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**Author(s):** Ojala, Jari

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Jari Ojala

*Maritime Information Networks between Northern and Southern Europe during the Eighteenth Century\**

INTRODUCTION

*“In 1766 a small vessel, the Carolus, sailed from Finland to Marseilles. The vessel was the first one from its home port to sail beyond the Baltic Sea – and even to the distant Mediterranean area. The tradesmen in its hometown of Kokkola (in Swedish Gamla-Karleby) had just obtained so-called staple rights, which allowed them to engage in foreign trade and shipping. To fit out and provisioning a ship for such a long voyage was exceptionally expensive and, thus, risky. The ship had been built in its home port at the owners’ own expense, and its valuable cargo of tar had been bought from peasants in the surrounding rural area – the cargo was about as valuable as the vessel itself. In practice, all merchants in the town owned small shares in the vessel. However, due to the valuable cargo and the price of the vessel itself, even small shares were expensive for relatively poor merchants in the town. Thus it is easy to imagine that the shipowners must have had reservations about the idea of sending the vessel on such a long voyage. The more so because none of the traders had ever visited the Mediterranean, no-one spoke French, nor did any of them know any businessmen in Marseilles with whom they might trade. It took about a month to deliver a letter to Marseilles – and it took another month to get a reply. Nevertheless the vessel was dispatched and months later it arrived in Marseilles, returning safely to its home port the following summer. The voyage was a success, providing to all who had invested to the ship and cargo with enormous profits.”<sup>1</sup>*

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\* This essay is largely based on earlier articles by the author: J. OJALA, *The Problem of Information in Late Eighteenth- and Early Nineteenth-Century Shipping: A Finnish Case*, in “International Journal of Maritime History”, 14, 2002, n. 1, pp. 189-208 and J. OJALA, V. LUOMA-AHO, *Stakeholder relations as social capital in early modern international trade*, in “Business History”, 50, 2008, n. 6, pp. 749-764. – I would like to thank the participants of the Datini conference “Maritime Networks as a factor in European Integration” for the most useful comments to further develop this article.

<sup>1</sup> The case of the *Carolus* is also discussed in: J. OJALA, *Approaching Europe: The merchant networks between Finland and Europe during the eighteenth and nineteenth centuries*, in “European Review of Economic History”, 1, 1997, n. 3, pp. 323-352 and J. OJALA, *Tebokasta liiketoimintaa Pohjanmaan pikkukaupungeissa: purjemerenkulun kannattavuus ja tuottavuus 1700-1800-luvulla* [Efficient Business Activity in Small Ostrobothnian Towns: Profitability and Productivity of Shipping by Sail during the 18<sup>th</sup> and 19<sup>th</sup> Century], Helsinki 1999 (SHS), p. 312.

How was it possible to send a ship from a northern port to the Mediterranean without any prior experience of such a business venture? Why did the merchants dare to take the risk? The answer lies in the organization of trade and shipping, and especially in the role played by information networks and specialization of shipping and trade. These are the topics to be dealt with in this short essay.

\*\*

Shipping and trade between Northern and Southern Europe increased significantly throughout the 18<sup>th</sup> century. That is, before the first era of globalization during the following century.<sup>2</sup> This growth can be witnessed, for example, in the number of so-called Algerian passports given to Northern ships;<sup>3</sup> in the rise of shipments between these areas witnessed in the Danish Sound custom records;<sup>4</sup> and in the overall increase of trade and market integration during the period.<sup>5</sup> In the late 18<sup>th</sup> century roughly one third of Swedish shipping tonnage participated in trading with Southern Europe.<sup>6</sup> For Finnish shipping, this share was even higher: over half of Finnish tonnage returning to home ports in the late 18<sup>th</sup> century came from Southern Europe.<sup>7</sup> As Table 1 shows, the share of Finnish tonnage was greater than the number of ships, both those departing and arriving ships. This therefore means that the ships engaged in Southern European trade were larger than those used mainly for North Sea and Baltic trade – although in practice the same vessels were frequently used in all three areas. These ships mainly carried home salt as a return cargo. Almost half of Finnish tonnage also carried cargoes to Southern Europe – as did the *Carolus* in 1766. Most often the outward cargoes also consisted of relatively cheap, bulk products such as tar and timber.<sup>8</sup>

Moreover, Northern ships were also widely used in freight-carrying tramp shipping in Southern Europe. The competitive advantage for Nordic ships was low capital and running costs: ships were built in domestic shipyards from cheap, soft timber, and also the salaries of sailors (and shipbuilders) were relatively low com-

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<sup>2</sup> K.H. O'ROURKE, J.G. WILLIAMSON, *Globalization and history: The evolution of a 19<sup>th</sup> century Atlantic economy*, Boston 1999 (MIT Press).

<sup>3</sup> L. MÜLLER, *The Swedish consular service in southern Europe, 1720-1815*, in "Scandinavian Journal of History", 31, 2006, n. 2, pp. 186-195.

<sup>4</sup> J. ELORANTA, M.C. MOREIRA, & L. KARVONEN, *Between Conflicts and Commerce: The Impact of Institutions and Wars on Swedish-Portuguese Trade, 1686-1815*, in "The Journal of European Economic History", 44, 2015, n. 3, pp. 9-50 and M.C. MOREIRA, J. ELORANTA, J. OJALA, & L. KARVONEN, *Early modern trade flows between smaller states*, in "Revue de l'OFCE", 15, 2015, n. 4, pp. 87-109.

<sup>5</sup> for example, G. FEDERICO, *How much do we know about market integration in Europe?* in, "The Economic History Review", 65, 2012, n. 2, pp. 470-497.

<sup>6</sup> E.F. HECKSCHER, *Den svenska handelssjöfartens ekonomiska historia sedan Gustaf Vasa*. Stockholm 1940 (Almqvist & Wiksells), p. 24.

<sup>7</sup> Finland was part of the Kingdom of Sweden up to 1809.

<sup>8</sup> SWEDISH NATIONAL ARCHIVES (SNA), Stockholm, Annual Reports to the Swedish Board of Trade, Foreign Trade, ser. 9, 1769-1789, 1795-1799.

pared to those of many other European shipping nations.<sup>9</sup> In this tramp shipping particularly, the role of information was pronounced.

Tab. 1. **Shares of Finnish shipping tonnage departing and arriving to/from different sea areas in the period 1766-1799, (%)**

	N % from departed	Ton % from departed	N % from arrived	Ton % from arrived
Baltic Sea	34	25	32	23
North Sea	30	27	30	23
<b>Southern Europe</b>	<b>36</b>	<b>47</b>	<b>38</b>	<b>55</b>
Total	100	100	100	100

Source: SNA, Stockholm, Foreign Trade, ser. 9, 1769–1789, 1795–1799.

NOTES: In the table only three important shipping towns are included (Pietarsaari, Kokkola and Raahe, their Swedish names being respectively Jacobstad, Gamla-Karleby and Brahestad). These towns accounted for 20-30% of the Finnish shipping tonnage at the time. Note that only shipping with direct foreign trade is included, thus, tramp shipping is excluded

The demand for Northern commodities in the South and vice versa was undoubtedly the main reason for the growth of trade with Southern Europe. The trade between Portugal and Sweden, for example, grew from the late 17th century until the late 18th century due to increasing salt imports. This salt, however, was taken as a return cargo on board ships that first exported Swedish or Finnish products to the North Sea or Mediterranean areas, and were thereafter usually used for brief periods of tramp shipping before taking on salt as return cargo. Salt was in practice the only voluminous product that it made sense to carry from the Mediterranean to the North. During the seventeenth century the Dutch had carried the salt imports of Sweden, yet because the key aim in Swedish mercantilist policy was to reduce foreign shipping, Sweden managed to expand its own salt shipping from Portugal after the passing of the Navigation Act in 1724. During the 18<sup>th</sup> century roughly 90 per cent of goods traded between Sweden and Portugal were carried by Swedish (including Finnish) ships. Portugal also emerged as an important market for certain Swedish products: in the 1720s, for example, over 50 per cent of the Swedish export of boards went to Portugal.<sup>10</sup> Throughout the eighteenth century, Sweden also managed to secure its shipping interests in the Mediterranean by mak-

<sup>9</sup> J. OJALA, P. FRIGREN, and J. ELORANTA, *Lönade det sig att gå till sjöss? Arbetarnas löner till sjöss och på land i 1800-talets Sverige och Finland*, in "Historisk Tidskrift (Sverige)" 134, 2014, n. 3, pp. 434-461.

<sup>10</sup> J. OJALA, L. KARVONEN, M.C. MOREIRA, J. ELORANTA, *Trade between Sweden and Portugal in the Eighteenth Century. Assessing the reliability of STRO compared to Swedish and Portuguese Sources*, J.W. VELUWENKAMP, W. SCHELTJENS eds, Leiden 2018, pp. 153-176.

ing treaties, paying tributes and maintaining political connections with the Corsair States of Northern Africa.<sup>11</sup>

The salt imports, however, were presumably the least problematic for Northern shipowners: the low-cost return cargoes were usually bought at the ships' (ship-owners') own expense when vessels were northward bound. Moreover, the exports of Swedish and Finnish goods were in most cases not especially challenging, as there was a growing demand for iron, tar, timber and other Northern goods in Southern Europe. From the perspective of information, however, the most complicated business was presumably tramp shipping; namely, carrying cargoes for freight earnings between foreign ports. The shipowners obtained most of their revenues from exports and tramp shipping – and occasionally by selling the ship in the second-hand markets. The import cargoes were less significant – although even importing salt was more profitable than to sail north in ballast.

Besides the old and established Swedish and Finnish trading houses, newcomers also participated in the trade in the Mediterranean, as witnessed in the introduction of this paper. Given the knowledge of the commodities potentially available for export, import or tramp shipping, the next step, ascertaining exactly who was trading in them, was especially challenging during the era when information delivery was even at its best slow, costly and unreliable.<sup>12</sup>

As the trade grew the demand for information also increased. In small-scale local trade the challenges of obtaining information were not problematic as distances were short and the parties concerned knew each other personally. Many authors have noted that due to the increase in trade during the early modern era, the costs of transactions also increased as more attention had to be paid to contracts, enforcement mechanisms and information gathering. Thus, the supply of information did not necessarily meet demand.<sup>13</sup>

According to the classic arguments by Ronald Coase and later developed by Oliver E. Williamson and in economic history especially by Douglass C. North, the perfect allocation of resources within the markets is impossible due to the costs of transacting. Transaction costs are incurred because the actors lack information, the information may be false or otherwise unreliable, or it is simply impossible to make the most appropriate use of the information available in the most appropriate way. Actors seek to find mechanisms to minimize the costs of transacting, and thus to make markets operate more securely, and to develop more efficient business activities. These mechanisms include hierarchical economic organizations, such as business enterprises, measures introduced by governments in order to ensure efficient economic activities through safeguarding property rights, and networks between the parties to the transactions. Market competition as such, however, can also en-

<sup>11</sup> L. MÜLLER, *Consuls, Corsairs, and Commerce: The Swedish Consular Service and Long-distance Shipping*, Uppsala 2004 (Acta Universitatis Upsaliensis).

<sup>12</sup> J.J. MCCUSKER, *The Demise of Distance: The Business Press and the Origins of the Information Revolution in the Early Modern Atlantic World*, in "The American Historical Review", 110, 2005, n. 2, pp. 295-321; J. OJALA and V. LUOMA-AHO, *Stakeholder relations*, cit., pp. 749-764.

<sup>13</sup> D.C. NORTH, R.P. THOMAS, *The rise of the western world: A new economic history*. Cambridge 1973 (Cambridge University Press), pp. 93-94; D. NORTH, *Institutions, institutional change and economic performance*, Cambridge 1991 (Cambridge University Press); J. OJALA, *Problem of information*, cit., pp. 189-208.

sure the efficient dissemination of information.<sup>14</sup> The early modern business enterprises, however, were in most cases relatively small and unable to create international, hierarchical organizations – besides of chartered companies such as the Dutch and British East Indian Companies. Moreover, small states had only weak possibilities to secure businessmen's property rights abroad. Therefore, the networks between parties to transact became more pronounced in early modern shipping and trade.<sup>15</sup>

Acquiring relevant market information is, thus, a basic requirement for business efficiency.<sup>16</sup> The problem is not only in obtaining it but also in ensuring its reliability and in putting it to good use.<sup>17</sup> During the era when information channels were undeveloped, these problems were particularly pronounced. International trade during the 18<sup>th</sup> century is therefore a case in point through which to study in-depth the challenges of asymmetric information. The challenges can be divided into three categories: *availability*, *reliability* and *usability* of information.

#### AVAILABILITY OF INFORMATION

Availability of information refers to trading parties' timely access to relevant information. In spite of evidence of an increase in the speed of information transfer already during the 18<sup>th</sup> century, and especially during the early 19<sup>th</sup> century before the telegraph was introduced, the information flows were still, even at best, slow and expensive.<sup>18</sup> Thus undeveloped information channels and slow communications were the basic constraints on the availability of information.<sup>19</sup>

Yet during the 18<sup>th</sup> century – and even before – revolutionary innovations were in place to advance information gathering. These included circular letters and price

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<sup>14</sup> R. COASE, *The Nature of the Firm*, in "Economica", 4, 1937, n. 16, pp. 386-405; R. COASE, *The Problem of Social Cost*, in "The Journal of Law & Economics", 3, 1960, n. 1, pp. 1-44; R.A. POLLAK, *A Transaction Cost Approach to Families and Households*, in "Journal of Economic Literature", 23, 1985, n. 2, pp. 581-608; O. E. WILLIAMSON, *Transaction-cost economics: the governance of contractual relations*, in "The Journal of Law & Economics", 22, 1979, n. 2, pp. 233-261; D. C. NORTH, *Transaction costs in history*, in "Journal of European Economic History", 14, 1985, n. 3, 557-576;

<sup>15</sup> C. ANTUNES, A. POLÓNIA, *Beyond Empires: Global, Self-Organizing, Cross-Imperial Networks, 1500-1800*, Leiden 2016 (Brill).

<sup>16</sup> M. CASSON, *Information and Organization: A new Perspective on the Theory of the Firm*, Oxford 2001 (Oxford University Press).

<sup>17</sup> J. OJALA, *Problem of information*, cit. pp. 189-208.

<sup>18</sup> See especially: H. VINNAL, *Cost-distance ratio in change: Transmission rates of commercial correspondence in the North and Baltic Sea region, 1732-1808*, in "Scandinavian Economic History Review", 66, 2018, n. 3 (online); K. RÖNNBÄCK, *Transaction costs of early modern multinational enterprise: Measuring the transatlantic information lag of the British Royal African Company and its successor, 1680-1818*, in "Business History", 58, 2016, n. 8, pp. 1147-1163; M. EJRNAES, K.G. PERSSON, *The gains from improved market efficiency: Trade before and after the transatlantic telegraph*, in "European Review of Economic History", 14, 2010, n. 3, pp. 361-381; S.-R. LAAKSO, *Managing the distance: Business information transmission between Britain and Guiana, 1840*, in "International Journal of Maritime History", 16, 2004, n. 2, pp. 221-246; Y. KAUKIAINEN, *Shrinking the world: Improvements in the speed of information transmission, c. 1820-1870*, in "European Review of Economic History", 5, 2001, n. 1, pp. 1-28.

<sup>19</sup> J. OJALA, *Problem of information*, cit. pp. 189-208.

currents which in the course of time developed into newspapers, affording opportunities to those included in the information networks disseminating information on trade.<sup>20</sup> Moreover, governments established ways to provide merchants with information; in Sweden and Denmark consular networks established in the Mediterranean area were especially important.<sup>21</sup> These new modes of information transfer were created due to an increase in the demand for information.<sup>22</sup> As trade expanded, more information was needed – thus, economies of scale led to a situation in which more efficient modes to transmit communication could be built.<sup>23</sup>

Most importantly, specialized services in shipping and trade were developed, including agencies and brokerage firms – although the roots of these services go back to medieval times. This specialization in international trade and shipping services at least partially solved the challenges of information availability. In international trade, brokers and specialized merchant houses handled the transactions and also supplied information. They were middlemen between the original producers and the customers. In addition, they provided a network of contacts. As Mark Casson has noted, these actors, whether merchants or specialized brokers, handled basic information within the impersonal entrepreneurial networks of international trade. They did not usually handle the products physically but provided advice on where the products should be delivered. Specialized services lowered the costs of searching and identifying possible business contacts and, thus, reduced the uncertainties and risks involved in operations. Therefore specialized trade and shipping services can be characterized as intermediate co-operative modes that reduced transaction costs.<sup>24</sup>

The intermediaries earning commission for taking care of business in foreign ports were already a familiar feature during the Middle Ages. The shipping services were initially provided by the trading houses engaged in these activities. The merchants in foreign ports attended to the clearance of the vessels, and charged a commission from this activity, known as an address commission. The specialized ship-brokers emerged from the late 17th century on.<sup>25</sup> These specialized services in shipping and trade were among the infrastructure that supported and shaped the economic activity; they co-ordinated the flows of resources (like capital, goods and

<sup>20</sup> C. LESGER, *The rise of the Amsterdam market and information exchange: Merchants, commercial expansion and change in the spatial economy of the low countries c. 1550-1630*, Aldershot 2006; J.W. VELUWENKAMP, *International business communication patterns in the Dutch commercial system, 1500-1800*, H. COOLS & al. eds, Hilversum 2006, pp. 121-134; W.D. SMITH, *The function of commercial centers in the modernization of European capitalism: Amsterdam as an information exchange in the seventeenth century*, in "The journal of economic history", 44, 1984, n. 4, pp. 985-1005.

<sup>21</sup> L. MÜLLER, *Consuls*, cit.

<sup>22</sup> G. BAKKER, *Trading Facts: Arrow's Fundamental Paradox and the Origins of Global News Networks*, P. PUTNIS, C. KAULS, J. WILKE eds, New York 2011, pp. 9-54.

<sup>23</sup> H. VINNAL, *Cost-distance ratio*, cit.

<sup>24</sup> M. CASSON, *Entrepreneurial Networks. A Theoretical Perspective*, in *Entrepreneurial networks and business culture*, M. MOSS, A SLAVEN, C.E. NUNEZ eds, Seville 1998, pp. 13-28.

<sup>25</sup> J.F. MYRHE, *About Chartering and Shipbroking Business*, Copenhagen 1917; M.B. MILLER, *Ship Agents in the Twentieth Century*, in *Resources and Infrastructures in the Maritime Economy, 1500-2002*, G. BOYCE, R. GORSKI eds, St. John's 2002, pp. 5-22; R. DAVIS, *The Rise of the English Shipping Industry in the Seventeenth and Eighteenth Centuries*, London 1962.

information) and secured quick turnaround in the port towns.<sup>26</sup> In practice, however, turnaround times were seldom especially quick, and there were quite a lot of challenges in maintaining efficient flows of information and co-ordination in spite of these specialized intermediaries.

A wide variety of actors offered their services for trade and shipping, including brokers and agencies offering charter-parties between shipowners and charterers; houses specialized in transmitting bills of exchange and underwriting services; and ship's chandlers to offer provisioning and other supplies to vessels. The brokerage and commission payments usually included not only the costs related to acquiring and organizing freight shipments and cargoes, but also clearances and sometimes even the harbour fees and marine insurances. The competitive advantage for a shipbroker was the information (e.g. on customs, laws, commodity prices and so on) he possessed, and his ability to use that information.<sup>27</sup> Specialized shipping agencies and the networks created between them offered an institutionalized solution to reduce the costs of transactions. Especially important were the agencies located in certain commercial and financial centres (like London and Amsterdam), or in port towns with suitable geographical locations (like Falmouth, Queenstown or Cadiz), or in ports with normative, legal functions (such as the Danish Sound and Constantinople).

The trade and business contacts emerged from traditional merchant-adventurer types of organizations towards informal networks of practice in which parties to transactions did not (necessarily) know each other personally.<sup>28</sup> Thus shipping and trade services were at least moderately specialized during the eighteenth century. This is seen in the rarity of direct business correspondence between buyers or sellers of export and import cargoes, or between those providing and needing shipping services. In fact, earlier studies show that the bulk of the letters were sent to specialized agencies and brokerage firms specialized in information transmission. Moreover, in many cases ships' masters acted as the personal agents of shipowners to ensure reliability and honesty between the parties to transactions.<sup>29</sup>

The parties to transactions gathered information through correspondence and circular letters sent by agencies and brokerage firms. These agencies and brokerage firms established formal and informal networks of communication in which this vital information on trade was transmitted. Access to an information network over time provided even more contacts, and some of the strategic actors came to occupy vital positions.<sup>30</sup>

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<sup>26</sup> G. BOYCE, *Introduction: Resource Flows and Maritime Infrastructures*, in "Research in Maritime History", 11, 2002, n. 22, pp. 1-4.

<sup>27</sup> M. CASSON, *Entrepreneurial Networks*, cit., pp. M. CASSON, *Entrepreneurial Networks*, cit.; J. OJALA, *Tehokasta liiketoimintaa*, cit., pp. 309-311.

<sup>28</sup> A. GREIF, *Reputation and coalitions in medieval trade: evidence on the Maghribi traders*, in "The journal of economic history", 49, 1989, n. 4, pp. 857-882; J.S. BROWN, P. DUGUID, *The Social Life of Information: Updated, with a New Preface*, Boston 2017 (2000, Harvard Business Review Press)

<sup>29</sup> J. OJALA, *Problem of information*, cit., pp. 189-208; J. OJALA, V. LUOMA-AHO, *Stakeholder relations*, cit., pp. 749-764.

<sup>30</sup> J. OJALA, *Problem of information*, cit., pp. 189-208.

The problem was not only one of obtaining information but also of the slow speed of communication. It took weeks rather than days to transmit data from important Mediterranean ports to the Northern extremities of the Baltic Sea. The time lag between sending a letter and getting an answer to it from a distant port could be at best weeks, but in the worst cases months. In one case, a Finnish businessman complained to his Portuguese business partner that he did not receive a circular letter dated in January until November.<sup>31</sup>

## RELIABILITY OF INFORMATION

The very same innovations that advanced the availability of merchant information also played an important role in improving the reliability of information.<sup>32</sup> Personal contacts between the parties to transactions ensured the reliability; this is born out by the longevity of business contacts. Namely, in many cases business contacts between distant trading houses lasted for decades or even over a century. Furthermore, parties to transactions were ready to continue with reliable, old business partners, even though more profitable ones were available, as personal commitment and long-term economic relationships were efficient ways to minimize the risks related to information.<sup>33</sup>

The “weakness of strong ties”, however, might create challenges in cases of economic depression, as suggested by Mark Granovetter in his classic study. To a certain extent, however, the emerging brokerage firms and agencies were still impersonal in nature. In time, the parties involved in such contacts came to know a great deal about each other. As a result, these impersonal networks also acquired personal characteristics in the long run and eventually lowered transaction costs. Thus, frequency and repetition within the contacts were among the primary factors in building relationships and trust between the transacting parties.<sup>34</sup>

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<sup>31</sup> *Ibid.*, p. 310.

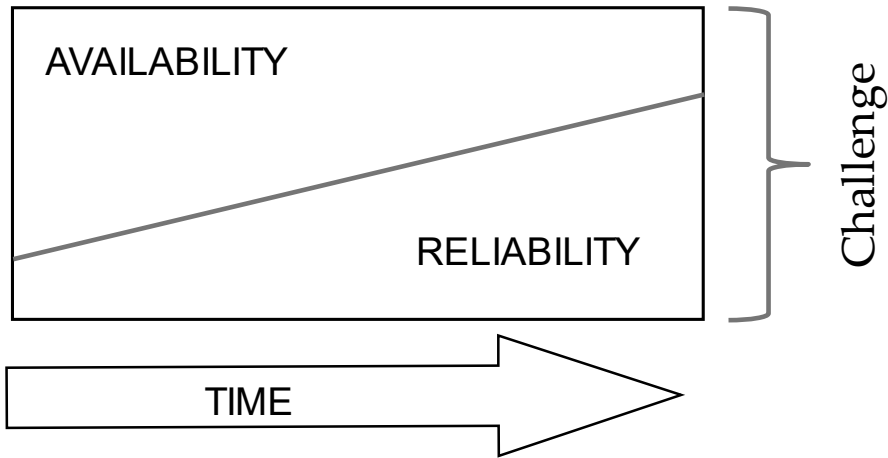
<sup>32</sup> H. VINNAL, *The world refuses to shrink. The speed and reliability of information transmission in North and Baltic Sea region, 1750-1825*, in “European Review of Economic History”, 18, 2014, n. 4, pp. 398-412.

<sup>33</sup> J. OJALA, *Tebokasta liiketoimintaa*, cit., pp. 311-319.

<sup>34</sup> M. GRANOVETTER, *The strength of weak ties*, in “American Journal of Sociology”, 78, 1973, n. 6, pp. 1360-1380 – See also: J. OJALA, *Problem of information*, cit., pp. 189-208; J. OJALA, V. LUOMA-AHO, *Stakeholder relations*, cit., pp. 749-764.



Fig. 1. Availability and reliability of information over time



Personalized networks were especially important in transferring information between parties to transactions; in this case shipowners and charterers. The very foundation of these networks was to serve as channels to provide reliable information, thereby reducing transaction costs caused by the asymmetric dissemination of information. For a shipowner and charterer it was vital to be a part of these information networks, and for a newcomer to be able to use some existing network.<sup>35</sup>

The availability of information was at least partly solved through specialization of trade and shipping, namely, by established information networks. Later on technological development also reduced the challenge of obtaining information. Examination of the correspondence of shipowners suffices to show the challenges the entrepreneurs faced during the early modern era: how to select the most reliable and valuable information? Thus, whereas previously sheer availability of information might have been the key obstacle, now it was (also) its reliability – as indeed it is even today. Figure 1 aims to illustrate this challenge: in time the availability of information becomes less challenging, while its reliability may become more problematic. The shipowner, for example, could not be sure whether his business partner in some distant town was really acting in best interests of his principal. There are, indeed, some occasions in which a so-called “principal-agent” challenge occurred, when self-seeking agents tried to cheat their distant principals. Yet in practice such behaviour was fairly rare as the close networks of information were also quick to spread news of bad behaviour.<sup>36</sup>

The key to understanding why and how these information networks proved reliable is resource dependency; the parties involved in the transaction were dependent upon the resources they provided to one another. Finnish shipowners and

<sup>35</sup> J. OJALA, *Problem of information*, cit., pp. 189-208.

<sup>36</sup> IDEM, *Tebokasta liiketoimintaa*, cit., p. 311; M. CASSON, *Entrepreneurial Networks*, cit., pp. 17-18.

exporters offered staples such as tar and timber that were needed in Southern Europe. They could offer these commodities, and also cargo capacity to carry tramp shipping at affordable prices, which made them valuable contacts for businessmen in the South. Conversely, Finnish merchant-shipowners were dependent on imports, exports and charter-parties offered by their Southern counterparts. In time, the parties to transactions had repeated dealings and they learnt more about each other over time – even though they did not necessarily knew each other personally. Moreover, the consular networks established by the Swedish government also ensured the establishment of trust between the transacting parties – especially as in many cases these consuls were local businessmen with whom the Swedish (and Finnish) merchants had transactions.<sup>37</sup> Among all parties, whether they were ship-owners, charterers, agents, brokers or ships' masters, reputation was invaluable: to maintain a good reputation also ensured future opportunities for in business.<sup>38</sup>

## USE OF INFORMATION

The availability and reliability of information are only pre-conditions for activities; ultimately it is a matter of how the information is used. The information obtained had to be assessed and analysed in one way or another. Thus, it was a question of business acumen: the ability to exploit available information and to explore new possibilities.<sup>39</sup> The long-term business relationships witness, on the one hand, the strategy of exploiting existing resources in businesses. Yet entrepreneurs were also constantly seeking for new opportunities, and their endeavours are apparent in the hundreds of letters sent to previously unknown businessmen. However, in most cases, new trade relationships were not achieved through these occasional contacts.

How then could a merchant-shipowner in the early modern era best use the information he possessed? These capabilities were a complex mixture already then – as they are today – of personal abilities, including formal education, experience, entrepreneurial mindset, and sometimes, pure luck – or misfortune. The training of the future merchants can be roughly divided into two categories: formal education and practical training as an apprentice. Most often the training was a combination of these, although it is evident that during the 18<sup>th</sup> century practical training was still preferred among the Finnish merchant families. Also, the (Swedish) merchant legislation favoured practical skills over formal education. In fact, practical training was considered indispensable, while formal schooling was not. According to the Swedish law of 1734, up to twelve years of practical training was required before one could obtain the right to be a merchant. In reality, a much shorter time was considered acceptable, and in the cases of the sons of merchant families the notion “of

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<sup>37</sup> J. OJALA, *Problem of information*, cit., pp. 189-208

<sup>38</sup> Examples of using networks, for example, in J. OJALA, *Tebokasta liiketoimintaa*, cit., p. 335.

<sup>39</sup> D.J. TEECE, *Explicating dynamic capabilities: the nature and microfoundations of (sustainable) enterprise performance*, in “Strategic management journal”, 28, 2007, n. 13, pp. 1319-1350; M. CASSON, *The entrepreneur: An economic theory*. Totowa, New Jersey 1982 (Barnes & Noble Books).

being with his father since a small boy” was sometimes enough. The Swedish merchant law on practical training remained active in Finland up to 1879.<sup>40</sup>

The merchant-shipowners had to be active in their networks, thus making use of information entailed hard work. However, the use of information was still constrained by its availability and reliability. The first of these meant that businessmen of the early modern era had to adjust their business operations to the speed of information transfer. That is, they were constantly forced to make long term plans. Even at the shortest, sending a vessel from Northern Europe to the South and back would take about half a year. But as ships were used to carry freight, this period was in many cases more than one year. Moreover, Finnish and Swedish shipowners had to take into account the forces of nature: in winter returning to the North was impossible due to the ice; storms were frequent in autumn and certain commodities like grain were needed especially in spring. The warehouses at home should be full when the vessels docked so that they could be loaded as soon as possible to reduce turnaround time and sent back to profitable business. Moreover the shipyards needed to be at the ready in case the vessels needed repairs. Thus correspondence with foreign business contacts formed just one part of the daily routines and long-term strategies of entrepreneurs engaged in foreign trade and shipping.

In spite of constant complaints from Finnish shipowners, for example, about the slowness of information flows – and sometimes even the challenges of reliability, there was in fact not much they could do to speed things up. In most cases letters including information on the export cargo was carried on board the same vessel that was carrying the cargo in question.<sup>41</sup>

## CONCLUSIONS

The vessel *Carolus* made a successful voyage from the Northern shores of the Baltic Sea to the Mediterranean in 1766-1767. How was this specific journey possible, how were the necessary contacts made? The answer lies in the complicated networks of information and the personal ties between the key parties involved. In this case, the answer is in the contact networks and role played by a certain Stockholm-based merchant house which had close contacts with Finnish merchants on the one hand, and with traders in Marseilles on the other. This Stockholm-based merchant house also owned a small share in the *Carolus* itself; thus, it was in the best interests of the owners of this Stockholm house to act in the best interests of the other owners of this business venture. Thus, this trading house acted as an intermediary that organized contacts, delivered letters and even organized a capable ship's master from Stockholm for the *Carolus*, which sailed with and unexperienced crew from North to South and back.

The access, reliability and use of information were problems for merchant-shipowners during the 18<sup>th</sup> century. The solutions adopted were partly contradictory: the aim to reduce information asymmetry on the one hand, and this might incur

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<sup>40</sup> J. OJALA, *Tebokasta liiketoimintaa*, cit., p. 270-276.

<sup>41</sup> Compare, though, H. VINNAL, *Cost-distance ratio*, cit.

costs on the other. For example, using the services of specialized brokers and agencies certainly made information more easily available, but might at the same time pose challenges in terms of reliability of information. The merchant-shipowners therefore sought for long-term business contacts in which repeated dealings had created trust between the parties involved. Such contacts were preferred even if there were more profitable ones – but potentially unreliable – available.