502	502	414	917	917	..
1858	517	51	114	631	631	..
1859	843	843	437	1 280	1 280	..

Notes and sources: Years 1783-1806, 1815-50: STA, ØTA, DRA. Years 1807-09: CR, NA T-201/1, NA T-195/2. Years 1851-59: CR, NA M-81/5-6. Year 1810: Adams to the Secretary of State, 5 January 1811, NA M-35/2/12. According to Adams 399 tons cordage were carried on foreign vessels from St Petersburg to U.S. Year 1811: Harris to Monroe, 10/22 December 1911, NA M-81/2. Parallel figures for the years 1783-1815: USR 1980, 115-116; the figures for 1783-1804 are same as in Pitkin (1817, 271-274).

TABLE 63

Bristles and feathers carried through the Sound from St Petersburg to the United States on American vessels, 1783-1859 (lbs).

Years	Bristles	Feathers	Years	Bristles	Feathers
1783-90	9 300	12 300	1826-30	154 800	90 600
1791-95	6 200	6 900	1831-35	179 200	646 900
1796-00	13 500	29 300	1836-40	188 500	742 600
1801-07	50 900	71 000	1841-45	268 900	280 100
1810-11	186 000	..	1846-50	282 300	271 500
1815-20	45 500	58 700	1851-53	262 000	375 500
1821-25	..	117 700	1856-59	242 900	198 200

Notes: The figures lacking for bristles in 1841-43 and feathers in 1820. Table combines figures in STA and consular reports. In STA the figures for bristles and feathers are very often missing. In the shipping lists of the consuls there are almost always some figures for the export of bristles and feathers.

Sources: Years 1783-1806, 1815-50: STA, ØTA, DRA. Years 1807-11: CR, NA T-201/T1, NA T-195/T-2, NA M-81/2. Years 1851-59: CR, NA M-81/5-6.

TABLE 64
Tallow carried through the Sound from St Petersburg on American vessels,
1783-1859 (tons)

Years	To the United States			Total from St Petersburg	Years	To the United States			Total from St Petersburg
	Boston	New England (total)	Total			Boston	New England (total)	Total	
1783	-	-	- (9)	-	1822	140	260	312	312
1784	50	110	144 (2)	144	1823	16	16	16	19
1785	8	43	81 (49)	85	1824	115	215	247	247
1786	-	3	3 (3)	3	1825	193	193	211	229
1787	16	16	53 (1)	53	1826	47	119	146	146
1788	-	-	14 (-)	15	1827	102	104	304	304
1789	-	-	- (-)	-	1828	554	674	954	955
1790	-	-	- (-)	-	1829	116	137	149	149
1791	-	70	70 (-)	355	1830	-	-	-	102
1792	-	-	28 (27)	28	1831	-	-	-	-
1793	-	4	4 (2)	4	1832	-	-	-	-
1794	35	110	169 (162)	180	1833	202	202	202	395
1795	252	330	561 (701)	561	1834	-	-	-	-
1796	54	75	444 (348)	444	1835	89	89	90	90
1797	55	86	98 (41)	230	1836	-	-	-	-
1798	-	0	30 (27)	30	1837	93	93	99	197
1799	17	35	81 (89)	110	1838	63	63	67	102
1800	1	58	113 (123)	215	1839	124	124	221	221
1801	23	60	152 (192)	296	1840	9	9	9	43
1802	-	3	18 (31)	20	1841	-	-	-	942
1803	17	17	21 (9)	21	1842	-	-	-	606
1804	-	5	36 (34)	36	1843	-	-	-	-
1805	24	145	224	224	1844	-	-	-	10
1806	54	121	289	290	1845	-	-	-	-
1807	77	85	575	575	1846	-	-	-	-
1808	-	-	-	-	1847	-	-	-	1
1809	..	..	..	..	1848	-	-	-	258
1810	..	..	30	30	1849	-	-	-	3 097
1811	4	46	332	1 072	1850	-	-	-	1 347
1815	-	-	4	11	1851	-	-	-	2 163
1816	741	934	1 247	1 275	1852	154	154	154	850
1817	783	1 278	2 432	2 456	1853	-	-	2	1 994
1818	7	7	148	161	1856	-	-	-	2 834
1819	95	95	95	95	1857	3	3	12	12
1820	519	593	840	848	1858	-	-	-	2 000
1821	712	992	1 327	1 330	1859	-	-	-	561

Sources: Parallel figures in 1783-1804: Pitkin 1816, 236-237. 2) Years 1807-09: CR, NA T-201/T1. 3) Year 1810: Adams to the Secretary of State, 5 January 1811, NA M-35/2/12. Year 1811: Harris to Monroe, 10/22 December 1811, NA M-81/2. Years 1783-1806, 1815-50: STA, ØTA, DRA. Years 1851-59: CR, NA M-81/5-6.

TABLE 65
U.S. imports from Russia, 1821-60.

Years	Iron		Hemp		Manu- factures	Cordage		Others	TOTAL IMPORTS	Imports on American vessels	Imports on foreign vessels
	Bar iron (tons)	Iron (total) \$1000	tons	\$1000	\$1000	tons	\$1000	\$1000	\$1000	\$1000	\$1000
1821	4 223	279	3 781	441	844	241	28	260	1 852	1 852	-
1822	6 045	403	8 108	930	1 564	496	56	354	3 307	3 232	75
1823	5 721	364	5 567	646	1 019	306	40	190	2 259	2 196	63
1824	5 598	337	4 638	480	702	218	24	667	2 210	2 180	30
1825	3 965	273	3 819	429	1 068	380	43	255	2 068	2 024	44
1826	6 042	422	4 406	547	1 179	703	78	391	2 617	2 617	-
1827	4 316	272	4 132	505	1 004	520	61	244	2 086	2 068	18
1828	5 879	432	5 428	708	833	950	107	709	2 789	2 670	119
1829	10 564	732	3 777	512	585	796	92	298	2 219	2 138	81
1830	9 782	544	1 519	198	597	593	63	220	1 622	1 606	16
1831	5 682	342	1 800	190	795	296	32	249	1 608	1 565	43
1832	13 059	720	6 492	723	1 070	1 047	110	629	3 252	3 094	158
1833	10 972	664	4 419	441	1 082	1 362	142	443	2 772	2 708	64
1834	9 905	662	4 734	471	743	1 430	138	582	2 596	2 554	42
1835	5 077	319	3 971	382	1 335	924	77	282	2 395	2 336	59
1836	3 715	509	5 486	568	1 092	784	76	533	2 776	2 634	144
1837	6 676	715	4 121	464	1 036	835	40	562	2 817	2 654	163
1838	3 651	284	2 729	318	945	698	80	271	1 898	1 882	16
1839	..	328	3 584	465	1 237	781	95	269	2 394	2 313	81
1840	6 852	538	4 873	649	857	649	87	442	2 573	2 394	179
1841	..	532	3 245	492	1 310	1 364	173	310	2 817	2 695	122
1842	..	191	1 614	213	1 214	589	82	350	2 050	1 975	75
1843	4 446	178	1 577	201	321	..	..	43	743	732	11
1844	1 727	172	1 829	211	327	403	53	297	1 060	1 037	23
1845	2 593	408	708	79	350	479	64	591	1 492	1 336	156
1846	2 105	424	1 392	162	411	374	51	522	1 570	1 556	14
1847	..	229	345	45	376	378	54	221	956	925	-
1848	1 450	338	1 036	152	379	1 125	185	265	1 318	1 319	-
1849	1 291	76	1 563	191	221	726	110	242	840	840	-
1850	532	254	1 720	259	432	1 379	206	360	1 511	1 367	144
1851	113	161	666	79	542	1 329	189	422	1 393	1 008	385
1852	218	330	1 251	152	403	1 230	193	503	1 581	1 276	305
1853	..	209	2 239	277	378	1 026	110	304	1 278	1 242	36
1854	143	256	1 446	191	464	1 274	200	433	1 544	1 507	37
1855	283	16	143	18	33	-	-	184	251	251	-
1856	72	47	52	17	78	231	38	45	225	225	-
1857	..	241	2 673	364	260	613	104	467	1 436	1 215	221
1858	169	305	2 094	309	561	1 001	163	724	2 062	1 783	279
1859	-	141	1 024	149	286	273	49	225	850	840	10
1860	-	169	1 682	275	727	657	119	242	1 532	1 532	-

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