967

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DIFFERENT NEEDS, DIFFERENT SOLUTIONS — The Importance of Economic Development and Domestic Power Structures in Explaining Military Spending in Eight Western Democracies During the Interwar Period

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Tiivistelmä - Abstract

Tässä työssä tarkastellaan sotilasmenojen kehitystä kahdeksassa läntisessä demokratiassa maailmansotien välisenä aikana. Suurvalloista vertailussa on mukana USA, Iso-Britannia ja Ranska; pieniä valtioita edustavat Belgia, Tanska, Ruotsi, Norja ja Suomi. Lisensiaatintutkielman pääkysymyksinä on selvittää mikä taloudellisen kehityksen (erityisesti hegemoniapyrkimysten kannalta) ja sisäisten valtarakenteiden merkitys oli sotilasmenojen kehityksessä.

Sotilasmenojen tutkimisessa tulee ottaa huomioon sekä valtion ulkoiset uhkakuvat ja taloudellisesta kilpailusta juontuva hegemonian tavoittelu että sisäiset tekijät(mm. sisäpoliittinen tilanne, päätöksentekoon vaikuttavat organisaatiot, painostusjärjestöt). Tämä tutkimus nojautuukin monen eri tieteenalan metodologisiin lähtökohtiin, esim. perinteinen diplomatian historia, sotahistoria, taloustiede, uusi institutionaalinen taloustiede (NIE) ja julkisen valinnan (public choice) teoria.

Tässä työssä on sotilasmenoja suhteutettu mm. valtion kokonaismenoihin, bruttokansantuotteeseen, per capita -pohjalle, pinta-alaan ja sotilashenkilöstön määrään. Lisäksi työssä on pohdittu vertailumetodien ongelmia ja esitetty niiden käyttömahdollisuuksia.

Tutkielmassa on saatu uusia tuloksia maailmansotien välisen ajan sotilaallisten uhkakuvien ja sisäpoliittisten kriisien vaikutuksista. Esim. USA:ssa reaaliset sotilasmenot säilyivät alhaisina ja sotilasmenojen osuus BKT:sta pysyi verrattain pienenä. Toisaalta USA:n absoluuttiset sotilasmenot olivat vertailun korkeimmat. Ison-Britannian ja Ranskan sotilaallinen panostus oli selvästi voimakkaampaa. Isossa-Britanniassa sotilasmenot kääntyivät selvään kasvuun 1930-luvun alussa, kun taas Ranskassa 1930-luvun heikko taloudellinen kehitys vaikeutti sen puolustusinvestointeja erityisesti vuosikymmenen lopulla. Pienet valtiot, poikkeuksena Suomi, investoivat suhteellisesti vähäisesti maanpuolustukseen, jopa 1930-luvullakin.

Suomen reaaliset sotilasmenot kasvoivat lähes koko ajanjakson ajan. Sotilasmenojen osuus valtion kokonaismenoista pysyi korkeana, samoin BKT:sta.Selitys tähän löytyy mm. kotimaisten investointien kalleudesta.

Asiasanat
SOTILASMENOT, PUOLUSTUSMENOT, 1920-1930-LUKU, SUOMI, PUOLUSTUSPOLITIIKKA, MAANPUOLUSTUS, SOTAHISTORIA, TALOUSHISTORIA, KANSAINVÄLISET VERTAILUT

Säilytyspaikka

Muita tietoja
Säilytyspaikka: HISTORIAN LAITOS

1. INTRODUCTION

1.1. Different Approaches in Studying International Power Struggles and Military Spending

This study is aimed at explaining the complicated phenomenon of military spending in eight Western democracies (Belgium, Denmark, Finland, France, Norway, Sweden, United Kingdom, and United States) during the interwar period. This question is approached from an interdisciplinary angle, influenced by the various research traditions in the study of wars and conflicts. Military spending is analyzed both through the interaction among the Great Powers as well as smaller states, especially their economic development, and by contemplating the importance of domestic power structures, i.e. the role of the government and the significance of political (and economic) interest groups. First in this chapter we will take a closer look at the different research traditions, among different disciplines, in international studies of military events and structures. Then we will sketch the outlines of the Finnish research traditions, both traditional military history as well as more interdisciplinary efforts. The framework for the study as well as some additional theoretical tools will link these research traditions to the aims of this study. Finally, we will contemplate upon the possible difficulties in the use of both the data and sources as well as the problems of combining different theoretical orientations.

The study of military history, perhaps the most traditional research orientation in the study of crises, has been changing ever since the Second World War, especially in the last few decades. This applies specifically to the international interests in this field. Emphasis has been placed on a new set of problems, primarily concerning the ties between war — as well as the military establishment itself — and society. The traditional view, involving strategic and tactical considerations, of many past historians has gradually been complemented with studies of more complex interrelationships. These newer approaches and studies on the effects of wars and military establishments on societies as a

whole, whether they concentrate on political, economic, social, or cultural aspects, are attempting to create more comprehensive or "total" (in Braudel's terms) accounts of military history.[1]

These newer approaches include the so-called "New Military History" -school, which originated from the United States.[2] In the United States the study of wars found itself in crisis by the 1950s: it was shrinking into the margins of mainstream historiography in academic institutions. The reasons for this development included the debilitating impact — as far as academic prestige was concerned — of big government and armed services' military history projects, the distrustful attitude of Cold War scholars towards war as a research topic (they regarded wars as exceptional "perversions" of the ordinary political and foreign policy processes), and the lack of analytical framework featured in most of the studies. Some of the military historians of the time continued to study war in a more "traditional" way whereas some tried to incorporate a larger view of explaining conflicts. Another solution adopted by some military historians, for example by Walter Millis in his 1956 *Arms and Men*, was to try to popularize military history and incorporate a broad range of elements, such as political institutions, into the explaining wars. The emphasis of non-military characteristics started to challenge and complement the traditional military history in the United States in the 1960s, which Paret refers to as the "nadir of American military history in this century".[3]

The New Military History was greatly influenced by such similar movements as the New Social History, New Economic History, New Cultural History etc. The description "new" military history is somewhat misleading, because this research orientation includes the traditional military history as well. The main idea behind the New Military

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[1] Howard 1972, 9—11; Anderson 1988, 8; Milward 1977, xii.
[2] Paret 1992, 220—221.
[3] Paret 1992, 214—220; Millis 1956.

History is that there are a variety of approaches available for a researcher of wars and conflicts, which may not necessarily produce the same results. Another characteristic of this research orientation is that it has not become a dominant part of the field of military history rather than a complementary, yet vague set of interdisciplinary approaches. The viewpoints and methods involved differ greatly, but this variety is necessary to understand the different structures and elements of war and peace better than before. In the United States, as well as in Europe, this approach has helped to invigorate studies concentrating on the history of war to a great degree. In Europe this type of military history has claimed the most success in Great Britain, especially in connection with economics and economic history.[4]

This loosely formed New Military History has been strongly influenced by various kinds of interdisciplinary efforts to explain the origins and causes of conflicts. Charles Tilly's division of the available approaches into the relationship between war and power is perhaps the most encompassing: 1) statist; 2) geopolitical; 3) world system; 4) mode of production approach. The statist approach presents war, international relations, and state formation chiefly as a consequence of events within particular states. The geopolitical analysis is centered around the argument that state formation responds strongly to the current system of relations among states. The world system approach, á la Wallerstein, is mainly rooted in the idea that the different paths of state formation are influenced by the division of resources in the world system. In the mode of production framework the way that production is organized determines the outcome of state formation. None of the approaches, as Tilly points out, are adequate in their purest form in

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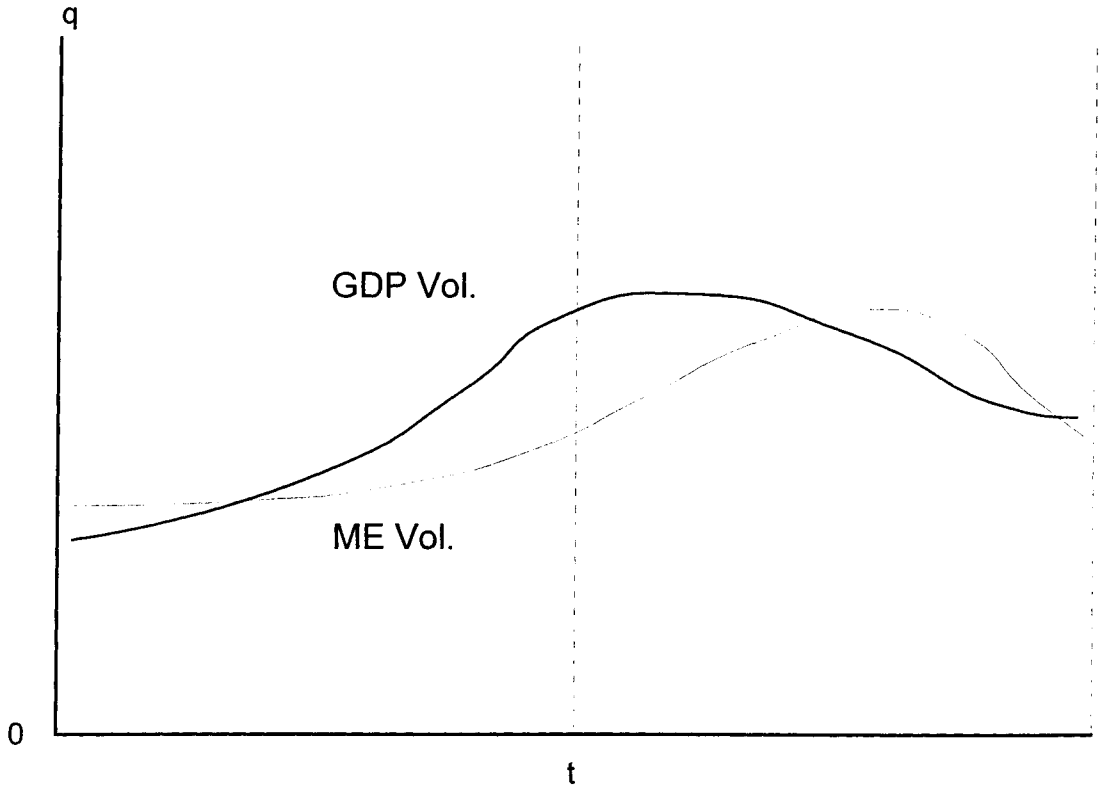
[4] Paret 1992, 221. See also Howard 1972; Milward 1965; Milward 1970; Milward 1977. On the latest British military economics, see Harrison 1996. On the German military history traditions, see Showalter 1984. On the so-called new histories, see Olábarri 1995, 10—12, 17—24; Iggers 1984; on cliometrics, see McCloskey 1987. On the emphasis of cultural constraints, see Keegan 1994.

explaining state formation, international power relations, and economic growth as a whole.[5]

Figure 1. The Projected Interaction Between Economic Development (GDP) and Military Spending (=ME) in the Leader Nation (=Great Power) According to the Hegemony Paradigm



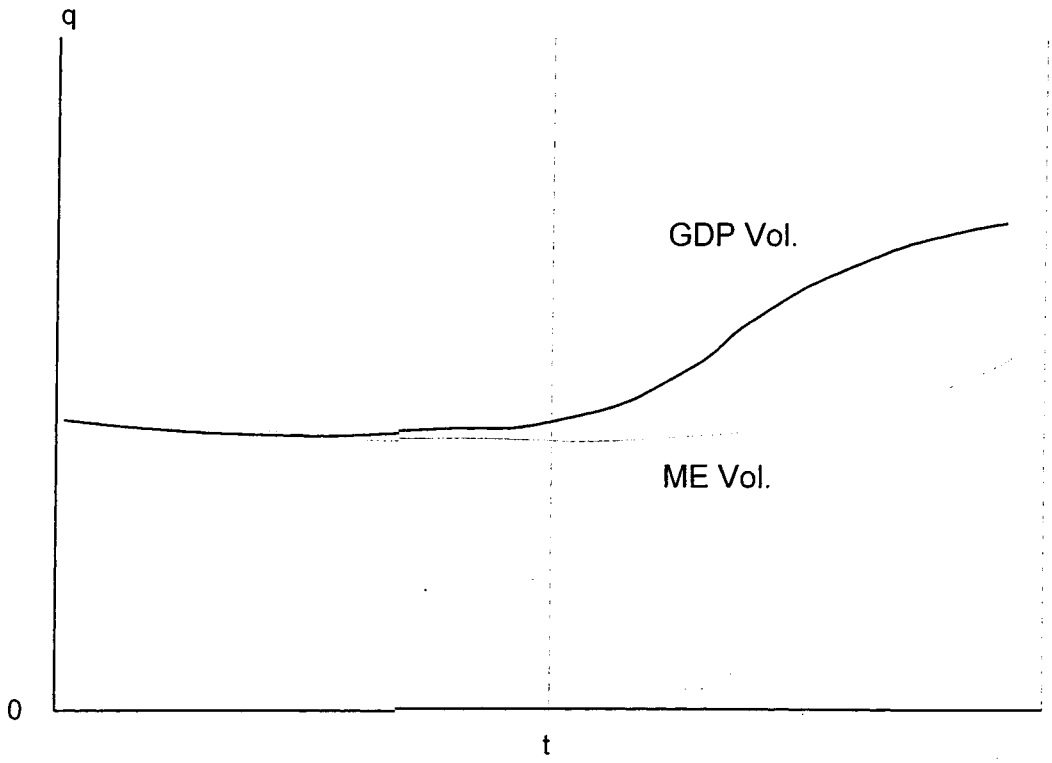
Source: Constructed from Kennedy 1989, xv—xvi.

An important contribution closely related to the statist approach and the study of international relations in general is the argument that military might and the "quest" for hegemony are intricately linked to economic growth. Paul Kennedy and Robert Gilpin are the main proponents of this so-called hegemony paradigm in its purest form. It builds

[5] Tilly 1990, 6—14. For an overview of Tilly's arguments in a concise framework, see Tilly 1985.

on, similar to Angus Maddison, the idea of a leader and its follower countries, and the competition between them for military and economic leadership. According to Kennedy, uneven economic growth causes the nations to compete for economic and military prowess. The leader nation(s), as represented in Figure 1, thus has to dedicate increasing

Figure 2. The Projected Interaction Between Economic Development and Military Spending in the Follower Nations (=Great Power) According to the Hegemony Paradigm



Source: Constructed from Kennedy 1989, xv—xvi.

resources to armaments in order to maintain its position while the other states, the so-called followers, can benefit from greater investments in other areas of economic activity (see Figure 2). Gilpin argues that the domination of the Great Powers causes the dif-

fusion of the sources of power, which undermines the hegemonic system; ultimately, leading to the creation of another hegemonic system.[6]

The study of defense expenditures has become an important part of the disintegrated field of economics in the last few decades. Interestingly enough, these studies can not be defined exactly in Charles Tilly's terms introduced earlier rather than as approaches utilizing the theoretical tools of neoclassical economics in their analysis. This new field, *defense economics*, has attained credibility and prolonged interest in economics especially in the aftermath of Cold War military spending. A central feature in this research has continuously been the analysis of military spending from the public good perspective. Most of the studies have been greatly interdisciplinary by nature, influenced by the beforementioned developments within social sciences and historiography. As Keith Hartley and Todd Sandler noted in their 1990 study *The Economics of Defence Spending: an International Survey*, defense economics is still a "fresh" and expanding branch of economics: "It involves the application of macro- and microeconomic theory to issues of defence, disarmament and peace."[7]

The most significant of the more interdisciplinary efforts has been the Correlates of War -project, which started in the spring of 1963 with little to nothing at the University of Michigan. This project became the largest research program to trace "the intellectual history of the 'peace research movement'" as well as to try to discover some explanatory models relating to the birth of conflicts, and it has endured until the 1990s. David

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[6] Kennedy 1989; Gilpin 1987, xiii; Hodne 1992, 80—82. See also Maddison 1991; Kennedy 1991. On the international position of interwar Great Britain, see Kennedy 1981. On the study of international relations, see Hovi 1984. Kennedy makes only vague suggestions that the interwar period was somehow exceptional. See more Hodne 1992, 82; Kindleberger 1973.

[7] Hartley-Sandler 1990, xv. On the significance of defense expenditures in economic analysis, see e.g. Stiglitz 1988. On the other studies in defense economics, see e.g. Alexander 1990; Hewitt 1991; Dunne-Smith 1990; Gold-Adams 1990 (which has an interesting critique of Kennedy's hypothesis); Landau 1993; Deger-Sen 1990.

Singer has summarized the research objectives of this project as "to add what we can to the painfully small body of correlational knowledge on the incidence of war."[8]

A problem in defense economics in general has perhaps been the relatively little attention paid to the concept of time-related phenomena. Also, international interests in general in the field of defense expenditure analysis have varied greatly. There have, however, been some common features. These studies have tended to focus both on the Cold War period and on the interrelationship between economic growth and defense spending. There have been very few studies concentrating on the development of military expenditures during other time periods, for example the interwar period. Quite a few of these studies, however, offer invaluable insights into defense expenditure analysis and the available methodology. Another common feature to be found in these studies is the lively debate on methods and data to be used in such analysis.[9]

1.2. Finnish Military History Traditions and Alternative Approaches

The Finnish research traditions of studying crises have been slow to react to international trends in this field. In general, Finnish military history — the only approach available for a Finnish researcher of crises until the 1980s and 1990s — as a concept has been in transition after the Second World War. An interesting and descriptive definition of (Finnish) military history has been provided by Jussi T. Lappalainen in his 1965 collection of lectures titled *Sotataidon historian luennot*:[10]

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[8] Singer 1979, xi—xviii; Singer 1990.

[9] Singer 1979, xvi—xix; McCloskey 1987, 14—15, 24; Komlos 1992; Olson 1982. See also Maddison 1991. On Nordic studies on military expenditures, see e.g. Hagelin-Wallensteen 1992; Gleditsch et al. 1992.

[10] Lappalainen 1965, 3; even though Lappalainen stresses the diverse nature of military history as a concept at this time, he does not emphasize this diversity as strongly in his later works.

> "The history of military skill is one of the special areas of interest in military history. Of the other areas the history of military events, the history of military economy, the history of military policy, the history of military governance, the history of social phenomenon relating to war etc. deserve a mention...It is apparent that the military history as well will move into the direction influenced by psychology and sociology."

The Finnish military history research has been more or less connected to both the general developments within historiography and even more so to the political climate of the time. The period from end of the 19th century to the first decades of the 20th century represented a time of socially influenced historiography in Finland. These studies were strongly affected by the so-called German school, which meant greater emphasis on statistics and the methodology of sociology and economics of the time.[11]

In the 1920s and 1930s the Finnish military history revolved mainly around the task of presenting the history of the Civil War of 1918 — or the War of Liberation, as it is still referred to as — from a right-wing perspective. The main emphasis was on military skill, namely on the importance of tactical and strategic elements of war. Such military historians as Heikki Nurmio and Martti Santavuori represented this type of approach in its purest form. For example Santavuori attempted to prove the centrality of military skill in military history, because in this way "an attempt was made to display what was real and lasting in the Finnish military skill, instead of artificial".[12] Even though the studies occasionally pondered upon the meaning of, for example, defense planning, the overall viewpoint included very little discussion on other matters besides military skill. These studies did not acknowledge the link between economic and social development and military prowess.[13]

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[11] Tommila 1989, 138, 149—160; Ahtiainen-Tervonen 1990. On the later developments in the Finnish historiography, see Ahtiainen-Tervonen 1996.

[12] Santavuori 1941, 5—6; Nurmio 1921, 5—6; Tommila 1989, 183—184.

[13] See e.g. Santavuori 1941, table of contents.

Einar W. Juvelius (from 1935 on Juva) and Arvi Korhonen were the most respected names in the field of Finnish military history during the interwar period and even after the Second World War.[14] Juva was the initiator of the Military History Office in 1925 as well as an active researcher of 18th century military questions.[15] For Arvi Korhonen, for example, military history was a means of displaying the Finnish spirit of defense and nationalism. He was convinced of the extraordinary character of the Finnish fighting man, who was above else a solid and loyal — although somewhat rebellious towards authority figures — soldier.[16]

The political limitations imposed by the peace with the Soviet Union and the strengthening of political history in general after the Second World War influenced the development of Finnish military history as well.[17] The newer, more politically oriented military history incorporated elements from the researchers personal experiences in the war. This type of military history undoubtedly produced detailed studies on the origins and events of the Second World War (from the Finnish perspective), an abundance of biographical studies, and apt descriptions of international diplomatic relations relating to wars. This type of research, however, has tended to view the concept of military history much more narrowly than the international trends of the time. The absence of methodological discussion has been another conspicuous aspect in the more traditional Finnish military history after the Second World War.

The impact of this type of military history on Finnish research of wars and conflicts has been and continues to be strong. Vilho Niitemaa is one of the Finnish military historians that has advocated this politically influenced approach. Even though he seems to sup-

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[14] Ahtiainen-Tervonen 1996; Tommila 1989, 183—188; Herlin 1996.
[15] Ahtiainen-Tervonen 1996, 82; Juvelius 1919, V—X; Juvelius 1927; Tommila 1989, 183—188.
[16] Ahtiainen-Tervonen 1996, 69—73. On Korhonen's works, see especially Korhonen 1939 and 1943.
[17] Tommila 1989, 245—248.

port the idea already introduced by Korhonen that "all aspects influencing the course of wars and their impacts ought to be studied", he still viewed military history as something mainly connected with analyzing war events and the organizational development of different armed branches.[18]

The one of the most widely published representative of the politically oriented Finnish military history has certainly been Mauno Jokipii. In addition to his studies in the field he has also been an avid critic of military history works published in Finland. He brought forth his view of what military history is and where it is heading in his 1969 study on the Finnish volunteers serving in German elite troops in the eastern front titled *Panttipataljoona*:[19]

> "...it (the Finnish SS battalion) is an interesting if not a unique example of the entanglement of political and military issues...There was a conscious effort to display their complex interaction in this study instead of separating them. It seems that international modern military history is heading this way anyhow."

Jokipii does not, however, accept the incorporation of "civilian matters" into the definition of what military history is, which becomes apparent from his review of the newer Finnish military history works. Although he does advocate the study of such matters and that the results are also important for the military history as a whole: "It has to be admitted that in this way an aggregate has been created, which has not existed before."[20]

The Finnish military history has experienced somewhat similar stages of development as the international in the last few decades, although the transition towards "new" mili-

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[18] Niitemaa 1979, 11; Niitemaa 1984, 153. Another traditionally oriented Finnish military historian is Helge Seppälä; see Karonen 1994; Seppälä 1979. Niitemaa, of course, was in the employ of the Military History Office from 1944—1955, which connected him closely to the school of military history represented e.g. by Arvi Korhonen. See Hovi 1992 for biographical details.

[19] Jokipii 1969, 5. Currently most widely published Finnish military historian is Ohto Manninen.

[20] Jokipii 1993, 246—247.

tary history has been considerably slower. This development is closely related to the successes of social and economic history in Finland in general in the 1980s and 1990s.[21] The concept of "military history" has changed rather slowly, however, and continues to be difficult to define. There are still many perceptions on what exactly should be included in this field. The views of the military officials and professionals has tended to be narrow. There has been a distinct overemphasis of strategic, tactical, and technical aspects of the military experience among these types of researchers.[22] Other reasons can also be cited in order to explain this rather slow change: the subjective limitations of the researchers (often veterans of the Second World War) and the built-in resistance of the academic paradigms in general.[23]

The origins of the newer tradition of Finnish military history can perhaps be traced back to the so-called SUOMA (=Finland in the Second World War) -project, which was started in 1975. This project, which was inspired by similar efforts in other European countries, established both the opportunities for different research frameworks as well as started a cautious dialogue on the possible methodology involved.[24] Ilkka Nummela, Jussi T. Lappalainen, Kari Selén, and Silvo Hietanen all could be interpreted as representatives of the newer tradition of military history. Nummela's 1993 study *Inter arma silent revisores rationum* concentrates on the military and non-military, especially eco-

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[21] See e.g. Haapala 1989; Tommila 1989.

[22] See e.g. Karonen 1994 or Tervasmäki 1993, 251. Tervasmäki has, however, previously undertaken innovative research into the military realities of the interwar period; inspired by the school of thought led by Jussi Teljo in Finnish post-Second World War political science, see Tervasmäki 1964. On other such studies, see Lamberg 1995 for details.

[23] Kulha 1994; Renvall 1983, 15; Niiniluoto 1984, 26—28. This does not mean, however, that "older" research is without merit; on the contrary. See also Paret 1992.

[24] SUOMA 1976, 0—2. See also SUOMA 1977 on the preliminary research reports. The Swedish SUAV (=Sweden in the Second World War) -project was started in 1966 with five sub-projects. See e.g. Åmark 1973, 7. In Sweden, however, the influence of the "newer" military history has been more widespread and has included a broader interpretations of the interdependence of politics and economy in the military sphere than in Finland; Krantz 1997, 170—172.

nomic effects of the Second World War.[25] Hietanen emphasizes the interaction between the society and the military establishment in the most comprehensive account of the Finnish society in the Second World War, *Kansakunta sodassa* (= A Nation at War), which is distinctly aimed at a socio-cultural approach.[26] Jussi T. Lappalainen has been one of the first Finnish military historians to endorse the "newer" military history research. Although he advocates the study of military organizations (and soldiers' realities) and the society as a whole frequently in his research, he tends to avoid too strong commitment to this approach.[27] Also, many of the studies of this nature have been closely connected with the Finnish political history research. For example Juhani Mylly's and Timo Soikkanen's studies on the security policy and domestic politics of Finland in the 1920s and 1930s represent the interdisciplinary emphasis of the last few decades, although they would probably not be categorized as representatives of "military history" by all the current researchers or even themselves.[28]

The study of conflicts from alternative perspectives has also taken place in Finnish social sciences research. The most significant *comparative* studies relating to military expenditures are Tatu Vanhanen's 1981 study and Raimo Väyrynen's 1992 study. Although Vanhanen's study is based on outdated and unreliable statistical sources, the methodological discussion, however, is still very relevant. Väyrynen's study is aimed at exploring the impact of technological development and armaments — its strengths lie also in the building of a theoretical framework for such a study. Väyrynen mentions as his aim "to explore the relationships between the civilian and military technologies and

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[25] Nummela 1993, 5. On the importance of war economy, see especially Pihkala 1982. See also Selén 1980; Lappalainen-Selén 1997 — Jussi T. Lappalainen and Kari Selén have been involved in a Nordic project on garrison towns and their respective significance for the societies. See also Artéus 1997.

[26] For example, see Hietanen-Vehviläinen 1989.

[27] See e.g. Lappalainen 1975, 6—9; Lappalainen 1972.

[28] On other "newer" military history studies, in the broad meaning of the term, see e.g. Mylly 1978; Luntinen 1984; Leskinen 1997; Soikkanen 1984; Kronlund 1990; Turtola 1984; Saarikoski 1997; Vasara 1997. Most of these studies center around the political implications of the interaction between the society and the military establishment.

their connections on the one hand, and the nature and pace of economic development on the other."[29] Jouko Matilainen's 1990 study titled *Maanpuolustus ja kansantalous* also represents an interdisciplinary approach into the study of military resources, especially from an economic perspective.[30]

There have been very few studies relating to the interwar military expenditures among the Finnish researchers. Curiously enough, even Finnish military spending has not been thoroughly studied. A common interpretation in the past has been to emphasize the neglect of the politicians in the 1930s to grant enough funds for the military establishment — a common reference has been to the so-called model Cajander (*malli Cajander*), which explicitly places the blame for the insufficient equipment on the late 1930s politicians. This view was first changed by Leonard Grandell's interpretation in 1963. He claimed that it was actually the 1920s when the greatest errors were made. Also, a number of studies since then have begun to question this view of insufficient funding. Mostly, however, Finnish military expenditures have not been studied in detail, especially from a comparative point of view.[31]

The most significant studies relating to the Finnish military establishment and military expenditures during the interwar period are Vilho Tervasmäki's 1964 study *Eduskuntaryhmät ja maanpuolustus (valtiopäivillä 1917—1939)* and his historical — written

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[29] Väyrynen 1992, e.g. 23. Vanhanen 1981 —see e.g. the development of military expenditure respective of GDP in Finland and Belgium in the Appendices of this thesis.

[30] Matilainen 1990. Matilainen's study is, however, not comprehensive enough as far as the historical realities (e.g the significance of the peace treaty as a constraint) of the time period in question are concerned. See e.g. pages 1—7, cf. 20—37.

[31] Grandell 1963, e.g. 54; Mannerheim 1952, 12; Tirronen-Huhtaniemi 1979. Cf. Kronlund 1990, e.g. 11 — Kronlund points out that "it is realistically not possible that a poorly armed and equipped as well as according to the training reports poorly trained army could have given a Great Power as tough opposition as Finland did in the Winter War 1939—1940". On other criticism of insufficient funding "myth" and its interpretation, see Eloranta 1997c; Eloranta 1996; Hietanen 1989; Kallenautio 1985.

with Martti V. Terä — account of the Ministry of Defense 1918—1939.[32] For example Tervasmäki's 1964 dissertation represents an interdisciplinary effort attempting to explain military outlays from a political perspective. His studies cover both the analysis of political parties attitudes towards military legislation as well as the development of the Ministry of Defence in a time of turbulence within the officer corps. Tervasmäki's studies have thus far been the most comprehensive accounts of factors influencing the political decisions and military questions during the interwar period. Jorma Juottonen's 1997 dissertation on similar issues offers little innovation to the dilemma of the formation of military outlays. Although Juottonen's study has a more detailed narrative than for example Tervasmäki, he has not utilized some of the basic studies needed in statistical comparisons (i.e. Hjerppe 1988 and Taimio 1986). The interpretation of the decision-making process place the study among the older interpretations (i.e. model Cajander). Juottonen claims also, interestingly enough, that international comparisons are not a worthwhile perspective into the study of Finnish military expenditures. He claims that a number of false claims have been and can be made on the basis of such comparison, although *no such studies have existed thus far.*[33]

1.3. Framework for the Study and Complimentary Theoretical Tools

As such, this thesis primarily aims to undertake research into the relationship between economic development and military expenditures. Thus, we intend to analyze both the external (for example, contemplate the applicability and the problems involved in applying the hegemony paradigm) as well as internal constraints (for example the impact of the role of the central government and domestic interest groups) for military spending

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[32] Tervasmäki 1964; Terä-Tervasmäki 1973. On Finnish military expenditures, see also Jalonen-Vesa 1992. On political parties' security interests, see e.g. Mylly 1978.

[33] See Juottonen 1997, e.g. 13, for details. It should also be noted that a number of important studies relating to the topic have been ignored in his dissertation.

literature in performing macrolevel comparisons of military expenditures in Finland, Belgium, Norway, Sweden, Denmark (=small states), the United Kingdom, France, and the United States (=Great Powers). Finland can be viewed as a relatively small, continuously "threatened" (by the Soviet Union) country during these two decades. The situation was quite similar for Belgium that was situated between two Great Powers: France (=ally) and Germany (=threat). The United States, however, was an economic and demographic giant influenced by the economic needs of various corporations and the Great Depression, in regards to military funding, for example. It is also significant that the United States was not seriously threatened by another country until the 1930s. The differences between the selected countries form an important part of the analysis and will reflect on the comparisons.

The countries selected consist only of Western democracies, which here pertains to democratic political institutions instead of clearly totalitarian rule (i.e. in the case of Italy in the 1920s and 1930s under Mussolini's rule or Germany in the 1930s). The analysis of a hegemonic system would indeed greatly benefit from the inclusion of such countries, but there are two important objections to such an approach: 1) For example in the case of Germany there are very limited sources dealing with the military spending and "acceptable" statistical data[34]; 2) The interaction of the political system and the economy, the approach adopted in the licentiate thesis, is not even remotely similar in a totalitarian political economy compared to one of the countries selected here for comparisons.[35]

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[34] See e.g. Ritschl 1996; Ritschl 1997; Showalter 1984; Fremdling 1995. On German military thought, see Lider 1984. This problem becomes even more pronounced in the case of Eastern European countries, i.e. the Baltic nations. See van Ark 1995 for an overview. For details on the Soviet national accounts, see Kudrov 1995. On research into interwar Soviet defense, see e.g. Davies 1993; Simonov 1996; Stone 1996 — for a more biased view yet useful, see Tyushkevich 1978. On Soviet security decision-making, see Soviet Decisionmaking for National Security 1984. On the Soviet General Staff, see Erickson 1984.

[35] On wages in the German totalitarian economy, see e.g. Temin 1990. On the Italian case, see e.g. Bardini 1996. On Japan, see Harvey 1994. The inclusion of totalitarian states would lengthen this thesis disproportionately.

Thus, the first of the objectives in this thesis is to find: *What kind of common as well as unique features are there to be found in the development of military expenditures among the large and small democracies compared to their economic development*? This question is approached both by making comparisons between military outlays and various other indicators as well as by analyzing military expenditures through the hegemony paradigm explained earlier. For the interwar period it could be argued that military outlays will be of great importance in explaining the political and economic competition for leadership among the Great Powers. More precisely, in this thesis we will test whether the economic growth and military expenditures were interdependent as described by the hegemony paradigm.

However, a hypothesis is made that the use of this paradigm alone as an explanatory framework is highly problematic. According to Charles Kindleberger it was a significant feature of the 1920s that there was no particular military leader nation in the world. Thus, after the disintegration of the world economy started in the early 1930s economic cooperation turned into rival economic blocks and a military competition for hegemony.[36] As Paul Kennedy himself has noted, the 1919 American withdrawal in addition to the Russian isolationism put the international system "more out of joint with the fundamental economic realities than perhaps at any time in the five centuries". Great Britain and France, although weakened, were at the center stage diplomatically until their position was challenged in the 1930s by "the militarized, revisionist states of Italy, Japan, and Germany".[37] How did their military expenditures develop in respect to their economic development? Also, how high of burden did this spending impose their economies? The idea that high military spending is actually decisive in a country's economic development is naturally linked to the "waste" of economic resources in such a situa-

[36] Kindleberger 1973.
[37] Kennedy 1989, xxi.

tion.[38] However, in this thesis it is argued that economic development is highly significant in explaining military spending rather than vice versa.

Furthermore, Kennedy's study does not deal with small nations — or even undertake comprehensive comparisons of military resources between Great Powers on the basis of latest data on GNP — or the consequences of the emergence of rising military threats in the 1930s for them. The importance of analyzing small nations[39] lies in the study of their activity in the international power game (within the blocks) as well as studying the impacts of the hegemonic competition. For example, small nations were the would-be sources of bilateral trade, new and possibly scarce resources for a Great Power, or even targets for new territory acquisitions. Deliberation on these issues is undertaken in chapters 3 and 4 of this thesis.

In accordance with the framework we have presented here, the internal power structures *within* states need to be considered in this thesis. The shortcomings of the hegemonic approach can be complemented with especially the theoretical tools offered by the so-called public choice approach, which dates to the end of the 1950s, as well as in the New Institutional Economics (NIE). Public choice, or more comprehensively rational choice, became an actual school of thought in the 1950s and 1960s with the research efforts of James M. Buchanan and Gordon Tullock. One of the basic starting points in the public choice is the definition of bureaucrats and rulers as actors pursuing their own rational interests. As David B. Johnson has aptly defined, "public choice is the study of political markets".[40]

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[38] On similar criticism of Kennedy's framework, see Gold-Adams 1990.

[39] On a foreign policy perspective of the small nations during the interwar period, see especially Paasivirta 1987.

[40] Johnson 1991, 10—12.

Public choice as well as studies of political economy orientation in general challenged the mainstream approaches in social sciences in the 1970s and 1980s. At this time several studies were published on such issues as governance structures, voting behavior, bureaucracy, collective choice, and constitutions. Public choice is centered around the criticism of public sector intervention in order to compensate for market imperfections. Some of the most famous public choice researchers in the last few decades have been James Buchanan, Mancur Olson, Gordon Tullock, and Anthony Downs.[41]

The most important starting points for the study of internal power structures are Mancur Olson's — whose 1965 *The Logic of Collective Action* has become a cornerstone effort in the study of interest groups and power structures — and Anthony Downs' thoughts on the internal dynamics of political and economic groups, especially bureaucracies.[42] This type of analysis of economic development focuses namely on the internal dynamics of different groups, which respectively influence the outcome of political decision-making and state formation. This aspect becomes even more pronounced in the analysis of such a politically volatile public good as military expenditures. Groups with more homogenous structures and stronger selective incentives are more likely to succeed in influencing decisions due to the free-rider problem than large, heterogeneous groups.[43]

The free-rider problem relates to the fact that there are always persons who benefit from a particular public good or goods without paying for it. For example, it is in everyone's

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[41] Johnson 1991; Mueller 1990. See also Olson 1971; Downs 1967.

[42] There are two distinctly different research traditions relating to bureaucracies. The older organizational tradition is based on sociology and the thoughts of Max Weber (e.g. Mouzelis 1975; Blau 1973), whereas the newer Anglo-American tradition is strongly rooted in the public choice tradition. In the latter the actors and bureaus are seen as utility maximizers, which act according to their own notion of rationality. See Downs 1967, 1—2; Lane 1987. For other studies relating to the bureaucracy research, see especially Niskanen's (1971) seminal study; also, de Bruin 1987; Peters 1978. On Finnish interest group research, see especially Lamberg 1995 and Lamberg 1997. The tools for the analysis in this thesis come mainly from the latter tradition. The application and details of how these tools are utilized can be found in chapter 5.1.

[43] Olson 1971; see also Olson 1982.

interests to have a national defense, yet it is difficult for an individual to establish how much funds to invest for this purpose. Thus, a rational individual would wait for others to pay for a national defense, which does not have direct pay-off potential except in crisis situations. The end result would be that no-one invests in national defense. National defense is therefore a typical *public good*, which has to be funded with compulsory taxes. The free-rider problem is also related to group behavior. According to Olson, the larger the number of individuals or firms (or other organizations for that matter) that would benefit from a collective good, the smaller the share of gains from a particular line of action. This also leads to the conclusion that large groups are less likely to act in their common interest — for example to pay X amount of money for national defense — than smaller ones.[44]

Olson presents several assumptions on the basis of his theory, which is centered around the inspection of the dynamics between political and economic actors and groups. He attempts to prove his hypothesis with comparisons. Interest groups, depending of course on their size and function, are presented as factors reducing efficiency and aggregate income. These types organizations are also slow in their decision-making. Thus, growing bureaucracy hinders economic growth and is at least equally important in the analysis of economic development as Kennedy has suggested the hegemonic paradigm to be. An essential feature in the Olsonian model is that wars or other phenomena, which he does not advocate as necessary proponents in growth, that destroy the stagnant power structures in a society will eventually aid in the formation of new economic growth.[45] The tools in the research of bureaucracy and public expenditures, as well as Olson's contribution to the internal dynamics of groups and the functioning of bureaucracy are

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[44] Olson 1971, 9—16; Olson 1982, 25—34; Mueller 1991. For a definition of free-rider problem, see Stiglitz 1988, 120—122.

[45] Olson 1982, 36—73, 88—92. For an updated version of Olson's arguments, see Olson 1996. On critique of Olson, see e.g. Maddison 1988.

crucial in order to link for example Great Power competition á la Kennedy into domestic political and economic decision-making within countries.[46]

Another school of thought, which has focused on the internal constraints within countries, is the New Institutional Economics. After the first institutionalists like Thorstein Veblen in the early 20th century, a new phase in the study of institutions began when the so-called welfare economics, among others, challenged the traditional economics in the 1960s. On the other hand, the rise of rational choice and political economy approaches also paved way for the emerging New Institutional Economics. In the 1980s and 1990s some of the most influential NIE researchers have been Douglass C. North, Ronald Coase, and Oliver E. Williamson.[47]

The research orientation represented by North is perhaps the most encompassing of the NIE school. His "theory" is largely based on, as he readily admits, assumptions about human behavior and the theory of transaction costs. He attempts to construct a dynamic theory out of these parts; one that would explain economic development. The constant interaction between institutions and organizations, according to North, is the key to understanding and explaining the paths of different economies. He sees three factors as realities in the development of economic systems: 1) demographic development; 2) collective knowledge, beliefs, ideologies, and cultural factors influencing members of the society; 3) institutional framework governing the interaction. Organizations, the "players", limit the actions of individuals not only within themselves but also act as groups that shape societal development by pursuing different types of collective aims.

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[46] Olson 1971; Downs 1967. For other public choice studies relating to defense expenditures, see e.g. Sandler-Forbes 1990, which offers an innovative way of approaching defense burdens within alliances, or Rowley-Tollison 1994 on the Peacock-Wiseman displacement effect. See also Mbaku 1991.

[47] On the development of the NIE school, see Schmid 1996; Gunnarsson 1991, 49—53; North 1996b; North 1994b; Eggertsson 1992, xi—xiv; Hodgson 1988. Of similarities between NIE and the so-called German school, see Richter 1996. Shaffer 1997. See also Lamberg et al. 1997. On Scandinavian studies utilizing the institutional approach, see e.g. Andersson-Skog 1996; Magnusson-Ottoson 1997; Knutsen-

This activity by the organizations, within an institutional and cultural framework, shapes economic development.[48]

The Northian framework, as well as the implications of Mancur Olson's ideas, also leads us to question the validity of Kennedy's proposition that economic development could be the decisive element in explaining economic growth. Also, the Northian framework as well as the analytical tools — such as path dependence — are crucial in order for us to link military spending to a broader explanatory framework of economic development *within* countries.[49] Path dependence means here that certain outcomes, which are not necessarily economically the best choices, are linked to both the institutional framework (formal and informal constraints) as well as to the actions of the political and economic groups. Thus, path dependence will provide us the means of building a concrete, although not by all means final, explanatory framework for spending decisions within states.

Thus, the second important question in this thesis relates to the internal constraints of a country: *What kind of political and economic power structure underlined the military spending?* The analysis of political power shifts and economic policy are particularly important in researching such politically volatile public goods as military expenditures. Differences in the practices such as conscription, the size and allocation of military expenditures during and after the First World War, and foreign and domestic policy constraints are crucial for understanding the formation of military expenditures. One of the main determinants in the size of Finnish military budgets appears to have been the rise

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Sjögren 1995.

[48] North 1994a, 17—27; North 1997, 8—12; North 1996a. Organizations are political, economic, social, and educational groups.

[49] Details on how the concept of path dependence relates to explaining military spending can be found in chapter 5.1.

of right-wing policies and the more conciliatory nature of the Social Democrats in the 1930s.[50] We will attempt to view if similar conditions existed for other nations as well.

The third main question relates also to the analysis political decision-making and allocation of military funds: *What were military expenditures used for (for example, what kind of goods or services were acquired) and what kind of domestic decision-making structures must be accounted for in explaining the decisions?* The analysis of this issue is centered around the Finnish case, although some comparisons will be made with Great Britain as well as the Nordic countries. The most important aspects relating to this question are the possibilities of influencing the size and allocation of military expenditures and the significance of committees and interest groups. These issues will rationalized with the theoretical tools of explaining bureaucracies as well as the *path dependence* -hypothesis.

The purpose of this study is not to try to present a "final" account of the military needs of these countries or to explain *all* the reasons behind the differing trends. The main purpose behind these comparisons is to research a previously ignored subject both from the perspective of the states' external and internal constraints and to emphasize the need for careful deliberation on methodology. The perspective is therefore broad and the different countries are not all reviewed in detail. Finland, as it is the subject for our case study, will be the only notable exception. It should also be noted that obvious contrasts, such as comparisons between such different nations (as long as the differences are taken into account in the comparisons), often provide more diverse views into historical analysis.[51]

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[50] See Tervasmäki 1964.

[51] Somewhat similar ideas can be found in Reinhard Bendix's works; see Rueschemeyer 1984, 138—154. See also Skocpol 1979, 39—42.

The time-frame for the comparisons starts from 1920, since the years 1918—1919 were still very unsettled times for both the military establishments and the respective countries. Still, the effects of the First World War on the military expenditures reached the first years of the 1920s as well. The effect of the Great Depression on the military expenditures will emerge from the comparisons for the first years of the 1930s, although in the case of the United States the depression lasted for most of the decade. The different kinds of comparisons in chapters 3 and 4 will reach up to year 1938 (1939 is excluded as the first year of the Second World War). The Finnish case, covered in detail in chapter 5, will be covered in this thesis only up to circa 1935—1936, which marks a significant change in the domestic and foreign policy orientation in Finland.[52] It is also the beginning of sizable military acquisition planning (and execution) — this period will be covered in greater detail in the future dissertation.

1.4. Definitions, Statistics, and Sources: Data Problems and Practical Solutions

There have been various definitions for the term military expenditure[53]. The OECD definition, based on modern statistical data, includes "all the material and human resources devoted by a state to its defence and intended to guarantee its national independence, the integrity of its territory and, where appropriate, the respect of the international treaties binding the country to foreign states" and deems it also necessary "to extend the concept of military expenditure to include all or part of the resources employed by a state to maintain internal security and public order" as well. The OECD also makes an important distinction between the term military expenditure and defense budget:

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[52] See e.g. Soikkanen 1984. For other security policy studies by Timo Soikkanen, see e.g. Soikkanen 1981; Soikkanen 1989.

[53] Term military expenditures is preferred here instead of defense expenditures (cf. Pryor 1968) for wanting to avoid value judgements on the purpose of these outlays. On the offensive and defensive aspects, as well as the public good aspect of military spending, see Pryor 1968, 86—88.

"...the field of application of military expenditure goes beyond the simple vision of external defence guaranteed by the state through public financing, to constitute a statistical aggregate covering the whole of the resources devoted to the national defence effort understood in the broad sense."[54]

Frederick L. Pryor defines defense expenditures in his 1968 study as to include all expenditures for the recruiting, training, and maintenance of an army, navy, air and rocket forces, and national security troops. He also excludes on the basis of his selection of nations such items as expenditures on civil defense, veterans, military research and development, interest payments on war debts, reparations, military assistance abroad, and military construction.[55] This definition of *military expenditures* is also applied in this licentiate thesis, with the exception of military construction being included in the definition. Also, spending on national security troops such as the Finnish Civic Guards are included in the spending figures.[56] Colonial military spending is not included in the series, if it has been possible to eliminate it.[57] The statistical sources, however, do not always list what has been included in military expenditures, which make the figures less representative.[58]

Thus, the aim in this study is only to evaluate the central government military spending (no military appropriations were found for the local government sector) based on the

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[54] Herrera 1994, 13—14.

[55] Pryor 1968, 85—86.

[56] However, the funding for the Civic Guards in Finland, for example, came also from other sources than from the public authorities. Although this type of spending is not included in the figures, the role of these organizations is analyzed especially in the Nordic context in this thesis. Civil defense expenditures, small in quantity, are excluded in other cases besides the UK. See Appendices for details.

[57] See Appendices for details. Also, contemplation on the impact of colonial military spending is undertaken in chapter 3.2.

[58] Detailed data on public finances, especially focusing on military expenditures, exist only for Belgium (Clement 1995) and Finland (Tervasmäki 1964 and Taimio 1986, in addition to other sources listed in Appendices). For specific details on other countries data, see Appendices. The specifics of data used in the comparisons are also reflected upon throughout the text.

specifications listed above. An alternative would be to try to assess the total defense effort as Olle Månsson, for example, has defined: 1) military defense; 2) civil defense; 3) psychological defense; 4) economic defense.[59] The focus of this thesis, however, is to limit the approach into studying the extent of the military spending through its public goods' function in these nations, which is ambitious enough of an undertaking on its own.

In this study we have complete, although not always equally representative series of military expenditures for all the countries except France (years 1920 and 1921 are missing). The military expenditures (ME) are analyzed in comparisons with the gross national product or gross domestic product (GNP, GDP), central government expenditures (CGE), population, area, military personnel, and voting data. For the Nordic countries comparisons are complemented with data on public services, public consumption, and industrial production.[60]

The next problem with the data relates to the conversion of these expenditures into real terms and further into the same currency. The best way of converting a monetary time series from value terms into real terms is to calculate a series of price deflators for military goods. These types of indices are, however, almost impossible to construct on common terms even for post- Second World War data, let alone for the interwar period.[61] As far as conversions into the same currency are concerned, many prominent economists and economic historians, such as Angus Maddison, prefer using purchasing

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[59] Månsson 1976, 9.

[60] See Appendices in this thesis for details on the scope and content of the comparisons.

[61] The optimal way of converting the military expenditures would be to deflate the individual components of the military spending with the corresponding indices, like e.g. Charles Feinstein explains in his 1972 study: "For military expenditure, a series at 1938 values built up from five elements: average annual numbers of in the armed forces at average 1938 rates of pay; civilians on defence votes at average 1938 rates of pay; purchase of land and buildings deflated by the index of building costs; purchase of military equipment deflated by the general index of machinery costs; and other military expenditure deflated by the average value index for consumers' goods and services."; Feinstein 1972, 79.

power parities (PPP) in currency conversions.[62] Two problems have emerged concerning the use of this method on military expenditure conversions: 1) There are no PPPs available for the interwar years or older periods — only some scattered estimates[63]; 2) Military expenditures do not necessarily follow the price trends of other goods; thus, one would need to construct PPPs specific to military expenditures.[64]

These difficulties have led us to choose the method used by SIPRI (Stockholm International Peace Research Institute) instead. The steps include at first deflating the currencies respective of a certain year, and then converting them all to a common currency for that year.[65] In this study we have converted the military expenditures to (pre-1963) 1926 Finnish marks — and in some cases to 1927 marks to test the reliability of the conversions. However incomplete this method is, it still enables us to make reasonable estimations, which are complemented with the variety of comparisons.[66]

The choice of deflator is equally important in conversions to real terms. As Riitta Hjerppe has emphasized, it is essential that the price index is both "correct" and that it suits the commodity in question For the Swedish national account series O. Krantz has similarly emphasized the use of correct deflators for the corresponding series and severely criticized the use of the cost-of-living index (as in the older Swedish GDP estimates) as a GDP deflator. He argues, rightly so, that it merely represents the changes in the cost of living of consumers, not the changes in the costs of production for the individual sectors.[67]

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[62] Maddison 1995, 162—165.

[63] See e.g. Krantz 1995b. On PPP comparisons of wages, see Williamson 1995.

[64] See e.g. Herrera 1994, 18; West 1993.

[65] See Cars 1987, 78—82; Blackaby-Ohlson 1987, 3—24.

[66] Herrera 1994. See Appendices in this thesis for details.

[67] Krantz 1988, 166—173; Hjerppe 1996, 11-12, 86. See also Ljungberg 1996.

In this study the deflator used in the conversions to real terms for the military expenditures etc.[68] has been the wholesale price index, despite its obvious weaknesses. However, as Jon Hirvilahti has calculated, the wholesale price index seems to be least problematic choice of the price indices available. Also, in order to keep the error inherent in the approach for every country the same, the wholesale price approach seems to be the obvious solution. The error in using the consumer price or the wholesale price (which is better suited for deflating public goods such as military expenditures) indices becomes more pronounced in long-run comparisons.[69]

Overall, there have been *very* few studies relating to the military spending among the Great Powers and smaller states during the interwar period, both military historiography or in social science research. Most of the accounts were written by contemporaries, such as *Armaments. The Race and the Crisis* (1937) by Francis W. Hirst. These accounts, however, can not offer reliable statistical information, especially for the 1930s.[70] Of the newer accounts Peter Flora's *State, Economy, and Society in Western Europe 1815—1975* (1983) is based on outdated economic indicators and offers too little documentation on the sources.[71]

In this thesis the aim has been to utilize the latest statistical information available, especially as far as economic development is concerned. The breakthroughs in national accounting are of great significance for any macrolevel historical analysis. These advances occurred first in the United States in the 1930s and during the Second World War. The Great Depression and its consequences had a big impact on the study of economics and national incomes. By the mid-1940s the development of American economy could be

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[68] The GDP per capita figures (in 1990 Geary-Khamis dollars) were obtained from Maddison 1995.
[69] Hirvilahti 1993. See e.g. Eloranta 1997a.
[70] See e.g. Hirst 1937; Tiffen 1938.
[71] See Flora 1983.

measured with production and income accounts. After this — and related to the steps the United Nations took in the adaptation of System of National Accounts (SNA) in the 1950s — the development in national accounting was extremely fast. In Finland the first comprehensive calculations[72] on national income came from Valter Lindberg in 1943 and regarding methodology from Eino H. Laurila in 1953. Nowadays, the series covering 1860—1960 are measured with the old SNA (adopted in Finland in 1977 and measured backwards), and from 1960 onwards with the new SNA. National accounting has been able to produce more homogenous and reliable data in most of the countries in the world from the 1970s onwards.[73]

The progress made in national accounting has, however, not decreased the amount of debate on the subject. Thus, an economic historian must be able to assess the figures to be employed in macrolevel comparisons. The figures for the American GNP, for example, in 1920—1939 have been under scrutiny for the last decade or so. Christina Romer has criticized the older GNP estimates of the time before 1929 rather severely. She claims to have calculated more accurate aggregate GNP figures than both the Kuznets' and U.S. Department of Commerce figures. She has in turn been criticized for both placing too much importance on such revised figures and for the methods used in obtaining the figures.[74] In regards to European countries' GDP figures, the most comprehensive and reliable data can be found in Angus Maddison's works. He has in turn criticized severely the earlier GDP estimates of Paul Bairoch. In the case of Finland, Riitta Hjerppe's studies provide a reasonably comfortable basis for comparisons.[75]

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[72] Quite detailed estimates were published from the 1920s onwards. See Nummela 1993, 20.

[73] Mannermaa 1982, 43; Grönlund-Niitamo 1968, 11—14; Hjerppe 1988, 23—25; Ruggles 1982, 60—62.

[74] See Romer 1986, 341—342; Romer 1992, 773—781. Also see Weir 1986, 353—354; and Lebergott 1986. There is some truth in Weir's criticism of Romer, since her figures do not alter the picture of cyclical variations in the 1920s to a great degree. Cf. the figures in the Appendices, Series A of this thesis.

[75] See Maddison 1982; Maddison 1991; Maddison 1995; Hjerppe 1988. Maddison's critique can be found for example in Maddison 1990, 104. Interestingly enough, Paul Kennedy does not employ the latest

Due to these developments in historical national accounting we can make reasonably accurate quantitative comparisons in this study. The other statistical sources besides the various growth studies consist of historical statistics publications for different countries, specific studies on military expenditures as mentioned before, and statistical year-books. For example, the figures on Finnish central government finances can be found in Hilkka Taimio's 1986 study. Reliable military expenditure data for Finland in turn can be obtained from Vilho Tervasmäki's 1964 study.[76]

Primary sources for chapter 3 as a whole consist mainly of materials from the League of Nations. The Armament Year-Books of the League of Nations (include figures e.g. on the military spending and the size of the military force for these nations) will complement the statistical basis for the analysis. In the more detailed analysis of the Finnish military experience during the interwar period archival sources will be used extensively to uncover the structures embedded in the Finnish military decision-making system. These consist of parliamentary documents, documents relating to the functions of the State Council[77] on military matters, material of the Ministry of Defense, papers of the Defense Revision committee (*puolustusrevisionikomitea*), material of the Board of Acquisitions (*hankinta-asiain neuvottelukunta*)[78], and the papers of the Federation of Finnish Industries.[79] These sources will provide a deeper understanding of the decision-making system relating to the military outlays — in this case, interwar Finland — although the characteristics of the functioning of bureaucracies could be understood as being universal. Additionally, the sources relating to the functioning of the British

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figures on GNP or GDP, or military expenditures, for that matter. See Kennedy 1989. On the development of e.g. Swedish historical national accounts, see Christensen et al. 1995, 32—44. See also Krantz-Nilsson 1975; Eloranta 1997a; Eloranta 1997b. The data on the Swedish GDP for the thesis comes from Krantz 1995a.

[76] See the Appendices of this thesis for details.

[77] The State Council is roughly the Finnish equivalent of the term Cabinet.

[78] This archive covers only the years 1919—1926.

[79] See Appendix for an account on the source materials.

committee system will be employed for comparative purposes.[80]

1.5. Theoretical Concerns: Rationality and Causality

> "...this method of cautious prediction does not take us very far, because the most obvious aspects in historical development are non-repetitive. Circumstances change and situations arise that differ greatly from all that has ever happened before."
>
> Karl Popper 1948[81]

How different are the theoretical foundations of these research orientations, i.e. the neo-classically-based growth accounting approach (which is also the basis for the quantitative comparisons in this study), public choice, and institutional economics? Do the political economy orientations offer us a chance of explaining historical development more convincingly or more comprehensively? What kind of problems should we consider in applying such diverse theoretical frameworks? Answers to these questions are essential in order for us to employ these very different theoretical tools. However, the aim here is not to try to explain all such problems rather than concentrate on two essential issues: rationality and causality. Furthermore, contemplation on the issues of rationality, power of explanation, and theoretical soundness will provide an in-depth look at the problems facing empirical combinations of these "theories".[82]

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[80] Some of the reserch literature will be reviewed in connection with the text throughout thisthesis.

[81] Popper 1995 (Finnish version).

[82] On empirical applications, see also Alston et al. 1996.

Neoclassical economics has been characterized as an economic theory without institutions[83]. On the other hand, research into institutions could with the same criteria be characterized as economics of institutions but without an economic theory.[84] Even though econometric historian Donald McCloskey defends the assumptions of neoclassical economics and claims the institutional challenge to be outdated, there are some inconsistencies in the neoclassical approach relating to the concept of time, the availability of information, and the application of rationality into analysis.[85] Douglass C. North has summarized these weaknesses: 1) Although the concept of equilibrium is useful in analysis, the assumption of only one equilibrium is inadequate in the face of many alternate options; 2) Even though individuals act in some situations rationally, they are also faced with many unique situations, both by historical context and time. In these situations there is not enough information available and the outcome is uncertain; 3) The history of humanity contains plenty of evidence that question the assumption of "simple" rationality and non-cooperative behavior; 4) The presumptions of economists on human behavior have only limited use in research — they are, however, not enough for explaining the existence, formation, and development of institutions.[86]

The theoretical framework of the *public choice* school is only somewhat similar to the institutionalists' point of view.[87] The public choice theory — especially in the form represented by James M. Buchanan — is aimed at criticizing the notion that market failures could be corrected by public sector interference. This theory is mainly centered around the study of non-market decision-making, such as bureaucratic structures; according to

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[83] According to Douglass C. North institutions exist in human interaction to reduce uncertainty. Institutions comprise of official (constitutions, statutes, laws, rules) and unofficial (norms, customs, and internally defined codes of conduct) rules in the society. Organisations are the players functioning within this framework of institutions. North 1994a, 1—3, 25; North 1997, 2—3.

[84] Gunnarsson 1991, 50.

[85] See McCloskey 1987, 38—40.

[86] See further North 1994a, 24. Also Eggertsson 1992, 4—5.

[87] Of the important international trade orientation, see more Gunnarsson 1991. The theoretical framework

Buchanan the theory of public choice offers a possibility of researching politics objectively.[88]

For Buchanan, who has made important contributions relating to all key research foci of public choice, a basic assumption in the public choice is the emphasis on the rationality of individuals. He even seems to favor, with a few modifications, a theoretical reinstatement of the concept of economically rational being, *homo economicus*, as a starting point for the analysis; the use of this concept goes as far as Smithian rhetoric. Douglass C. North's critique of this school of thought has especially been aimed this notion of rationality. His interpretation of the behavior of individuals, thus including also irrational (for example, violent) and altruistic behavior, is more complex — the differing view of the world of individuals has to be a crucial element in understanding their behavior. He claims that history has to be seen as a collection of choices made in the face of unexpected circumstances and uncertainty.[89]

Is North's critique valid? The theoretical definitions of rationality, however, are not actually that different in NIE, public choice, or even neoclassical economics. As Donald McCloskey has remarked, economists often merely substitute rationality with "approximately calculating", thus "rationality depends of circumstances". He sees the idea of rent-seeking a useful tool in explaining behavior. He does, however, make a clear distinction between rational and irrational behavior.[90]

The main difference between the different research orientations in this thesis lies in the *application* of the idea of rationality into historical time periods. The approach in this

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of this research are not commented upon in this study.

[88] Buchanan 1990a, 11—12. See also Buchanan 1990b.

[89] See Brennan-Buchanan 1990. See e.g. Johnson's slightly different interpretation of *homo economicus,* Johnson 1991, 19. North 1994a, 20—24; North 1996a; North 1996b.

[90] McCloskey 1996, 133—137, 143; Lamberg et al. 1997.

thesis borrows heavily both from the public choice tradition as well as the NIE theorists. In this study rationality is defined as depending on the individual's experiences and personality, thus even self-destructive behavior is here defined as rational.[91] One of the key issues is the relationship between the individual and the group — in groups even "irrational" individuals are often of negligible importance. Mancur Olson's theoretical framework on the rationality of individual is perhaps the most intuitive of the political economists and deserves a closer look. He recognizes altruistic behavior as a problem in defining rationality, and he also attempts to analyze the different forms of altruism. A typical altruistic and rational individual does not influence decisively the bargaining for collective goods in a large group. On the other hand, an altruist interested in making "visible" sacrifices has to be taken into account in explaining group rent-seeking. *Olson's concept of rationality and group behavior forms the basis for the analysis in this thesis; in order to understand the rationality of groups involved in the formation and distribution of military expenditures we must understand the decision-making process as well.*[92]

North's theoretical orientations have similar inherent weaknesses as the neoclassical economic theory. Whereas he on the one hand accepts certain neoclassical assumptions, he on the other criticizes others for adopting similar solutions. Neoclassical economics defines institutions as exogenous factors whereas North includes them in his "dynamic theory" of macroeconomic development. The significance of institutions, however, is difficult to assess, let alone quantify. In his explanatory framework — compared for example to the neoclassical stance — the analysis of the role of the government forms an essential part. The government (and individuals and organizations functioning within

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[91] Such definition inevitably frees the researcher from making value judgements on the rationality or "irrationality" of individuals. The analysis concentrates on the group and environment context of individual action. For contemplation on this as far as path dependence is concerned, see chapter 5.1.

[92] Olson 1965; Olson 1982, 19—20, 34—35. Cf. e.g. North 1994a. For an excellent analysis of the notion of rationality, see Williamson 1997. Also, the tools of bureaucracy research should not be ignored; see

it) sets the rules of the "game" and enforces them. If political decisions fail to establish stable conditions for the functioning of the economy, economic growth weakens. On the other hand, actions of the government are automatically linked to the interests of the ruler(s), interest groups, and other organizations — the interaction between these leads to changes in formal and informal rules. North does not consider the state as such as necessarily negative from an economic growth perspective like some of the public choice theorists, and he tends to emphasize the significance of cultural and informal rules, as well as transaction costs, in the economic process.[93]

A common problem in economics and economic history has perhaps been the overemphasis of single explanation approaches. Behind most phenomena, as Mancur Olson has stressed, there are many explanations and complementary processes to be found. Multicausality has generally become more and more acceptable as a more comprehensive way of explaining economic development. However, especially in the cliometric research, as Charles Kindleberger has pointed out, there have been efforts of trying to assess the weights of multiple causes. In addition, as many economic historians have acknowledged, the possibility of historical "accidents" has to be included in the framework.[94]

How has the notion of causality been included and its perception among historians influenced these theories? In order for us to explain a certain phenomenon, we need to define how our theoretical thinking on determinism.[95] A typical feature in the 20th century historiography, for the *new histories*, has been the deliberation on the connections between individuals and larger structures as well as emphasis on theoretical considera-

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chapter 5.1 on this aspect.

[93] Gunnarsson 1991, 60—62; North 1994a, 30—35, 140. On the study of transaction costs, see e.g. Menard 1997; Ojala 1997.

[94] Singer 1979, xvi—xix; McCloskey 1987, 14—15, 24; Komlos 1992; Olson 1982; Kindleberger 1990, 24—25. See also Maddison 1991.

tions. The study of collective actions has become a key issue. In the last two decades the status of these *new histories* has been weakened considerably. The postmodern challenge has centered around the deconstruction of theories and structures — the possibility of comprehensive historical accounts has been questioned. Among the new approaches are the microhistorical and linguistic approaches into everyday life and mentalities. In addition, a purely historical, even merely descriptive narrative has emerged again to challenge for example Braudel's idea of "total history".[96]

August Comte was among the pioneers of the positivist philosophy of history in the 19th century, which aimed at finding specific laws in historical development. This orientation was also influenced by the Social Darwinism of the late 19th century. Positivism attracted, and still does, a great deal of theoretical discussion on the possibility of formulating historical laws, let alone causal relations. The many opponents of the positivist stance have included, for example, R. G. Collingwood — influential in the development of Finnish theoretical discussions — who considered it essential for the researcher to project him/herself into the past in order to understand the events and the actions of individuals. In general, historiographies of most European countries have come to emphasize the unique nature of information and limited, time-oriented causal relations.[97]

The various terms used in explaining a certain event or phenomenon include trend, historical factors, influences, effects etc. Causal[98] explanations are relatively rare in the

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[95] On this, see especially Halmesvirta 1983, 93—95.

[96] Olábarri 1995, 10—12, 17—24; Iggers 1984. See Braudel 1973. Of the influences of New Left and New Right in historiography and socio-political discussions, see Held 1990. On the postmodern challenge, see e.g. Ankersmit 1989; Kalela 1993a; Kalela 1993b. On the definition of narrative and its interpretations, see also Kalela 1993c.

[97] Kirkinen 1987, 75—80; Halmesvirta 1983. On Collingwood, see also e.g. Reassessing Collingwood (History and Theory) 1990.

[98] On definitions and differences in causal definitions, see Ringer 1989, 154—158.

field of historical research. When referring to causality the reference is often to the old C. G. Hempel's *covering-law* approach, which entailed an attempt into explaining history in a mechanistic fashion.[99]

The causal statements of historians are often isolated explanations which might still apply to explaining several events. The identification of causal factors, or explaining a phenomenon is quite naturally difficult (or even impossible). As far as causal theories are concerned, one has to be able to limit both the number of observations and the number of possible explanations in order for the *theory* to be scientifically valid, as Karl Popper demands. There can indeed exist many possible explanations for certain empirical material.[100]

The different theoretical frameworks of neoclassical economics and history have led economic history explanations towards many different directions. Although North emphasizes the importance of creating a "dynamic" and comprehensive theory, he does recognize the unique nature of historical events and time periods. The analysis of historical constraints — in addition to before mentioned public choice and NIE — has in the 1980s and 1990s gained some momentum in economics, especially due to re-evaluations of technological development. Explaining technological change and its effects on economic development seems to be a crucial part of the new growth economics. An essential tool in this could be the path dependence hypothesis, developed in the 1980s in order to explain certain features of technological change, which should be understood, as North applies it, as dependence of economic development on historical preconditions. Path dependence was developed by W. Bryan Arthur and his colleagues in the late 1970s and early 1980s. The first significant study to utilize this hypothesis was

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[99] Ringer 1989, 154, 156, 158—159.
[100] Ringer 1989, 160—167; Jarrick-Söderberg 1993, 78—81.

Paul David's study in the mid-1980s on the success of QWERTY-keyboard system, which was regarded as inefficient.[101]

Path dependence has also been applied to explaining the historical development of economies. In this respect Douglass C. North's interpretations of explaining economic development from an institutional dependence on history are indeed interesting efforts.[102] He, however, applies this concept on a rather general level and he does not attempt to define exactly how it should be used in explaining economic progress. There are two important basic factors in North's institutional framework, which are crucial for applying path dependence: increasing returns and inefficient markets (which embody large transaction costs). He assumes quite implicitly that institutions have no significance in economies in the absence of these factors — for example, he implies that perfectly functioning markets explain economic growth perfectly. According to North, with these factors in effect, organizations develop and function in order to attempt to increase their gains within an institutional framework.[103] Institutional economic history, as represented by North, offers us a chance of adopting a limited version causality, as in path dependence, into economic explanations; within this framework the interaction between organizations — be they a family, village, nation, corporation etc. — defines the development of polities. The strength of the factors mentioned above, combined with histori-

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[101] Ruttan 1997; North 1994a, 93—94. On criticism of David's conclusions, see Liebowitz-Margolis 1990. For David's most recent defense of the QWERTY-case as an example of path dependence, see David 1998. On applying path dependence into researching technological change, see Rosenberg 1994. On evolutionary framework similar to the idea of path dependence, see Mokyr 1990.

[102] See North 1994a, 93—95 — W. Brian Arthur's research, published at the end of the 1980s, possesses a much more narrow and technologically oriented perspective than North does. North, however, fails to define path dependence as e.g. Liebowitz and Margolis have attempted; see Liebowitz-Margolis 1997; Eloranta 1997c. Path dependence as a tool in historical research is contemplated further in chapter 5.1.

[103] North 1994a, 94—96. See also Ruttan 1997.

cal "accidents", define the strength of the path dependence in a given situation, respectively.[104]

North uses in his 1990 study *Institutions, Institutional Change and Economic Performance* the different economic paths experienced by the Anglo-American and the Spanish-Latin worlds from the Middle Ages to the present as an example of path dependence. As far as institutions are concerned, he considers the centralization and decentralization of power as crucial pieces of the puzzle: for England he emphasizes the role of the Parliament and the strong property rights; in the Spanish case the birth of a strong governmental bureaucracy is highlighted. In North's opinion it was essential for the functioning of organizations that the English banking system became stable, due to for example Bank of England and prudent state finances, whereas Spain experienced numerous state bankruptcies as well as bureaucratic favoritism of certain groups — for example the military, clergy, the judicial. His example could be criticized from many perspectives, but how does he define path dependence in practice in his example? He is somewhat cautious in applying path dependence into these types of cases, and he does not attempt to analyze what kind of concrete evidence could be found to support this hypothesis. He is well aware of the weaknesses of such conclusions:[105]

> "To make the contrasting brief stories convincing illustrations of path dependence would entail an account of the political, economic, and judicial systems of each society as a web of interconnected formal rules and informal constraints that together made up the institutional matrix and led the economies down different paths."

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[104] Of course, like in public choice, the difficulty in NIE is how to measure, especially quantitatively, this interaction. Also, it is practically impossible to recognize all of the multiple constraints in a historical process. On empirical applications, see especially Alston et al. 1996.

[105] North 1994a, 113—116.

In this thesis the path dependence hypothesis is utilized in order to complement the perspective offered by the hegemony paradigm. Path dependence is also closely related to the analysis of various groups in the formation and use of military expenditures in the Finnish society. As more empirical applications emerge, the significance of path dependence is likely to increase as a common tool for economic historians and economists. However, the application of these quite different theoretical frameworks poses a problem for the researcher: how to reconcile the different theoretical premises in order to create a more comprehensive explanation of a phenomenon? The approach adopted here consists of complementing the quantitative findings achieved through comparisons of military expenditures among the Great Powers as well as the smaller democracies with the qualitative analysis, employing the tools offered by Olson's group behavior analysis as well as path dependence, of a country's decision-making structures and the impact of the "political markets". Thus, we will approach the research problem from different angles, which should yield more convincing results in return.

In chapter 2 we will first take a cursory look at the economic development and the foreign policy constraints of these countries. This macrolevel view is then followed by a detailed analysis of military spending through comparisons of various indicators in chapter 3. We will also attempt to outline the differences in the size of their military budgets as well as emphasize their vastly different regional defense commitments. Chapter 4 begins with a critical assessment of the Kennedy paradigm, as revealed through the empirical evidence, as well as a macrolevel contemplation of some of the domestic constraints on military spending. This line of analysis is continued further in chapter 5, which is centered around the Finnish case. The theoretical tools needed in such an analysis are also contemplated upon.

2. ASPECTS OF ECONOMIC DEVELOPMENT AND FOREIGN POLICY OUTLINES: EIGHT WESTERN DEMOCRACIES

2.1. From the "New Era" to the Age of Depression

> "Whether 1914 or 1929 is the break point, the period labelled 'the inter-war years' has acquired a poor reputation for achievements in the fields of economics and politics. What were later regarded as the mistakes of the inter-war years fixated policy-makers at the end of the Second World War and subsequently. These were years of metamorphosis of institutions and beliefs. The old international liberal economic order seemed unable to cope with the disruptions of the 'war to end all wars' and the with the Great Depression. Rival doctrines of fascism and communism both offered remedies which emphasised greater state economic control. And all policy-makers chose more corporate ways of organising domestic and international economic relations."
>
> James Foreman-Peck 1995[106]

In this chapter we will first take a closer look at some of the aspects of the economic development, as provided by the modern growth studies, and their implications for these countries' overall economic resources. Then we will lay a foundation for our analysis by inspecting the foreign policy constraints of these nations. Additionally, we will analyze the significance of the armaments limitation efforts, especially in the 1920s.

First we need to take a look at the economic development of the leader nation in the time period, the United States[107]. The New Era -label, as the 1920s were often understood to be in the United States, have some merit in describing this period in American history. Some of the themes of American economic thinking in the 1920s were the su-

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[106] Foreman-Peck 1995, 175.

[107] In 1920 the GDP of the other seven nations in this study combined formed 67 percent of the GDP of the United States; in 1938 this share was 73 percent. Calculated from Maddison 1995.

premacy of the United States in world economy, and the minimization of government activity in economic life. Like President Coolidge expressed it in 1923: "We have now reached a point in our financial program where we can lighten the tax burden of the people, which is an added reason for taking a firm stand against any and all programs of spending that would tend to absorb the expected margin between receipts and expenditures."[108]

This period, and especially the last few "crazy" years, represented a time of significant economic growth. The economic collapse that occurred in September 1929 launched the United States into a deep depression known as the Great Depression. Some of the reasons for this crash included speculation, overheated markets, lesser demand for housing, and huge increases on supply while the demand stayed the same. Structural problems of the new industries and their needs have also been emphasized.[109]

As James Foreman-Peck has noted, the links between the Great Depression and the First World War were strong. Without the war the depression would have been much less severe. The human costs and injuries resulting from the war damaged the European economies even more than the destruction of capital. Another notable feature in the interwar economy was the significant decline in foreign trade, even in the 1920s — this development was mainly caused by the nationalist commercial policies. Also, it is important to take into account that during the 1920s the United States was largely economically independent of the rest of the world. Overall, this period was marked by uneven economic growth in the 1920s and divergent experiences of recovery from the depression in the 1930s among the Western democracies.[110]

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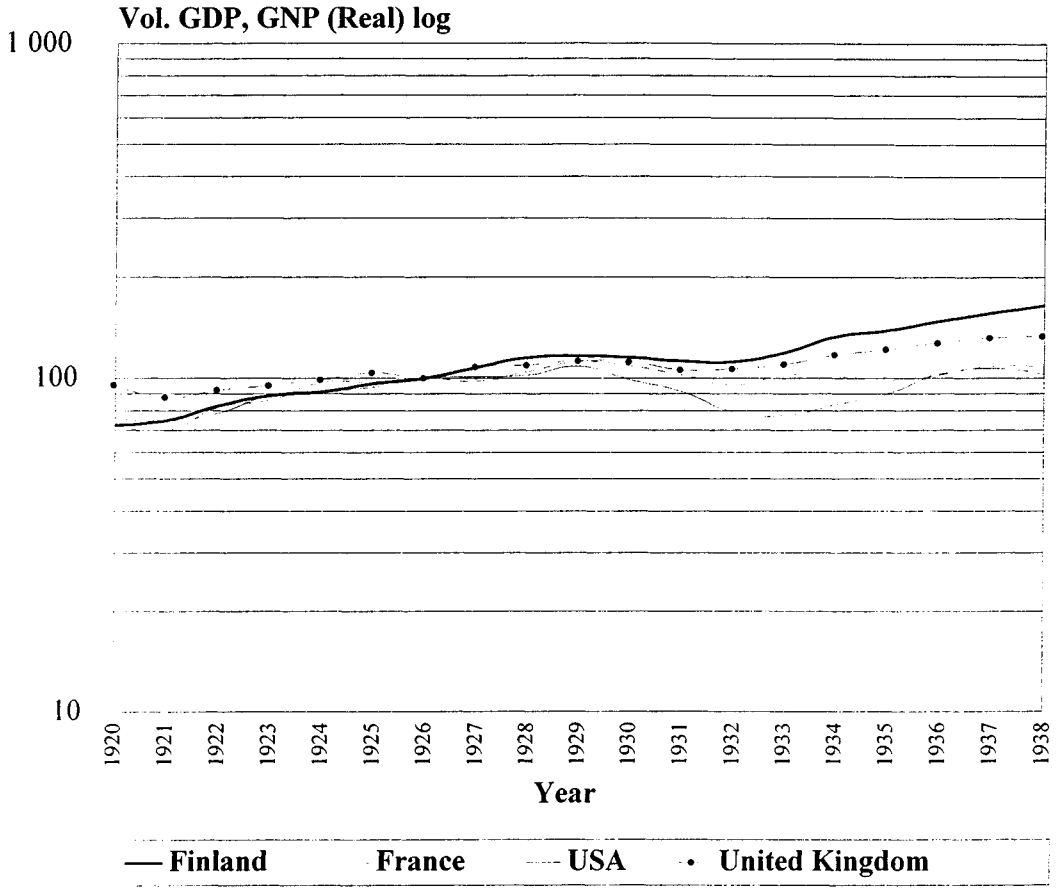
[108] Message of the President of the United States transmitting budget for service of fiscal year 1925. 1923. House Documents 76, 68th Congress, Second Session, Volume 31.

[109] Kindleberger 1973, 58—62; Barber 1985, 4, 14. See also Bernstein 1987, 1—20. On the severity of the depression, see Maddison 1991, 54—55, 87.

[110] Foreman-Peck 1995, 176—180.

Figure 3. Volume of GDP or GNP in Finland, France, USA, and UK, 1920—1938
1926=100 (log)



Source: Maddison 1995.

Another influential aspect of the 1920s world economy was the restless monetary situation, which stabilized for a while in the mid-1920s with most of the countries returning to the Gold Standard. The uncertainty in international transactions returned with the coming of the Great Depression — Britain was the first of the Western democracies to give up its gold parity in 1931.[111]

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[111] Foreman-Peck 1995; Autio 1992, 11—18; Hirvilahti 1993, 26—34; Hirvilahti 1996 — in many countries the return to the Gold Standard often resulted in an undervalued currency. For a detailed account of financial crises, see Kindleberger 1993. On the case of Norway and other Nordic countries, see Grytten 1996, e.g. 5—6.

The depression reached Europe as well as the Unites States with equal strength, although for example Finland had experienced signs of the coming depression as early as 1928. The repercussions of the crash included, among other things, a partial collapse of the Gold Standard and the international trade agreements, numerous bank failures, high rates of unemployment, and internal political disturbances. By the summer of 1932, industrial production in a number of countries had been halved to that of 1928, and world trade had been reduced by one-third. Both international and domestic politics were greatly affected by the economic crisis. The increased trade rivalry divided countries into competing blocs: a sterling bloc led by the British; a yen bloc dependent upon Japan; a dollar bloc led by the United States (after a similar gold bloc had fallen apart); and the detached socialism of USSR.[112]

Small nations — such as Finland, Belgium, and Norway — were economically hurt by the tightening of protectionism in the 1930s, even though the increased domestic demand and the bilateral trade treaties enabled quite strong growth for them in the late 1930s.. However, as Fritz Hodne has pointed out, the small nations carried little military weight in the "international power game", and were in general open and export-dependent economies.[113]

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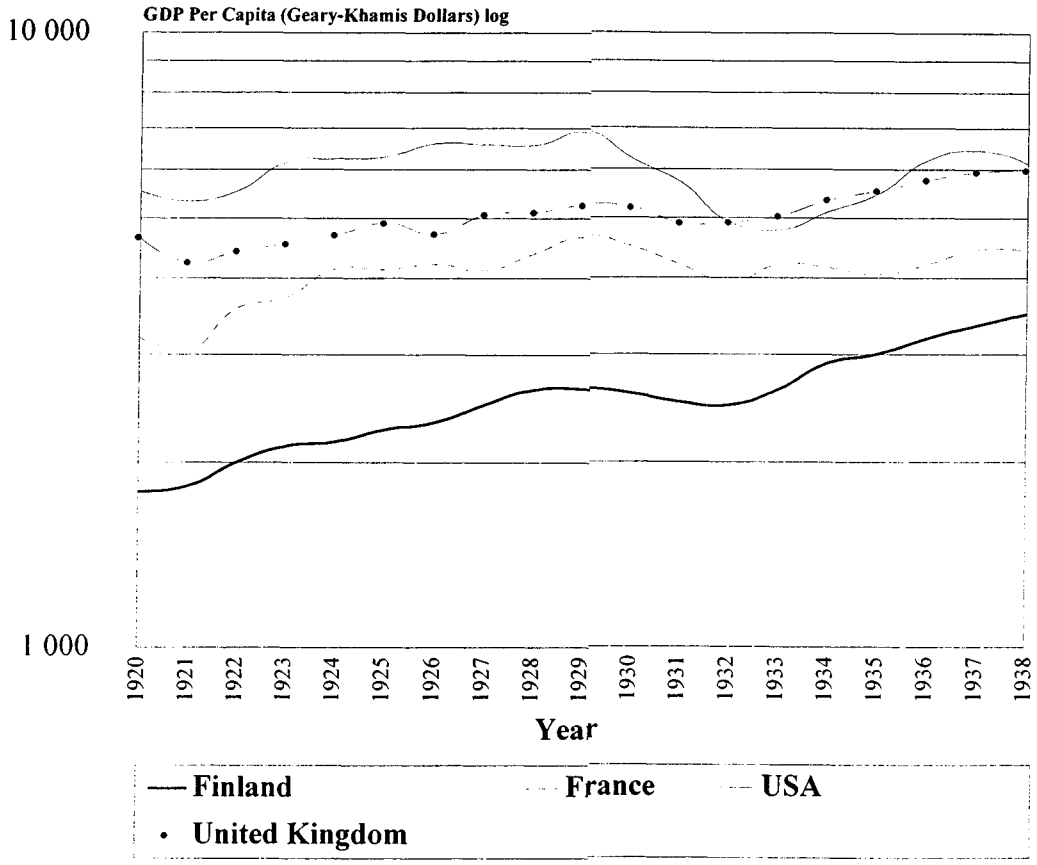
[112] Kennedy 1989, 364—366; Hjerppe 1988, 45—46; Autio 1992, 17—18; Foreman-Peck 1995, 208—209; Paasivirta 1987, 204.

[113] Hodne 1995, 60—61. See also Fitzmaurice 1996, 253.

Figure 4. GDP Per Capita in 1990 Geary-Khamis Dollars in Finland, France, USA, and UK, 1920—1938 (log)



Source: Maddison 1995.

The growth of GDP, GNP (in real terms) during the interwar period was quite uneven in these eight countries. The depression years emerge distinctly from the growth experience of these countries; only the length and severity of it differed. In the United Kingdom, Norway, Sweden, and Denmark the depression seems to have been milder than for example in the United States, where the depression was severe and long-lasting. The Finnish economy suffered a from pronounced shock in the early 1930s but recovered

quickly by the middle of the decade. All in all, the 1920s seemed to be a time of vigorous economic growth compared to the more divergent trends of the 1930s.[114]

The British position in the world economy was still strong after the First World War. As Paul Kennedy has noted, Great Britain was not "predestined to decline" after the war. A significant feature of the British economic policy was the attempt to reclaim her position as an economic/political leader, which was made at least hypothetically possible by the American isolationism and the near collapse of the German economy.[115] The British economy experienced a slump in 1920—1921, the worst depression of the interwar period in terms of output. Another such downturn occurred in the mid-1920s (see Figure 4). From 1929 to 1933 the Great Depression caused unemployment to soar and GDP per capita decreased. Recovery started in 1933 and was sustained throughout the 1930s. Compared to for example to the French economy in the 1930s, the difference was pronounced.[116] The French GDP per capita experienced a similar drop in the first years of the 1920s as most of the other countries in these comparisons. After the depression economic growth was strong especially in the mid-1920s. The years before the Great Depression were a time of uneven economic growth (see Figure 4). The depression was severe and long-lasting in France — modest recovery did not take place until the last years of the 1930s.[117]

The Great Depression posed the greatest difficulties for the American economy. The position attained by the United States was central in the world economy by the 1920s. The recovery started slowly after 1933, although unemployment fell only from 25 per-

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[114] See e.g. Maddison 1991; Maddison 1995 for details. See also Eloranta 1996.

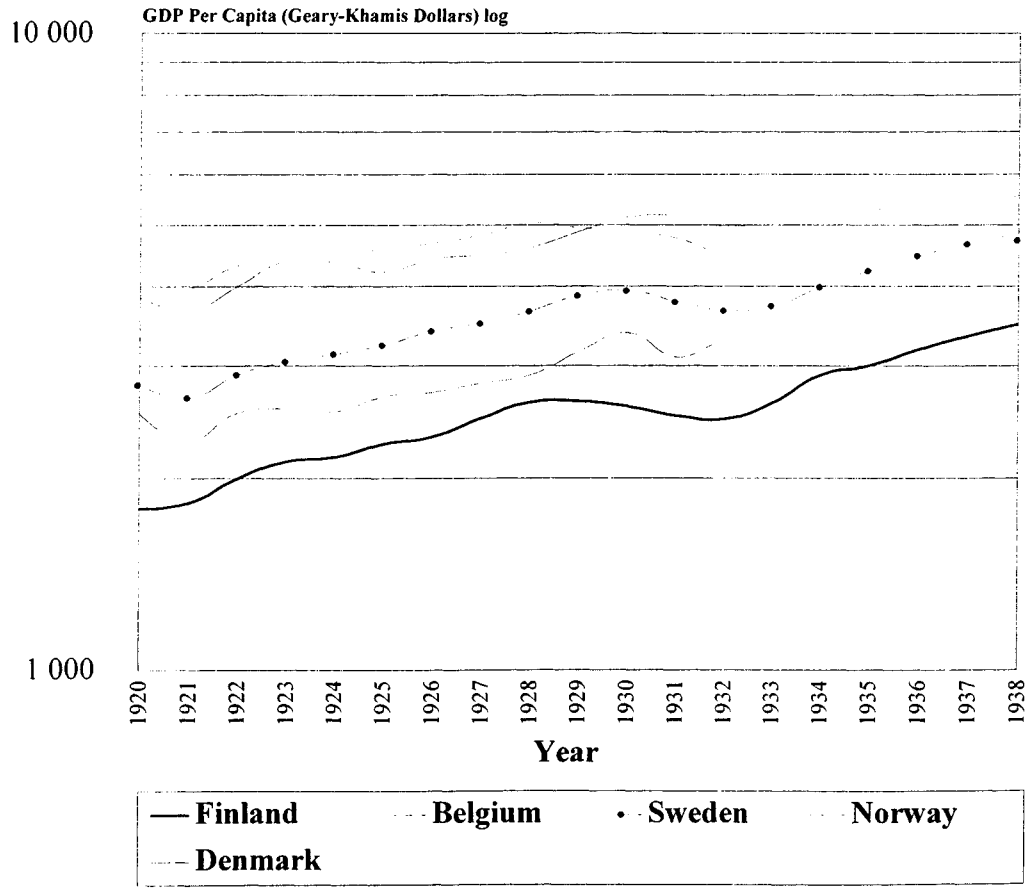
[115] Kennedy 1981, 223—227.

[116] Broadberry 1986; Solomou 1996, 113—115 — however, the British growth in the 1930s was modest compared to e.g. Germany.

[117] On public expenditures, see e.g. Lévy-Leboyer 1978, e.g. 248—255. On labour conflicts, see Lequin 1978. On monetary developments, see Kindleberger 1993, 337—349.

cent to 17 percent in 1933—1935.[118] The most distinct signs of recovery can be found in 1936 when for example veterans' benefits and the increased wages boosted the aggregate demand. This growth spurt, however, was followed by recession in 1937. The American economy started to grow just before the Second World War due to, among other factors, increased war production and extensive drafting.[119]

Figure 5. GDP Per Capita in 1990 Geary-Khamis Dollars in Finland, Belgium, Sweden, Norway, and Denmark, 1920—1938 (log)



Source: Maddison 1995.

[118] Kindleberger 1973, 233. On unemployment, see Jensen 1989; on the impact on the African-American population, see Sundstrom 1992. On the development of real wages, see Temin 1990.

[119] Kindleberger, 1973, 262—271; Robertson 1973, 708; Higgs 1992. See also Figure 4.

In Finland the period after the First World War was followed by a period of accelerating growth that lasted until the end of the 1920s. As Riitta Hjerppe has noted, the international depression of 1921 merely slowed down this growth pattern in Finland. The Great Depression was less severe in Finland, similar to the other Nordic countries, and the decline also turned out to be shorter. After 1932 Finland entered "a record-breaking pace of growth" with the average rate of growth for 1920—1938 rising to 4,7 percent.[120]

Whereas in Finland the depression was rather short-lived, the Belgian experience was different. The depression lasted longer in Belgium and the economy did not start to recover until 1934. The problems that the Belgian economy faced especially in the 1930s included monetary instability (Belgium was part of the "Gold Bloc" after 1931 until the devaluation of 1935), stagnation of international trade, the economy's dependence on traditional low-value, cyclically prone heavy sectors (coal mining, metallurgy, and textiles), and indecisive government policies. Overall, the 1930s performance of the Belgian economy seems to have been modest at best (see Figure 5).[121]

The Norwegian economy went through three periods of crises during the interwar period: early 1920s, mid-1920s, and early 1930s. The post- First World War depression resulted in slow recovery and a new domestic economy downturn in the mid-1920s. As Ola Honningdal Grytten has pointed out, GDP per capita did not reach the 1920-level until 1927. The 1930s depression made the Norwegian real GDP fall by 8,4 percent in 1931 — despite the setbacks, the interwar period on the whole represented a period of significant economic growth compared to the early 20th century.[122] In Norway the depression was sharp yet recovery occurred rather swiftly after 1933. Massive unemployment, which plagued other Scandinavian countries as well, was reduced considera-

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[120] Hjerppe 1988.

[121] Mommen 1994, 1—33; Buyst 1995; Eloranta 1996. See also Autio 1992, 15—20.

[122] Grytten 1996, 1—3. See also Hodne-Grytten 1992.

bly. A common feature, with Finland being a somewhat of a late-comer, in the development of these small countries in the late 1930s was the emergence of early corporatist structures, social security schemes, and coalition politics.[123]

The Danish economy experienced strong growth in the early 1920s, which ended in economic difficulties in the mid-1920s. The normalization of the economy did not have sufficient time to succeed before the Great Depression had an impact on Denmark as well. The growth experience of the 1930s, however, was strong and even (see Figure 5). A significant feature of the 1930s was also the increasing influence of the central government in labor conflicts, control over monopolies, and the Bank of Denmark.[124]

Sweden experienced also the crises of the international economy in 1921—1922. Unemployment (of those registered in union lists) rose to over twenty percent. The depression had a profound effect on the banks as well. Economic growth, however, was quite even in Sweden during the 1920s. The Great Depression had a profound effect on Sweden, especially among export industries. GDP per capita drop was more pronounced than in other Nordic countries. The recovery in the 1930s was very rapid and exceeded the economic performance of, for example, Finland or Denmark. The domestic markets expanded rapidly in Sweden during the 1930s.[125]

Figure 6 displays the annual percentage change in the aggregate GDP per capita average calculated on the basis of Maddison's (1995) figures.[126] The extent of the 1921 depression, nearly matching the drop caused by the Great Depression in GDP per capita for

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[123] Jörberg-Krantz 1976, 435—440; Mommen 1994, 30—33; Hjerppe 1988; Derry 1979, 317—325. In Scandinavia, an essential part of this period was the rise of Social Democracy. See also Kennedy 1991, 320—321. On unemployment, see e.g. Grytten 1995.

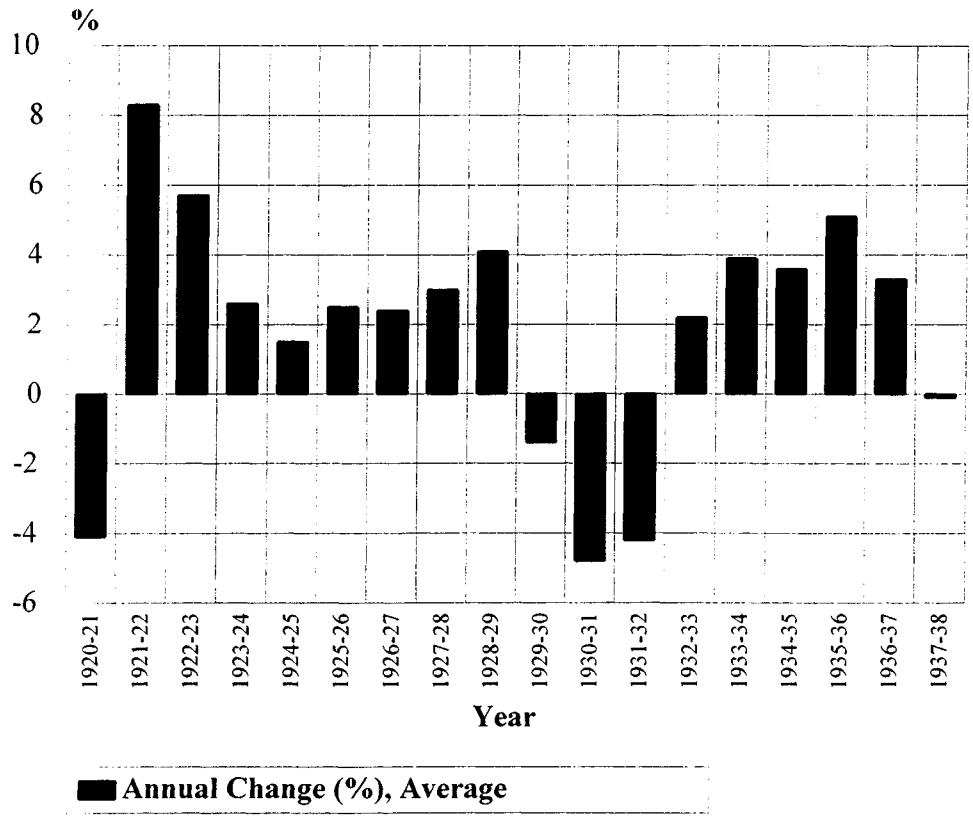
[124] Hansen 1974, 23—24, 31—41, 51; Johansen 1987. On the Danish public sector, see also Topp 1995.

[125] Olsson 1993, 73—80; Myhrman 1994, 117—137. On the banking crises, see e.g. Lindgren 1993.

[126] See Appendices, Series B for details.

these countries, is clearly evident in Maddison's figures. They also seem to point to at first strong but shortly declining economic growth until the mid-1920s. The late 1920s was again a time of economic growth for these nations. After the depression, the 1930s appeared again as a time of surprisingly strong growth until the threat of war began to constrict international markets again in the closing years of the decade.[127]

Figure 6. Annual Percentage Change in the Aggregate GDP Per Capita Average for Eight Countries, 1920—1938



Average = GDP Per Capita Annual Average for 8 Countries, in 1990 Geary-Khamis Dollars

Source: calculated from Maddison 1995.

[127] See more Maddison 1995.

2.2. Foreign Policy Constraints and the Peace Efforts in the 1920s

The American isolationism has inspired a lot of debate over its extent and impact on the world affairs during the interwar period. Paul Kennedy refers to the American position as "at least relative diplomatic isolationism".[128] Thomas Paterson et al. advocate the use of the term "independent internationalism". The American influence was strong in Europe and Latin America, although the Americans had arrived at the conclusion, which stuck throughout the interwar period, that Europe would have to solve their own problems before any significant American involvement.[129] What were the consequences of the cautious withdrawal of the economic leader from the European power politics? To analyze this situation we need to first take a closer look at the American withdrawal of this time period. The 1920s is a pivotal time in the confirmation of the isolationist stance, since the deep depression of the 1930s forced the United States to concentrate on her domestic problems and the established policies of the 1920s held their ground almost unchallenged.

The termination of the First World War on November 11, 1918 brought with it a quick demobilization of American forces and a significant change in the political status of the United States. The war had also made a tremendous impact on American people's lives; advancement of peace became especially popular in the 1920s.[130] Woodrow Wilson's efforts to achieve peace rested on the Fourteen Points and the Treaty of Versailles, which included the foundations of League of Nations, to bring the United States back into the policy of internationalism. At the heart of the League covenant was a collective-security provision aimed at achieving world-wide peace.[131]

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[128] Kennedy 1989, 357.
[129] Paterson et al. 1983, 305. See also Eloranta 1995.
[130] Preston-Wise 1970, 78—79; Pogue 1964, 209.
[131] Norton et al. 1986, 670—671; Soule 1968, 81—82.

For many reasons — among which were Wilson's underestimation of the United States Senate — the concessions that Wilson had to give to the Allies and the long tradition of the Monroe Doctrine, the attempt to bring the United States back into the international politics failed miserably. The Senate refused to ratify the treaty first in November 1919, and again in March 1920 as Wilson stubbornly refused to compromise.[132] Wilson and the League of Nations were defeated politically in the United States.

The presidential elections of 1920 provided an interesting twist in regards to the issue of League of Nations. Even though Warren G. Harding and the Republicans did not pledge themselves clearly on either side on the matter, Harding still insisted on, after his crushing victory, clinging to Wilson's words that the 1920 election should be considered a "solemn referendum" on American membership in the organization. Most of the voters did not even know if they were voting for or against the League, since only the Democrats took a clear favoring position on the issue.[133]

Harding's victory lead the United States into isolationism again, which became the leading guideline in American foreign policy for two decades: during the years between 1920 to 1940 no party dared to put the League in their political platform.[134] Though the Harding Administration followed a generally isolationist course regarding the League of Nations membership, it also established a tradition of cooperation outside the organization on issues like disarmament — the Coolidge and Hoover Administrations followed the example since the League was a politically dangerous item to advocate.[135] Scandals, such as the Teapot Dome oil incident and the Veteran's Bureau mismanagement, occurred during the latter part of Harding's presidency, and his death on 2 August 1923

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[132] Norton et al. 1986, 672—673; Bemis 1959, 437—439.
[133] Bemis 1959, 440—441; Pratt 1955, 525—526; Mayer 1964, 376; America at the Polls 1965, 1—2.
[134] Bemis 1959, 440—441; Stimson-Bundy 1948, 106.
[135] Morison et al. 1977, 586.

"saved" him from the embarrassments to come.[136] Yet the legacy that Harding left to Coolidge and the presidents following him was that of clear isolation from the European affairs but also of improvised efforts outside the League of Nations' organization.

Although isolationism was the three Republican Administrations' guideline in matters of foreign policy, they strongly pursued international cooperation on disarmament. These efforts were meant to stay decisively clear of any connection to the League of Nations. The United States only participated in numerous humanitarian, cultural, economic and technological conferences with the League — in practice, America held on to their idea of isolationism, which meant cooperation outside an internationally binding organization and activity generally initiated by American diplomats.[137] The purpose of these efforts was to create a world of peaceful nations characterized by economic and political stability, with the emphasis on nonmilitary means of enforcing such principles.[138]

For example Calvin Coolidge, who became the president of the United States after Warren G. Harding's surprising death in August 1923, had only few basic principles in his foreign policy efforts: he was against war and militarism — as he considered war a waste of money — and pursued peace actively without entangling America in a military alliance. Coolidge wished to make America an example in combining peace and wise financial management.[139] The greatest challenges to American foreign policy during the beginning of his presidency were the pressures to recognize the Mexican and Soviet governments, to recreate the League of Nations to fit American needs, and participation

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[136] Hicks 1963, 73—78, 80; Hawley 1979, 74—75. See also Noggle 1965 on the Teapot Dome scandal.

[137] Bemis 1959, 479; American Foreign Policy 1961, 243.

[138] Paterson et al. 1983, 305.

[139] McCoy 1988, 177—178. Also see The Autobiography of Calvin Coolidge 1989, 124—125, on anti-war sentiments.

in the World Court.[140] Of these issues, Coolidge became an ardent supporter of the World Court.

Coolidge believed international peace-efforts to be the only effective way of fighting communism and fascism. He did not really believe in the League of Nations to achieve these aims; he also did not wish to "betray" Harding's voters on his first term. Opposition to the League of Nations was in addition politically wise at the time.[141] He was, above anything else, a skeptic when it came to politics, and he did not fully believe in the peace efforts of the 1920s. Nevertheless, he pursued them since they were popular and were aimed at reducing federal government expenditures.[142]

This passive nature Coolidge's presidency became evident in the World Court, or more correctly, the Court of International Justice issue. Even though Coolidge, and the public opinion for that matter, favored joining the World Court, the ultra-isolationist Senate rejected the membership and shaped the future of American foreign policy to be isolation from world politics. The trend was clearly to return to the strict isolationist tradition of the Monroe Doctrine. The Senate's opinion on entanglements or international organizations for controlling world peace was clear in 1926:[143]

> "Resolved further, that adherence to the said protocol and statute hereby approved shall not be so construed as to require the United States to depart from its traditional policy of not intruding upon, interfering with, or entangling itself in the political questions of policy or internal administration of any foreign state; nor shall adherence to the said protocol and statute be construed to imply a relinquishment by the United States of its traditional attitude toward purely American questions."

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[140] McCoy 1988, 178.

[141] McCoy 1988, 184—185.

[142] Brown 1960, 108; Baruch 1960, 133. On Coolidge's attitude towards the military establishment, see Eloranta 1995 for details.

[143] American Foreign Policy 1961, 243; 256, Senate Reservation to the Protocol of the World Court Jan 27 1926. Also see Hicks 1963, 145—146.

Though Coolidge did not agree with the Senate, he did not wish to argue the matter and stray from his principles.[144] American foreign policy, therefore, continued on the same course as already defined by Harding during Coolidge's presidency — that is, emphasis placed on individual peace-efforts rather than international organizations.

From the 1920s until the Roosevelt Administration, the American foreign policy decision-making was characterized by, as Paterson et al. have pointed out, "weak presidential leadership, congressional-executive competition, and increased professionalism in the Foreign Service". Both Harding and Coolidge left the foreign policy decisions, especially Harding, to their respective secretaries of state Charles Evan Hughes (1921—1925) and Frank B. Kellogg (1925—1929). Herbert Hoover held a similar philosophy in foreign affairs yet was more active than his predecessors in the 1920s. Hoover's secretary of state Henry L. Stimson was a combative and eager leader of American foreign policy, often disapproved by Hoover for his tactics.[145]

Franklin Delano Roosevelt, who became the president in 1933, had gained some foreign policymaking experience in the 1920s and often conducted diplomacy personally. He centralized decision-making in the White House. Roosevelt's diplomacy was, however, ambiguously torn between Wilsonian ideals within isolationist policies. He did believe in limited collective security arrangements, yet he shared mostly the basic components of isolationist thought: 1) abhorrence of war; 2) limited military intervention abroad; 3) freedom of action in international relations.[146] Overall, his foreign policy continued the isolationist tradition established in the 1920s.

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[144] McCoy 1988, 359—363; Eloranta 1995.

[145] Paterson et al. 1983, 305—308.

[146] Paterson et al. 1983, 308—309. Roosevelt ignored his secretary of state in most of the foreign policy decisions in the 1930s. See also Kennedy 1989.

The American isolationism, however inadequate as the term may be, still left the European and even the "world" power relations in the hands of Great Britain and France. Germany and Russia had been defeated in the First World War, thus leaving room for these traditional Great Powers to re-emerge in European politics. However, the British, like the Americans, were less and less interested in the goal that France valued the most: keeping Germany in check. Additionally, Great Britain was more pre-occupied by extra-European problems, namely keeping the vast Empire from disintegrating. At the beginning of the 1930s France seemed to be the leading nation in the European scene. The economic performance of the 1930s, however, proved to be poor in comparison with the other European Great Powers.[147] Thus, the European stage created a sort of a "power vacuum" during the 1930s which seemed to invite hegemonic competition for leadership.

What was the significance of the international peace efforts in the 1920s and why did they fail to have an impact in the 1930s? The first significant peace conference took place in the aftermath of the First World War and the failure of the American involvement in the League of Nations. The idea of a conference on naval limitation originated from Senator Borah's proposal in 1920. The Washington Conference on Naval Limitation became a reality in November 1921, when President Harding warmed up to the idea. The final participants were the United States, Great Britain, Japan, France, Italy, Belgium, Netherlands, Portugal, and China. The question of Far East, mainly China, was one of the important issues at the conference. Since Americans were not ready to fight for example for China, the treaties provided an excuse not to carry the burden of their protection.[148]

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[147] Kennedy 1989, 357—375; Pearton 1982, 177, 197—198.
[148] Bemis 1959, 457—460; Hicks 1963, 34.

The most important of the treaties accomplished in the Washington Conference was the Washington Treaty for Limitation of Naval Armaments in 1922. In this treaty the United States, Great Britain, and Japan (in addition to France and Italy) agreed upon maintenance of a battleship and carrier ratio of 5—5—3 for the "big" naval powers (and 1,7 respectively for the others).[149]

With the Four Power Treaty (1921) the United States, Japan, Great Britain, and France agreed upon displaying mutual respect for their interests and possessions in the Pacific region. The third treaty, the Nine Power Treaty (1922), was designed especially to solve the problem of China's "defense", which in practice it meant the continuance of imperialism. In this treaty the nine naval powers agreed to respect China's sovereignty, independence etc.[150]

Even though these reforms had honorable aims and were recognized to be outstanding achievements in their time, the outcome proved to be disappointing in many ways. Many believed that these reforms rendered the American Navy useless — between 1922 and 1929 the United States built 11 ships, Great Britain 74, Japan 125, France 119, and Italy 82 ships. In Japan these "concessions" that guaranteed so much for them in Pacific became the militarists' weapon in discrediting their liberal government — at the end of 1934 Japan finally *officially* denounced the treaty and started a frenzied armament program.[151]

The treaties accomplished in the Washington Conference also lacked the machinery required to enforce the established agreements. For example, the Nine Power Treaty on

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[149] Morison et al. 1977, 586; American Foreign Policy 1961, 245—248; The Washington Treaty for Limitation of Naval Armaments 1922.

[150] Morison et al. 1977, 586—587; American Foreign Policy 1961, 248—251; The Four Power Treaty for Pacific, The Nine Power Treaty on China. There was also a less significant Five Power Treaty signed at the same time, see Shannon 1977, 100—101.

China was mainly rhetorical by nature and did not offer anything concrete for its enforcement.[152]

Calvin Coolidge tried to revive the naval limitation tradition in 1927 by assembling a new conference, but the effort was a total failure. The conference that took place between June 20 and August 4 had involved a lot of preparation on disarmament issues. It was to be President Coolidge's big achievement in the area of foreign policy. The reasons behind the failure of the conference can be found in the lack of communication by the participants over the aims of the conference, and in the British delegations actions based on Great Britain's domestic situation. The failure of the conference also led to anti-British sentiments in the late 1920s among American political circles.[153]

The American disappointment was serious, since President Coolidge recommended several billion dollars for a naval armament program to the Congress in December 1927.[154] Herbert Hoover's effort in the 1930 London Conference extended the limitations set in the Washington Conference a little further. The more militaristic climate of the 1930s, however, rendered these new agreements useless almost immediately.[155]

The Pact of Paris (or Kellogg-Briand Pact) that was signed in 1928 became one of Coolidge's most significant achievements in the area of foreign policy. It represented the "outlawry of war" -ideology that he had grown to appreciate, and renounced war "as an instrument of national policy". Even though altogether 62 nations finally adhered to this

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[151] Hicks 1963, 39, 41—43, 49; Morison et al. 1977, 586; Pratt 1957, 208—210.

[152] Morison et al. 1977, 587; Hicks 1963, 46—47.

[153] Tate 1948, 141—151; Stimson-Bundy 1948, 163—164.

[154] McCoy 1988, 365—367; Pratt 1955, 555—556; Hicks 1963, 146—148; Eloranta 1995.

[155] Bemis 1959, 461; American Foreign Policy 1961, 259—260, The London Conference in 1930. On the failures of disarmament efforts, especially in regards to navies, see more Roskill 1976.

the United States between the two World Wars. There different organizations, of which US Carnegie Endowment for International Peace was the most prominent, operated on different levels and tried to achieve different goals. These organizations could not, however, present a unified front on issues relating to the advancement of peace — for example legalists and feminists emphasized wholly different things. This divided movement was still strong enough to pressure Coolidge and the Administration into a balancing act between their demands and the ultra-isolationist Senate's views. The peace movement started to lose its influence in the White House in the late 1920s as the peace movement started to move politically towards left.[158]

Sweden, a member of the League of Nations from the beginning, was an active pursuer of disarmament policies in the League of Nations. All of the interwar Swedish governments worked for international disarmament vehemently, like the other Nordic governments did as well. The goal of the Swedish disarmament policy was to persuade other nations in the League to adopt radical disarmament measures, such as reduction in the tonnage of war ships, prohibition of chemical and biological warfare etc. The Swedish governments of the 1930s (until 1936) continued to put their faith in the League despite the increasing tensions. The main motivation behind the Swedish disarmament efforts was a commitment to humanitarian and democratic policies as well as belief in the League as the only means of maintaining peace in the world. The basic principles in the Swedish interwar foreign policy were the maintenance of neutrality and non-commitment.[159]

The Swedish disarmament began with the Defense Act of 1925, a result of the recommendations of the parliamentary Defense Revision committee appointed in 1919 and motivated by the League of Nations standards. Although the reductions in military ex-

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[158] Kennedy 1991, 321; Ferrell 1952, 21—22; DeBenedetti 1980, 108—109, 120.
[159] Trönnberg 1985; Paasivirta 1987, 194—195. See also Agøy 1996.

penditures were still modest and were not met for the most part, it still represented a significant effort towards conscious disarmament. The Swedish government strove actively to achieve disarmament measures both domestically and in the League conferences in the 1930s.[160] Of the other Nordic countries Norway and Denmark made similar commitments: Norway passed acts reducing the size of the armed forces and the officer corps in 1927 and again in 1933; Denmark in 1922 and 1932. Norwegian governments of the interwar period felt secure and beyond military threats, which limited their foreign policy interests to foreign trade issues. Danish governments, however, were convinced that even large military outlays would not secure the country against an invader.[161]

Finland, however, did not follow the example set by the other Nordic countries, both in military build-up as well as foreign policy. The aim of the Finnish foreign policy in the 1920s was largely to attempt to unite forces with other small nations such as the Baltic states and Poland, thus providing security against a Soviet invasion. The Tarto peace agreement in 1920 with the massive although temporarily weakened neighbor had not formed a consistent basis for functioning foreign relations. One of the schemes of the early 1920s was to form an alliance with the neighbors of the Soviet Union: the Baltic nations and Poland. This approach failed in 1922.[162] Until the mid-1920s the Finnish foreign policy could be described as a passive policy of "non-alliance".[163] The policy of relying on the League of Nations gained more ground from 1924 onwards, yet a clear turning point in this was the Finnish membership in the council of the League of Nations in 1927. In 1927—1931 the Finnish government participated actively in the

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[160] Trönnberg 1985, 33—73; Böhme 1988; Paasivirta 1987.

[161] Agøy 1996, 478; Paasivirta 1987, 194—195, 225—227. On the Danish "faith" on the League of Nations, see Wiberg-Jensen 1992, 353—354.

[162] Paasivirta 1984, 256—258, 262, 265—267; Kallenautio 1985, 63—67, 86—91; Roiko-Jokela 1996; Tervasmäki 1964, 23—24. See also Paasivirta 1987.

[163] Paasivirta 1984, 267—269, 272—273.

League of Nations functions.[164] The faith in the League of Nations in upholding the peace, however, was relatively scarce among the political parties.[165] In the late 1930s the Finnish foreign policy was centered around achieving an alliance with Sweden, which turned out to be impossible.[166] Finland was finally left in political isolation in 1939, to face a Great Power on its own.

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[164] Kallenautio 1985, 105—107, 113; Paasivirta 1984, 272—273.

[165] Kallenautio 1985, 113, 123; Hietanen 1989, 75; Defense Revision 1926, 12—14; Parliamentary Minutes/1927, 375—377, 386—387. On the Finnish League of Nations policy, see also Selén 1974.

[166] Soikkanen 1984; Turtola 1984. On the Finnish defense cooperation plans with Estonia, see Leskinen 1997.

3. COMPARISONS OF MILITARY SPENDING DURING THE INTERWAR PERIOD: GREAT POWERS AND SMALLER STATES

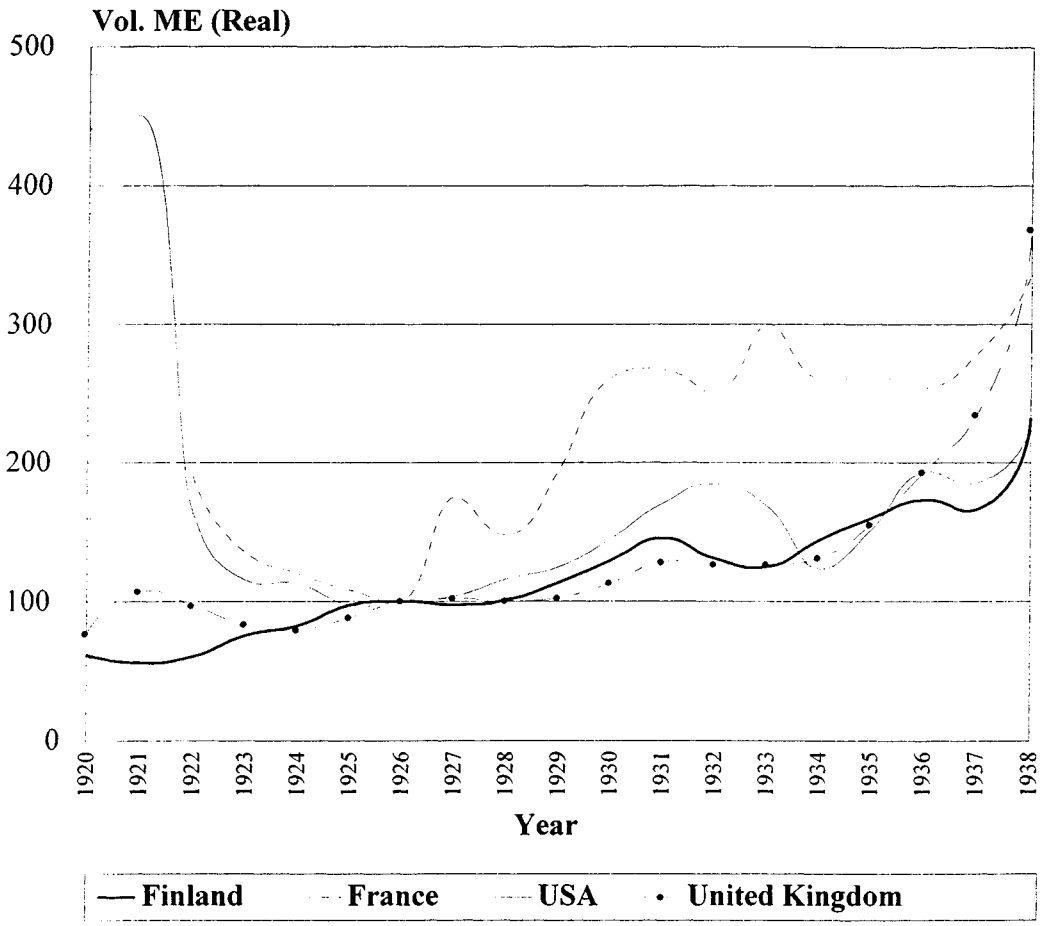
3.1. How Much is Enough? Macrolevel Military Expenditure Comparisons

According to the hegemony paradigm introduced earlier economic growth precedes increases in military spending in a Great Power. How did the political retreat, at least from the official functions of the League of Nations, by the United States affect the economic premises of military spending among the Great Powers in the 1920s? And, how did the new threats of the 1930s exert themselves in the military spending of the Great Powers and smaller nations? Also, it is important to analyze what kind of strategic and military policy constraints they had to face in their external relations. As we will see in this chapter, however, the development of military spending in these countries can not be explained on the basis of external constraints alone. Thus, we need to first analyze the volume development of military expenditures in the selected countries. Then we will take a closer look at the development of the relative share of military spending of GDP or GNP and central government spending or federal government spending. The analyses of military spending is then complemented by taking into account the population and the area of a particular country.

The development of military expenditures varied greatly between the nations included in these comparisons. The volume of military expenditures displays the development of military outlays in real terms relative to a base year. In Finland, military expenditures generally experienced rather steady growth during 1920—1930. Only a few years, such as 1927 and 1928, proved not to fit the overall growth performance. During some of the depression years military expenditures stagnated for a while but even stronger growth occurred during the latter part of the 1930s. The real military expenditures tend to em-

phasize the strong support for the military expenditures even more from the end of the 1920s onwards.

Figure 7. Volume Indices of Military Expenditures (ME) in Finland, France, USA, and UK, 1920—1938 1926=100[167]



Sources: see Appendices, Series A.

In the case of the United States, the picture was quite different. The huge American investments in the First World War military efforts show as tremendous peaks in Figure 7.

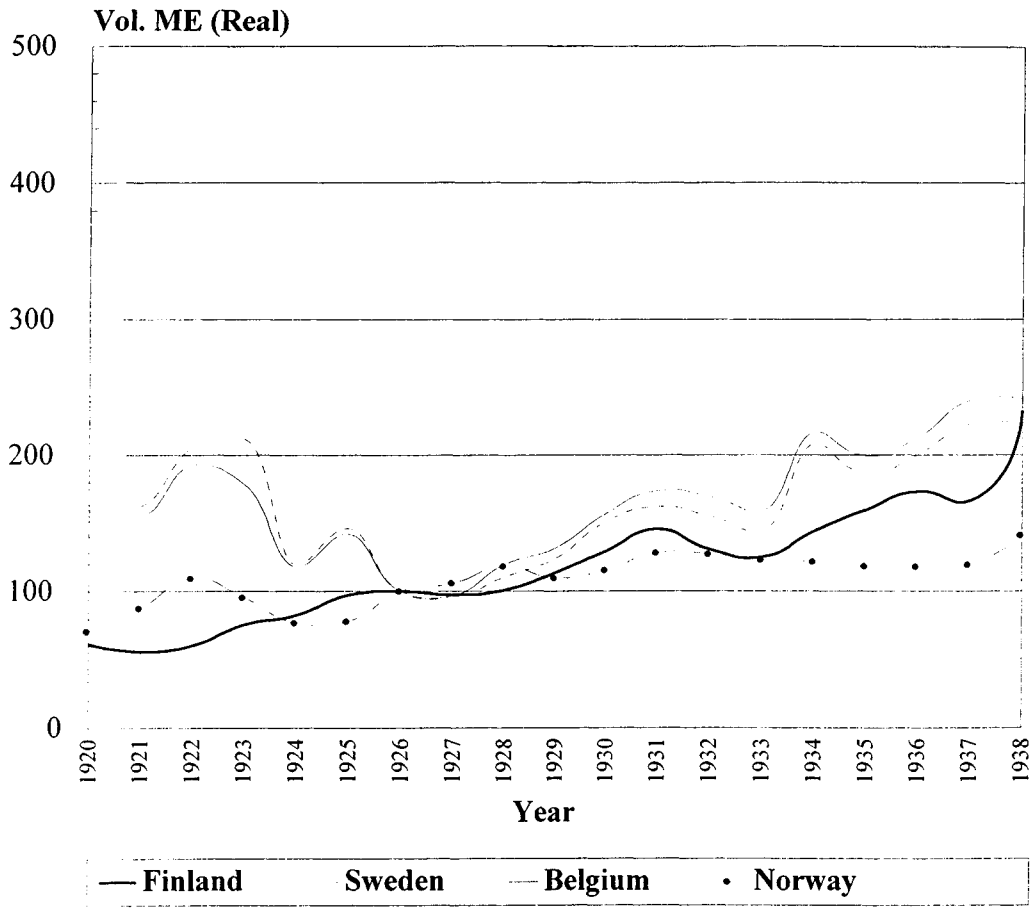
[167] The data is missing for France in 1920—1921. See Appendices for details.

The military expenditures grew slightly towards the turn of the decade only to be affected by the Great Depression in 1933 and 1934. The increased international tension of the latter part of the 1930s did not reflect very strongly on the American military expenditures.

British military expenditures developed quite evenly throughout the interwar period: a slight growth trend can be distinguished for the time period. It is also noticeable (as volume indices display the development relative to one base year) that the military outlays in Great Britain did not drop nearly as sharply after the First World War as in the other Great Powers included in the comparisons. The rearmament of the 1930s raised the military expenditures to a new level, especially towards the end of the decade. In France, however, the military expenditures experienced a similar drop as in the United States after the First World War. For the rest of the time period these expenditures grew quite rapidly, especially in the late 1920s. The rearmament effort at the end of the 1930s raised this level again sharply.

How did the volume of military spending develop among the small nations? Swedish military expenditures declined in volume during the early 1920s (see Figure 8). However, from the mid-1920s they continued on a growth pattern for the rest of the interwar period. Military outlays developed similarly in Belgium. In both countries the end of the 1930s consisted of increases in these expenditures. Compared to Finland, the growth pattern was somewhat weaker, especially in the late 1930s. The Norwegian military spending remained quite even during the time period, which distinguishes her from the other small countries in the 1930s. The early 1920s were in general a time of shrinking military expenditures for there nations, whereas the period from the late 1920s to the Second World War consisted of increases in military outlays.

Figure 8. Volume Indices of Military Expenditures (ME) in Finland, Sweden, Belgium, and Norway, 1920—1938 1926=100



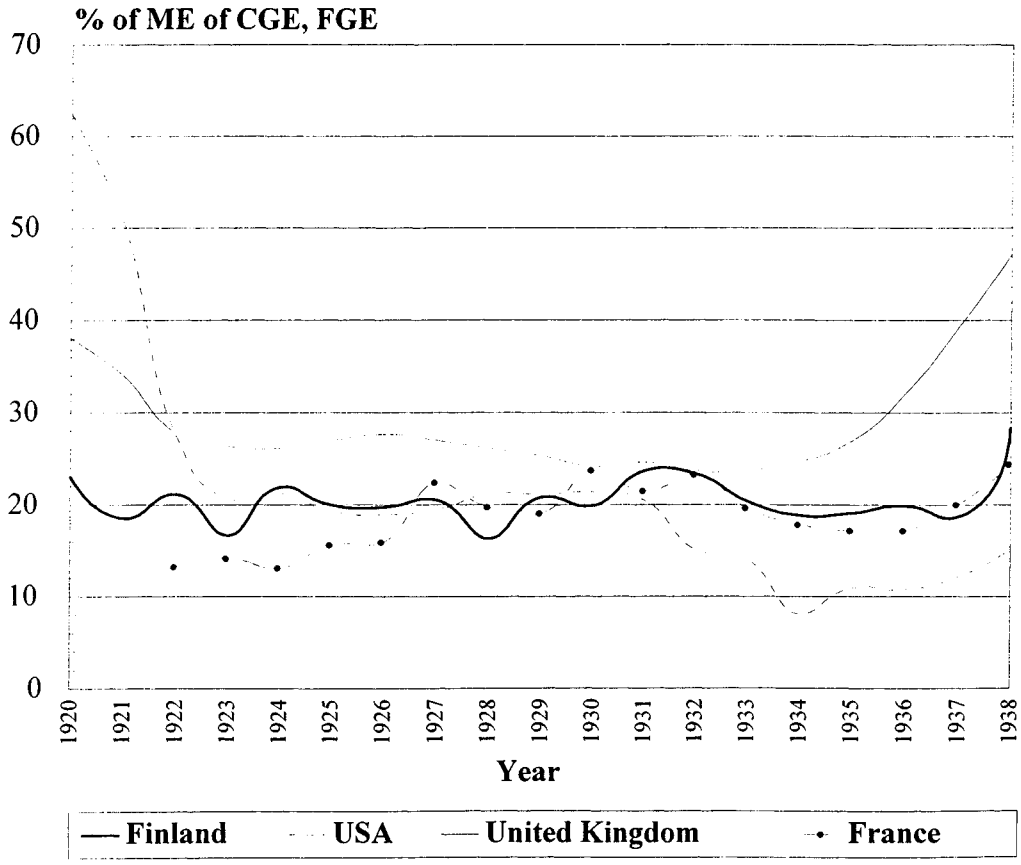
Sources: see Appendices, Series A.

In terms of political decision-making on military spending, which is best measured by the percentage share of military expenditures of central (or federal) government[168] expenditures (=*defense share*), the 1920s were a time of shrinking, yet somewhat constant military appropriations for most of these countries — especially compared to the end of the First World War. The depression did affect the defense share although the timing for

[168] The role of the of the central government as well as the entire public sector is explored further in chapter 4.2.

this varied from country to country. Growth in the defense share occurred again in the last years of the 1930s as the threat of war continued to mount. In Finland, however, this threat was more concrete, which can also be seen in the military expenditures of 1938—1939 (see Figure 9). Britain emerged clearly as the country that valued their military might the most; only Finland displayed even remotely similar interests for the entire time period.

Figure 9. Defense Share (= % ME of Central Government or Federal Government Expenditures) in Finland, USA, UK, and France, 1920—1938



Sources: see Appendices, Series A.

In Belgium, however, this share was surprisingly low in the 1920s, which may in part be explained by the reconstruction effort[169]. Norway maintained a ten percent level throughout the 1920s and 1930s.[170]

The Finnish defense share was circa twenty percent during the 1920s. The only years that noticeable drops occurred were 1923 and 1928. During the Great Depression this share rose significantly above the twenty percent level for some of the years. The rest of the 1930s the defense share stayed close to the twenty percent level until the last few years before the war.

Of the Great Powers in the comparison the Great Britain retained the highest defense burden, which clearly exceeded the others in Figure 9, except during the depression years. The rearmament effort, in addition to worsening international tensions, raised this share from the early 1930s onwards. In the United States the defense share remained close to twenty percent until the early 1930s, when it dropped almost continuously to even below ten percent in 1934. For the rest of the decade the American defense share remained low. The French defense share was surprisingly low in the early 1920s until it topped twenty percent in 1927. For the rest of the period it stayed close to twenty percent.

The Swedish defense share stayed close to twenty percent for most of the 1920s. At the turn of the decade this share started to decrease rapidly, which was partly a result of conscious disarmament — at least as far as state budgets were concerned — policy in the 1930s. In Belgium the defense share was low, especially in the 1920s. In the 1930s this share was little over ten percent until the last few years before the Second World

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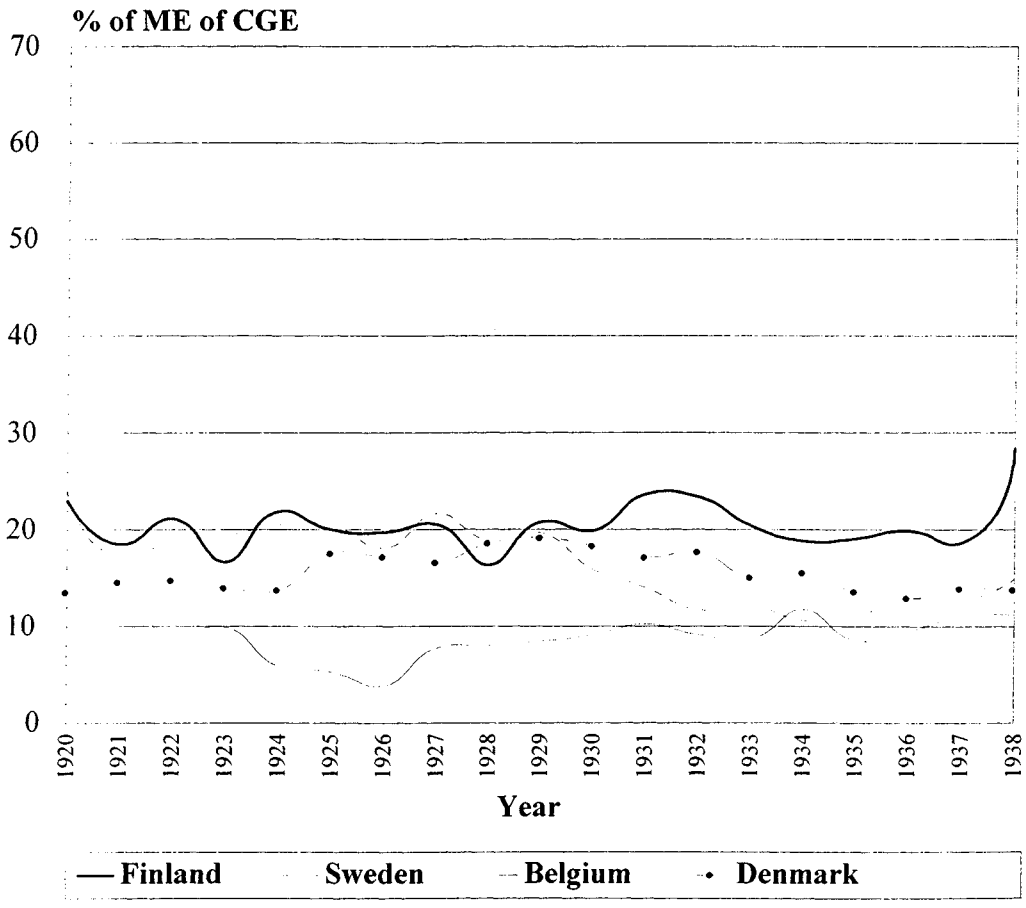
[169] Buyst 1995, 7—8; de Vries 1976, 13—14.

[170] For a long-run view of the Norwegian military expenditures, see Gleditsch 1992. For details on the Norwegian defense share, see Appendices for details.

War. In Denmark the defense share rose in the 1920s but did not reach the twenty percent level. For the Danish military the 1930s was a time of shrinking budget shares like in most of the Nordic countries, with Finland being somewhat of an exception (see Figure 10).

Figure 10. Defense Share in Finland, Sweden, Belgium, and Denmark, 1920—1938

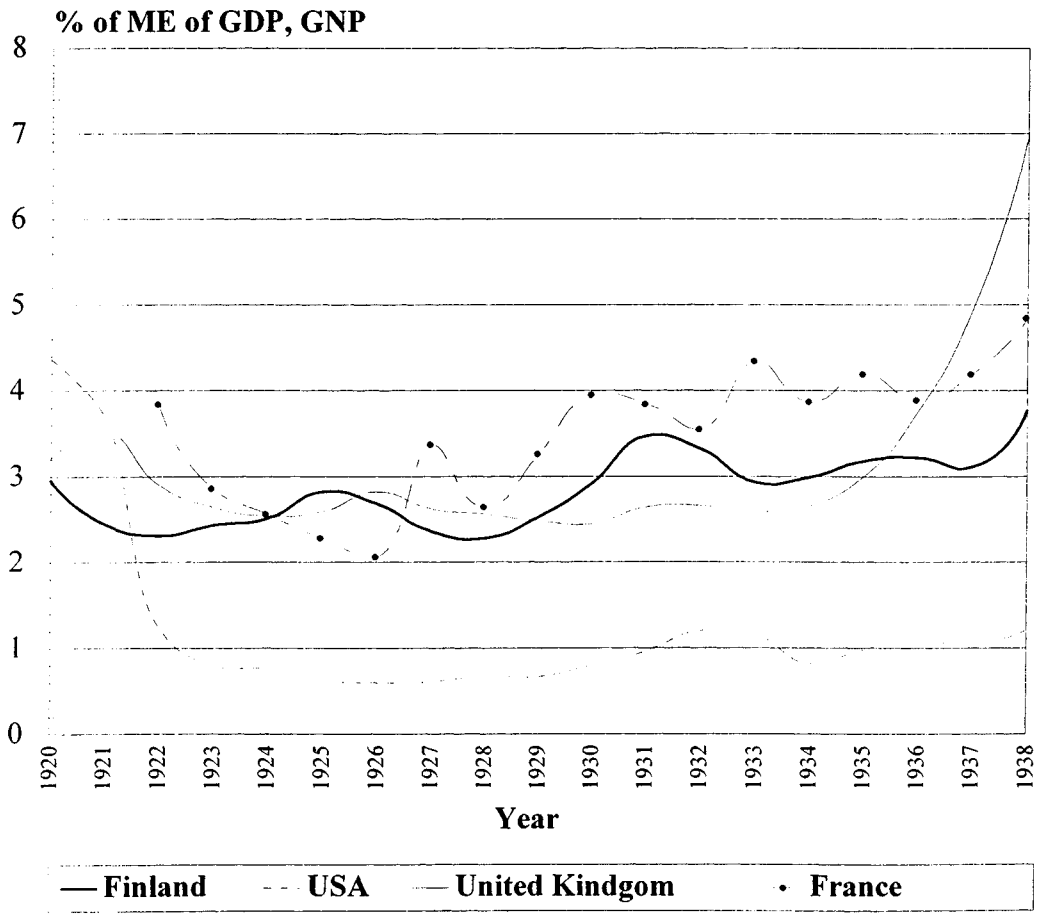


Sources: see Appendices, Series A.

What was the impact of the various, often unsuccessful disarmament measures, besides the political implications? The percentage share of military expenditures of GDP, GNP, or *military burden*, may be the best relative indicator of the resources a nation has in-

vested in its military establishment, since it describes the amount of total economic resources devoted towards military aims. It also displays how sensitive the military burden has been to the overall economic performance. In Belgium (Figure 12) this share decreased until 1926, when it started to grow again finally exceeding the post- First

Figure 11. Military Burden (= % ME of GDP or GNP) in Finland, USA, UK, and France, 1920—1938

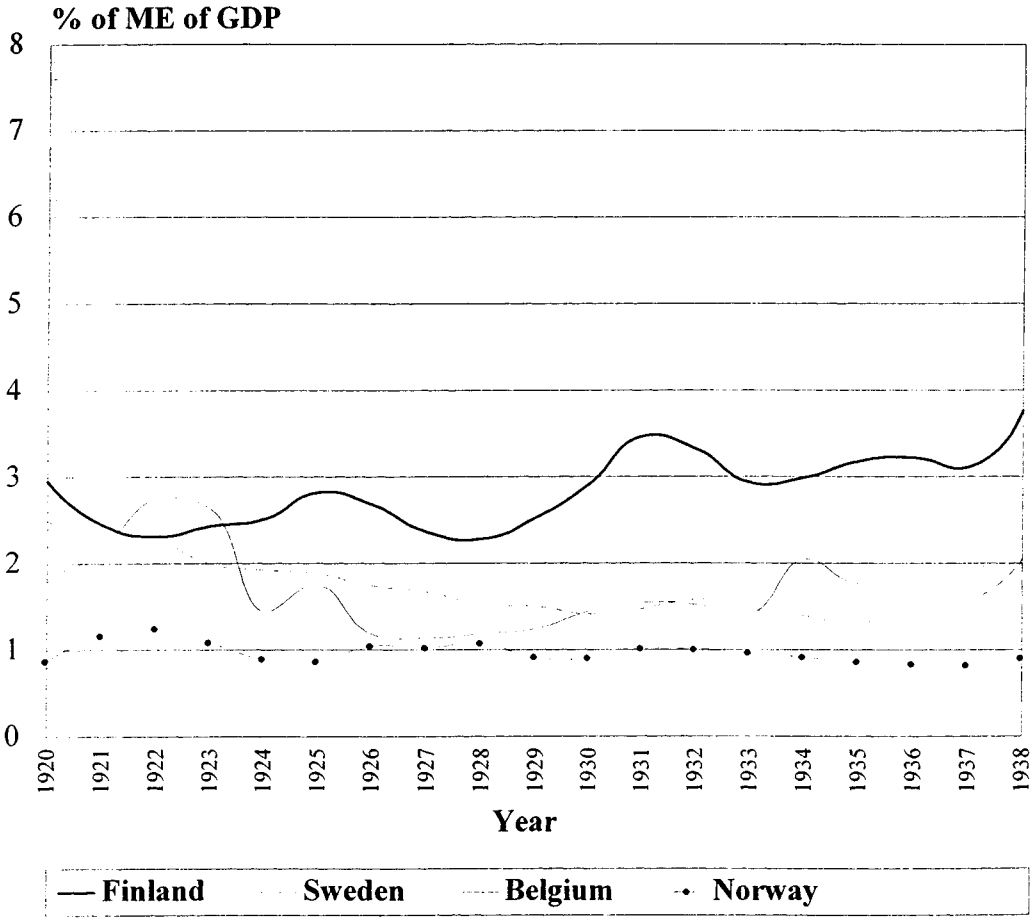


Sources: see Appendices, Series A.

World War level of spending in 1939. Norwegian military burden remained remarkably stable throughout the time period, at approximately one percent. Great Britain (Figure

11), however, matched and partially topped the relatively high military burden of Finland. Great Britain, France, and Finland were the only ones of the eight nations to keep their military burden above two percent level for the entire interwar period.[171]

Figure 12. Military Burden in Finland, Belgium, Sweden, and Norway, 1920—1938



Sources: see Appendices, Series A.

The development of Finnish percentage shares of military expenditures of GDP during the interwar years turned out to be quite stable. This share remained quite high in the

[171] During the post- World War II era the military burden of Finland has been about 1,5 percent. See Jalonen-Vesa 1992, 377.

mid-1920s, even though it has been suggested that the military needs were especially ignored during this decade.[172] The years of depression proved to be perhaps "favorable" for the military establishment, although the lagging impact of the depression does show in Figure 12[173] — interestingly enough, the same phenomenon affected the American military expenditures as well.

In Finland the military burden, similar to Great Britain and France, stayed above two percent for the entire interwar period. In the 1920s this percentage stayed mostly below three percent until the turn of the decade. The strong growth in the early 1930s lifted this percentage over three percent. During the 1930s military burden in Finland stayed at circa three percent until the large acquisition programs of the late 1930s raised the percentage again.

In the United States this percentage dropped drastically after the First World War. Throughout the interwar period these outlays stayed close to one percent. The early depression years emerged as a period of modest growth compared to the late 1930s. In Great Britain the development of the military burden was quite stable compared to France. The French percentage fluctuated sharply, especially in the 1920s. The 1930s was a period of rising military burden for both France and Great Britain.

The Finnish military burden exceeded the other small nations' levels in this comparison. In these countries this percentage either declined or stayed the same in the 1920s. Only the Belgian military burden grew significantly in the 1930s, which is another indication

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[172] For example, see Grandell 1963, 54—55; Jokipii 1980, 373; Iskanius 1985, 32—33. It is to be noted that the Finnish military establishment was created almost out of nothing in the aftermath of the newly-attained independence and the Civil War of 1918.

[173] Here it must be noted that military expenditures are usually not the first items to be cut in a time of economic difficulties, especially taking into account the right-wing oriented political climate of the interwar period in Finland. See chapter 5 for details. On the impact of the Great Depression on the Finnish central government spending, see Hjerppe 1988, e.g. 113-116.

of the effect of the disarmament policies in these countries. The Norwegian level, as seen in Figure 12, was the lowest of the countries selected in these comparisons. The Danish level was similar to the other Nordic countries, especially Norway.[174]

Can the figures provided in the sources used for these calculations be cross-checked in any way to confirm the results presented here? The League of Nations documents, relating to the international disarmament conferences and the Armament Year-Books, include very detailed information on the different countries' military expenditures and military establishments as a whole. The information covered included budgetary spending figures as well as real term figures deflated by the wholesale price index, the size of the armed forces, and outlines of the military decision-making structure. For example, in the case of Finland these figures for 1923—1927 are very close to the ones calculated by Vilho Tervasmäki in his detailed study.[175]

Thus, the data on the military expenditures of the member nations was available in quite detailed accounts in the 1920s. The failure of the League and the new military competition of the 1930s prevented the continuation of compiling such statistics in detail.[176] This undoubtedly increased the insecurity of the member nations and contributed to the armaments race. Overall, it seems that the figures used to measure the military spending of these nations are reliable, which can be checked for example with the League of Nations figures.[177] However, an alternative perspective into the military spending can be

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[174] See Appendices, Series A.

[175] League of Nations: Armaments Year-Book. General and Statistical Information. Publications of the League of Nations IX. Disarmament 1928. IX.1. Geneva 1928. Cf. figures for Finland in Appendices, Series A. On earlier estimates, see League of Nations: Statistical Enquiry into National Armaments. Part II. Budget Expenditure on National Defense 1921—1923. A. 20. 1923. IX. Geneva, September 1923.

[176] On the impact of increasing tensions and statistics, see e.g. League of Nations: Conference for the Reduction and Limitation of Armaments. Conference documents, Volume I. Series of League of Nations Publications IX. Disarmament 1932. IX. 63. Geneva 1932 (cf. e.g. League of Nations 1923a). The later documents displayed the emergence of a new armaments race much clearer.

[177] See Appendices, Sources and Solutions Relating to the Data Tables for further details.

provided by converting the respective military expenditures of these nations into a common currency. In such a manner we can enhance our comparative view by directly estimating the size and extent of their military spending, respective of population and area.

However, first we must analyze the reliability of this method and the behavior of the exchange rates, respective of the Finnish mark (= FIM). As we established earlier in the introduction, the wholesale price index is the best suited for our purposes in conversions to real terms. The countries included in these comparisons reverted back to the Gold Standard in different years, and their approaches in this process varied (see Table 1). According to Jon Hirvilahti there were roughly three types of approaches: 1) countries that returned both the internal and external value of their currency to the pre- First World War level through a severe deflation (UK, Denmark, Sweden, Norway); 2) countries that accepted the inflation and stabilized the value of their currency to correspond to the situation following First World War (Belgium, France, Finland); 3) countries that had to create a new monetary unit due to severe inflation (none of the countries in these comparisons).[178]

The Finnish mark in the mid-1920s, as indicated by Hirvilahti (1993), was undervalued in connection with most major currencies. However, the real exchange rates[179] were very close to the value of one, thus indicating only very small differences between the actual and theoretical exchange rates. The currencies that the Finnish mark was undervalued in comparison with were the US dollar, the British pound, the Norwegian crown, and the Swedish crown. This means that in the conversions of military expenditures they attain a *slightly* higher value than the PPP-theory implicates. The Finnish mark was overval-

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[178] Hirvilahti 1993, 27-34. The United States maintained the Gold Standard during and after the war, although 1917-1919 a gold embargo was practically in place.

[179] Real exchange rate = the actual exchange rate divided by the theoretical exchange rate. See Hirvilahti 1993 and Hirvilahti 1996 for further details.

ued in comparison with the Danish crown, the French franc, and the Belgian franc, with corresponding implications for our comparisons. The differences were, however, small[180]. Therefore, the exchange rate comparison forms a good basis for the analysis.

Table 1. Re-adaptation of the Gold Standard in Eight Countries in the 1920s

Country (Currency)	Year
Belgium (BEF)	1926
Denmark (DKK)	1927
Finland (FIM)	1926
France (FRF)	1928
Norway (NOK)	1928
Sweden (SEK)	1924
United Kingdom (GBP)	1925
United States (USD)	*

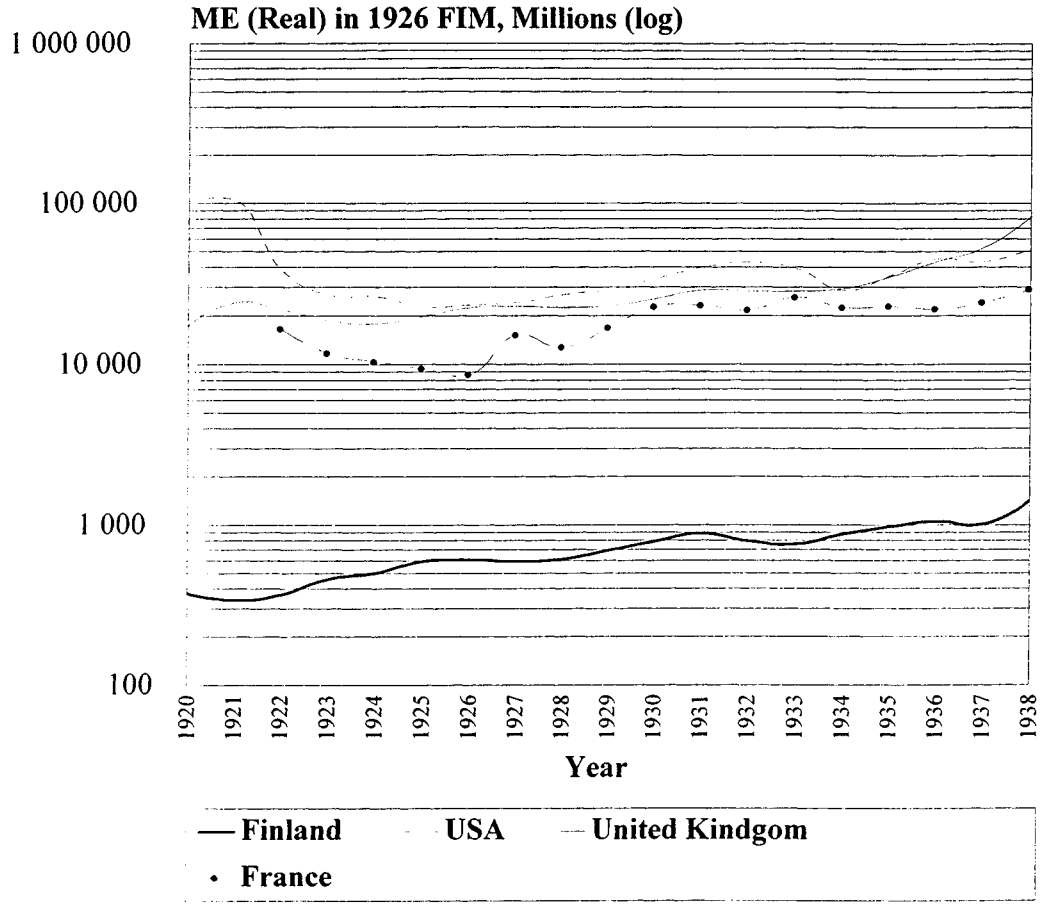
* = remained committed to the Gold Standard through the war and the 1920s

Source: Hirvilahti 1993.

Military expenditures converted into a common currency (1926 Finnish marks), as in Figure 13, enable us to compare the resources put into military establishments in a way to take into consideration the size differences between these economies. In this comparison the United States emerged as the leader with the United Kingdom following in a close proximity. It is also striking that UK (which actually surpassed the American level in the late 1930s) and France caught up to the American level of military spending by the turn of the decade.

[180] Hirvilahti 1993, 63.

Figure 13. Military Expenditures (ME) in Millions of 1926 Finnish Marks in Finland, USA, UK, and France, 1920—1938 (log)

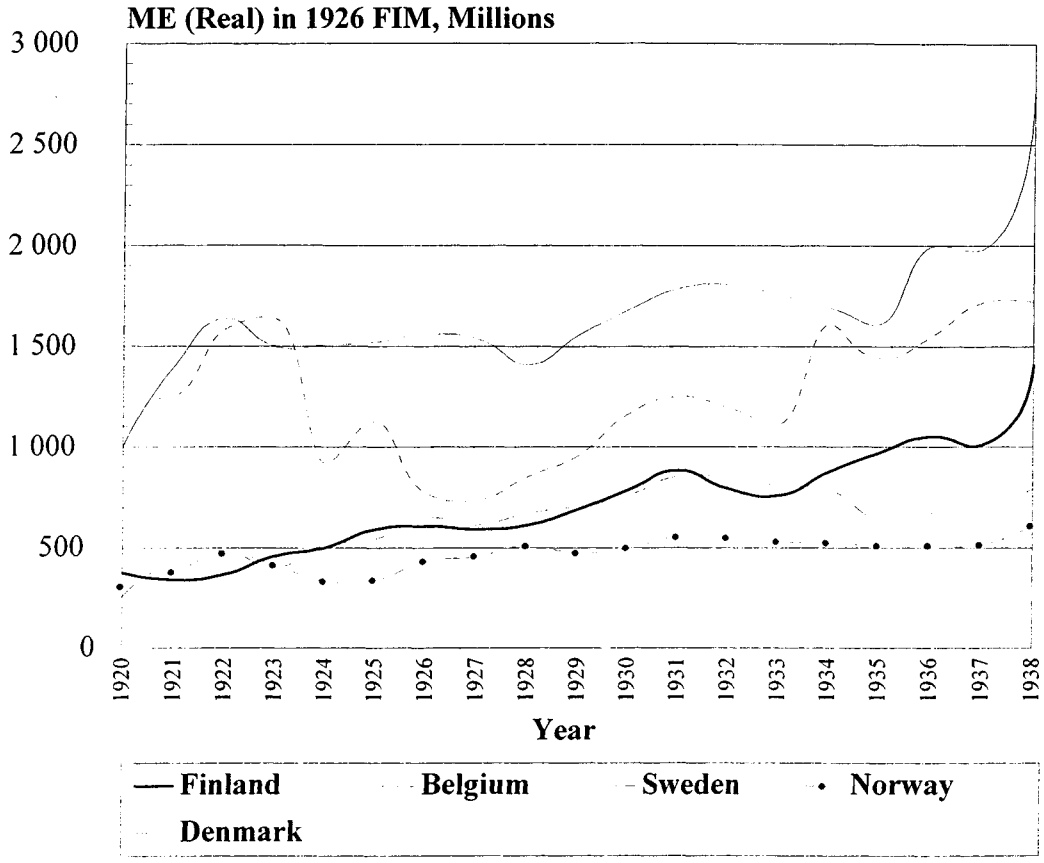


Sources: see Appendices, Series B.

This, of course, does not take into account of the country's size or the way that they were spent. The American GNP in 1926 (converted into 1926 Finnish marks) was 170 times larger than the Finnish GDP in the respective year. Even the Swedish GDP in 1926 was 4,08 times bigger than the Finnish equivalent.[181]

[181] Eloranta 1996; Eloranta 1997a.

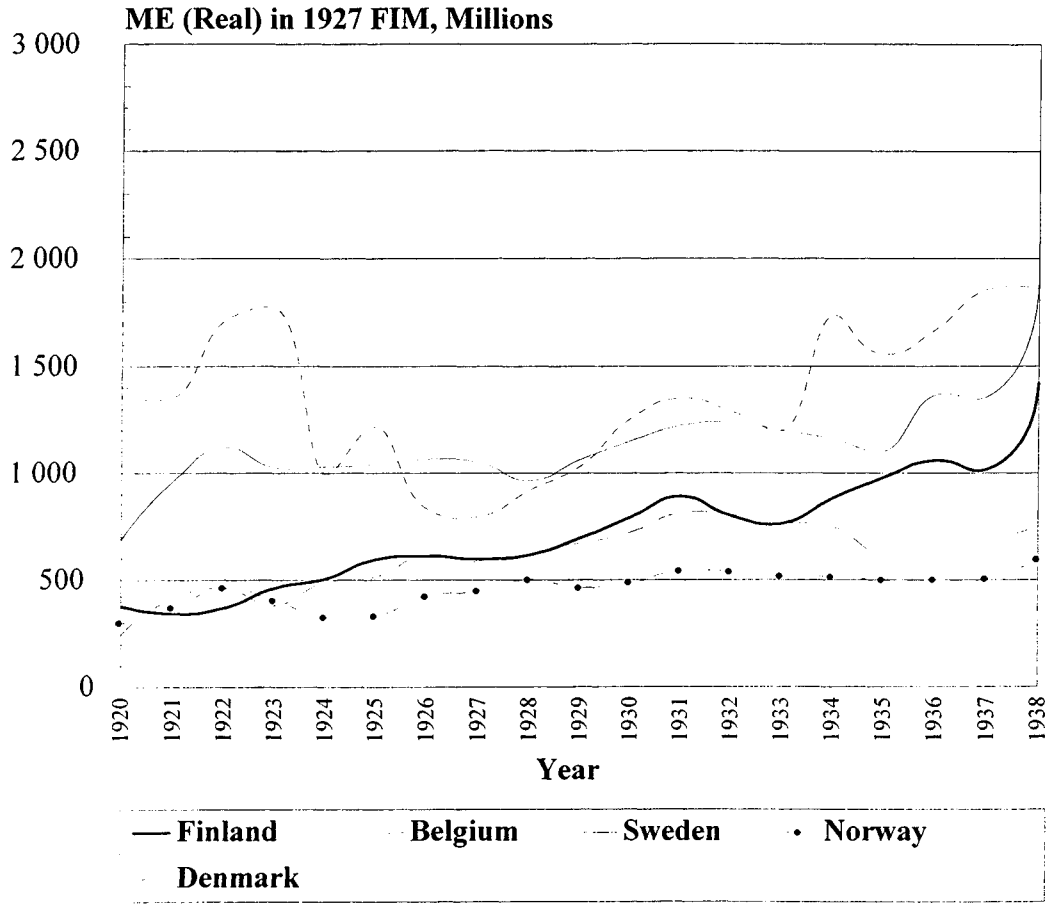
Figure 14. Military Expenditures (ME) in Millions of 1926 Finnish Marks in Finland, Belgium, Sweden, Norway, and Denmark, 1920—1938



Sources: see Appendices, Series B.

Of the smaller nations Sweden and Belgium spent the most on national defense in absolute terms, with Belgium even surpassing Sweden in the 1930s. Finland, Norway, and Denmark, as seen in Figure 14, belonged to the other group spending somewhat less in absolute terms on national defense. Finland seemed to distribute more resources for military purposes in the 1930s as she neared the Swedish and Belgian levels, although mostly in the latter part of the decade.

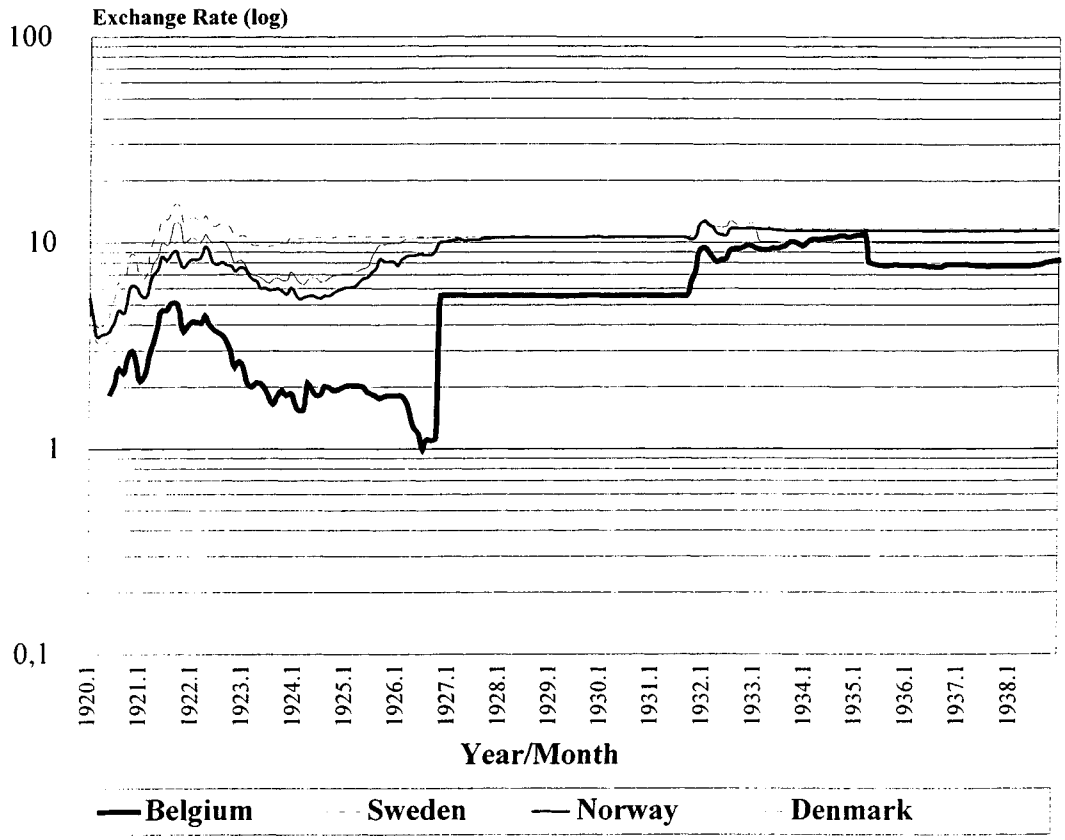
Figure 15. Military Expenditures (ME) in Millions of 1927 Finnish Marks in Finland, Belgium, Sweden, Norway, and Denmark, 1920—1938



Sources: see Appendices, Series B.

If we measure the military expenditures of the smaller countries in 1927 Finnish marks, an interesting result emerges: the level of Swedish military spending is considerably lower in Figure 15 than in Figure 14. The other small nations were not really affected by using the year 1927 in the exchange rate conversions. Thus, it would at first seem that the 1926 figures in Figure 14 overstate the Swedish military spending considerably. However, as we can observe from Figure 16, it seems that the other currencies in the comparison rose in value between 1926 and 1927.

Figure 16. The Development (in FIM) of Belgian, Swedish, Norwegian, and Danish Currencies' Exchange Rates, 1920-1938 (log)

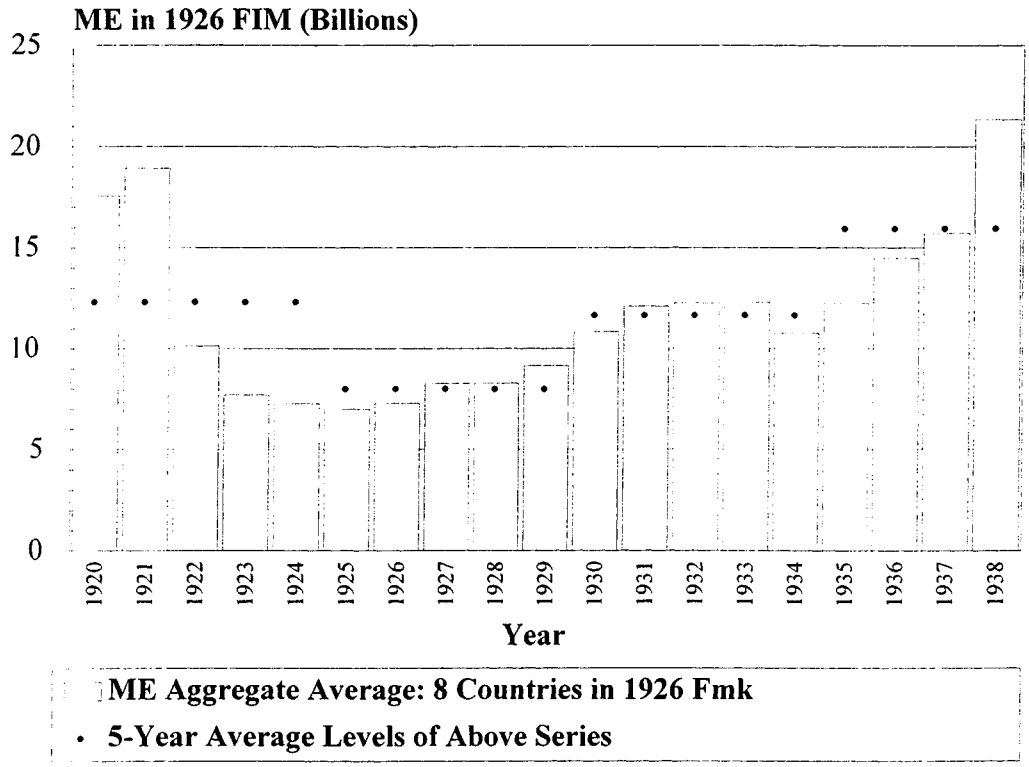


Source: Autio 1992.

The overall levels of military spending for these eight countries displayed a strong drop in the early 1920s due to both disenchantment with war as a solution after the "war to end all wars" and the sharp international depression. In general the 1920s were clearly a time of decreasing military expenditures — in absolute terms — in these countries. The early 1930s, however, proved favorable for the military establishments despite the Great Depression. One reason, for example in the case of Finland, was that military spending was not the first item to be cut in the state budgets. Other reasons included the right-wing pressure, the influence of domestic armaments industries, and the more active

government policies which benefited the military establishments as well. The delayed drop in 1934 can be observed in Figure 17. The rearmament and the renewed quest for political and military hegemony among the Great Powers raised the military spending to a new level for the remainder of the 1930s.

Figure 17. Military Expenditures Aggregate Average for Eight Countries in 1926 Finnish Marks, 1920—1938[182]



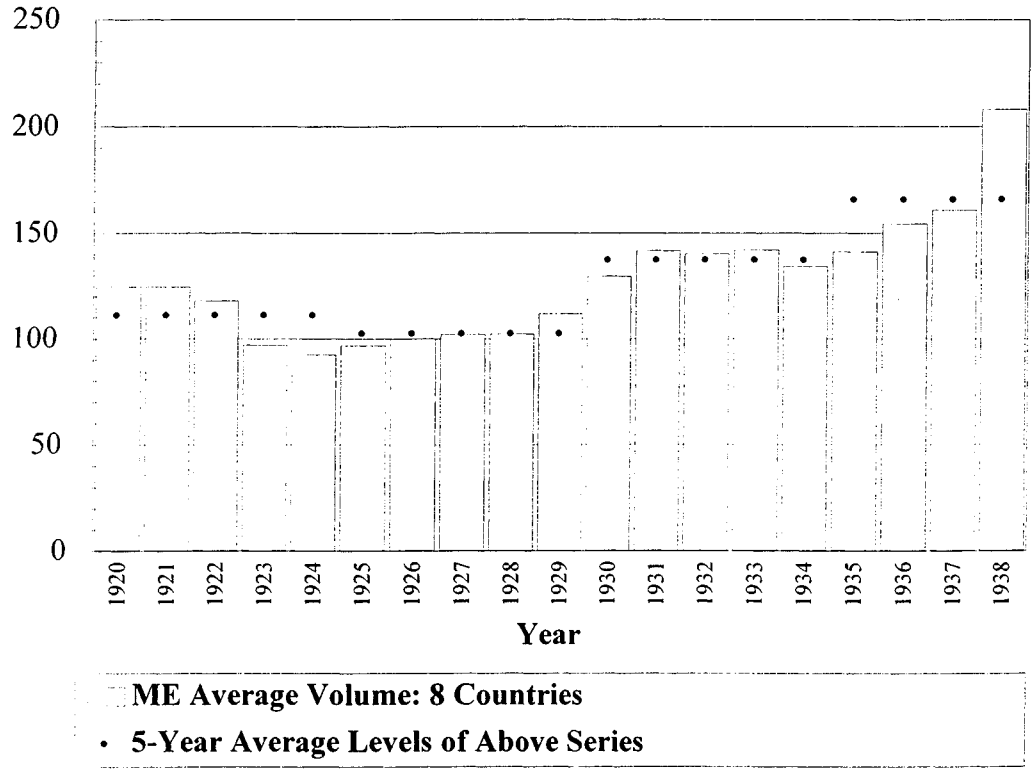
Sources: see Appendices, Series B.

It must be noted, however, that the data in Figure 17 is imbalanced due to the large size of military expenditures among the three Great Powers. Thus, if we take the average of

[182] These figures lack the data on France in 1920—1921, which naturally has an effect on the averages.

the volumes of individual countries' military expenditures, this bias is rectified (see Figure 18). The overall result is still not significantly altered by this change.

Figure 18. Average Volume of Military Expenditures (ME) of Eight Countries, 1920-1938 1926=100



Sources: see Appendices for details.

3.2. Demographic and Geographic Perspective into Military Expenditures

The comparative perspective offered in the previous chapter does not take into account the impact of colonial populations and their strategic burden on the military spending. Another significant shortcoming so far in the comparisons we have undertaken here has been the exclusion of the impact of area, not merely the huge differences in the size of

the economies. In the following we will attempt to take into account these problems and analyze, however briefly, the significance of regional commitments on military spending as well.

What was the significance of the colonial populations and areas on the military spending? The large colonial possessions of for example Great Britain must be taken into account in using such variables as population and area. The colonial interest of the United Kingdom and Belgium also made larger demands on their respective military establishments — in this respect the active interests of the United States in Latin America should not be forgotten either. This in turn meant that their military expenditures should have been relatively higher than in the other countries.[183]

However, colonial military spending was not included in the figures for the selected countries, except in the case of Great Britain.[184] If we include colonial populations or areas in the respective comparisons, we should at least be able to assess the significance of this type of military spending for these countries. In the case of Great Britain colonial military spending, according to the League of Nations Armaments Year-Book, varied between 2,6 and 3,7 percent of the entire military expenditures in 1925—1927. In the French case colonial military spending share varied between 4,2 and 4,7 percent in 1924—1927.[185] Although the spending figures were modest, the colonial commitments placed heavy demands on the armed forces personnel: in 1924 the territorial Army and all colonial troops formed 49,2 percent of all Army troops. However, the situation was different for a small country; Belgium managed the colony of Congo with "a small body

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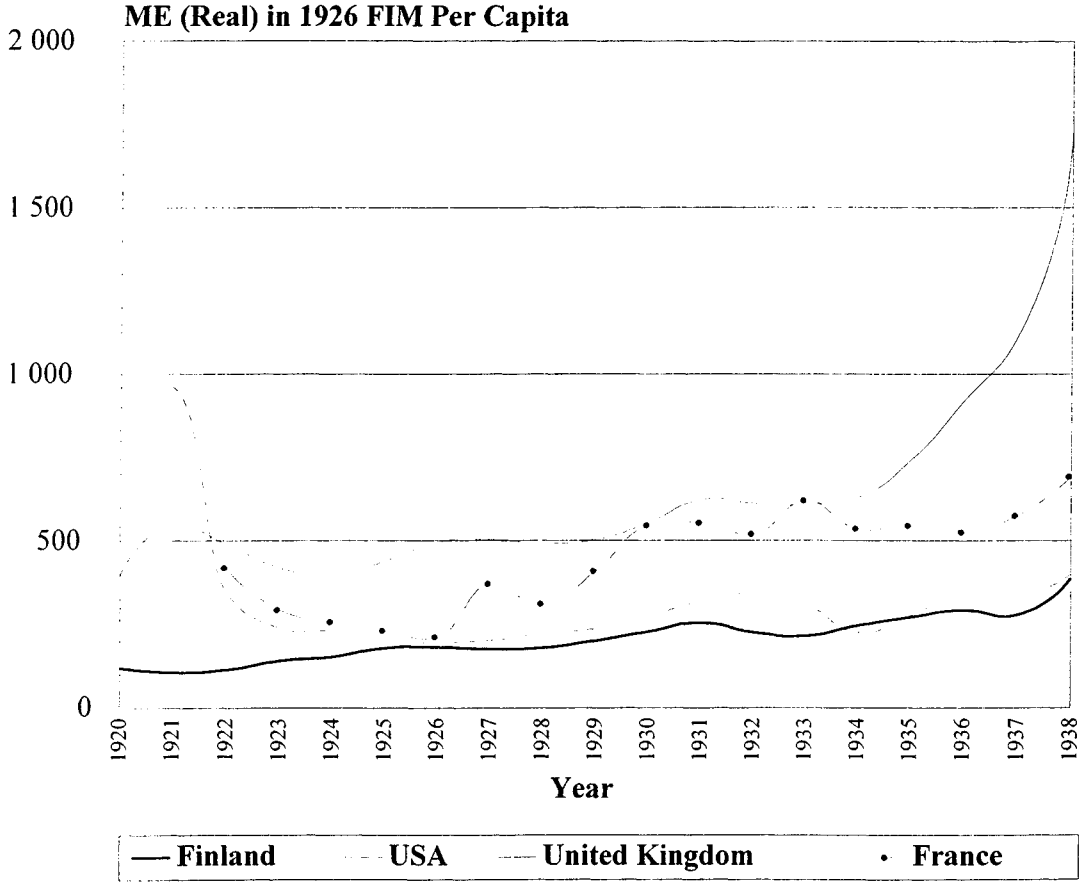
[183] It should also be remembered that the federal form of government in America made no difference in this sense: there were no state level appropriations for this purpose in the 1920s and 1930s; see The National Income and Product Accounts of United States 1981. The same applies to the municipal level for most of the countries, on Sweden, see e.g. Höök 1962.

[184] See Appendices, Sources and Solutions Relating to the Data Tables.

[185] Calculated from: League of Nations, Armaments Year-Book. General and Statistical Information. Publications of the League of Nations IX. Disarmament 1928. IX. 1. Geneva 1928.

of under two thousand civil servants and a small army to govern a population of more than ten million people, spread over an enormous area." [186] Thus we may conclude that the colonial populations and areas yield the "appropriate" (even without the colonial military spending figures being included) results for the Great Powers, whereas they overstate the military commitments of Belgium.[187]

Figure 19. Military Expenditures (ME) in 1926 Finnish Marks Per Capita (Excluding Colonial Populations and Military Spending) in Finland, USA, UK, and France, 1920—1938



Sources: see Appendices, Series B.

[186] Idem.; Kossman 1978, 668—669.

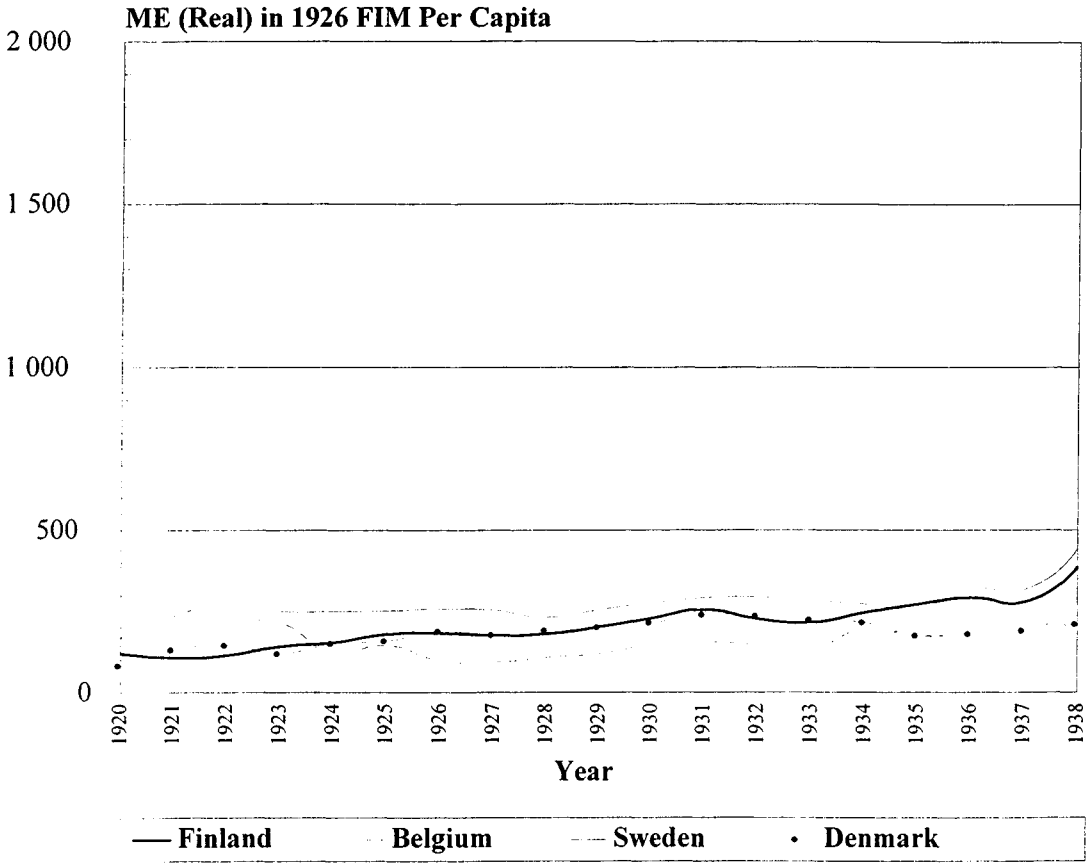
[187] On the definitions of colonial populations, areas, and calculation methods, see Appendices, Sources and Solutions Relating to the Data Tables.

How did the per capita military spending develop in these countries? Compared to the Great Powers in this study, as seen in Figure 19, for example the Finnish military expenditures per capita were at first glance quite low. The Finnish per capita level of military spending was very close to the United States during the interwar period. Overall, the modest rising trend can be detected in the Finnish military expenditures. The rising threat of war for Finland, as in other comparisons, showed as a peak in the late 1930s. The American level of spending was very similar to the Finnish after the drop from the high level of spending during and after the First World War.

The French military expenditures per capita varied rapidly from one year to another, especially in the 1920s. The period from 1926 to circa 1933 represented a time of significant increases in military spending. The French level even caught up to the British level in the early 1930s. For the rest of the 1930s, however, military expenditures per capita remained even or declined slightly, which differed from the British case for example. Great Britain was clearly the leader in military spending per capita if we do not take into account the colonial populations. The 1930s rearmament seems to have been particularly strong in Great Britain.

The small nations had very similar levels of military spending per capita (see Figure 20). The leader in this respect was Sweden, although Finland passed her in the late 1930s. The Swedish development, which has emerged from the other comparisons as well, was very even throughout the time period. The Belgian case, on the other hand, was different. The early 1920s consisted of large reductions in Belgian military spending per capita up until 1926—1927. For the rest of the period these expenditures recovered slowly. The Danish military spending was at an almost identical level to Finland and followed her closely until early 1930s when the disarmament measures started to have an effect.

Figure 20. Military Expenditures (ME) in 1926 Finnish Marks Per Capita (Excluding Colonial Populations and Military Spending) in Finland, Belgium, Sweden, and Denmark, 1920—1938

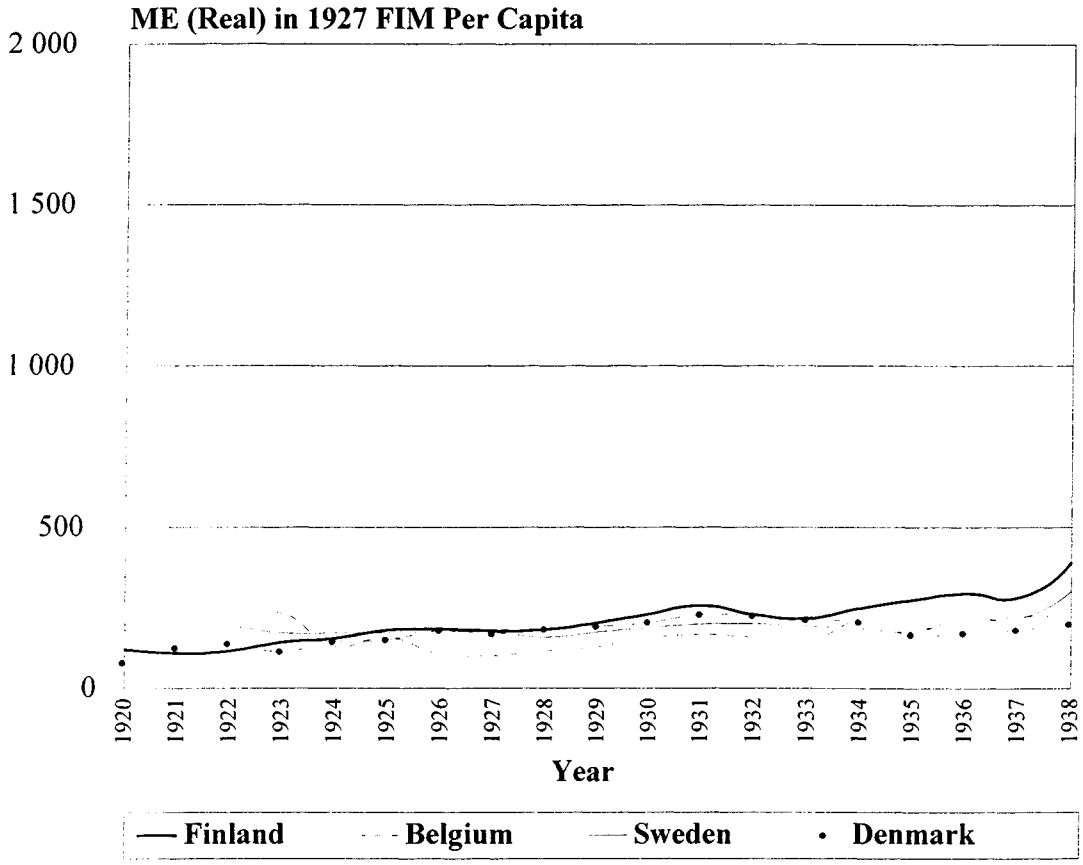


Sources: see Appendices, Series B.

If we use 1927 exchange rates, as in Figure 21, to see what changes, we discover that — as in the earlier comparisons — the Swedish level at first seems to have been overstated by the 1926 values. But, as we discovered earlier, the other nations exchange rates rose noticeably between 1926 and 1927, thus explaining the difference. In Figure 21 the Finnish level exceeded the Swedish level for most of the time period. Also, the levels of spending on military were remarkably similar up until the early 1930s, when the strength of the rearmament efforts started to vary considerably by country. The other

countries' levels did not seem to be affected by the change of year in performing the exchange rate conversions.

Figure 21. Military Expenditures (ME) in 1927 Finnish Marks Per Capita (Excluding Colonial Populations and Military Spending) in Finland, Belgium, Sweden, and Denmark, 1920—1938

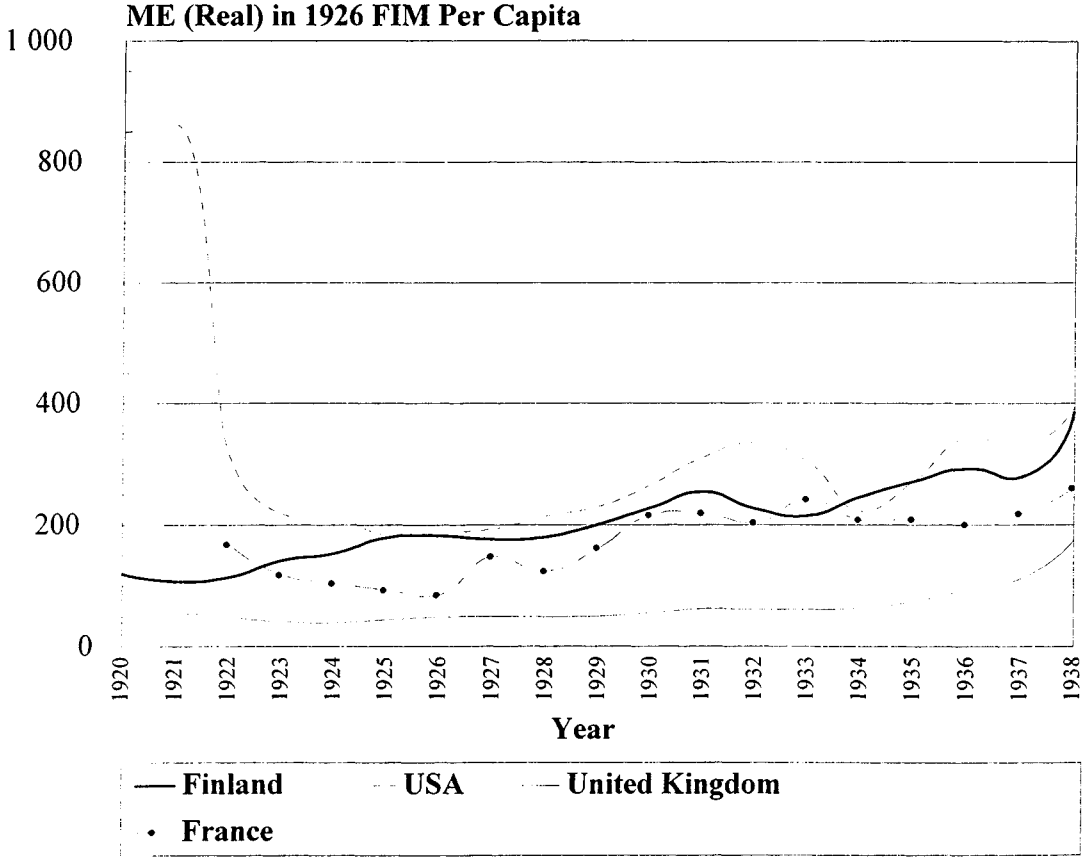


Sources: see Appendices, Series B.

As we see in Figure 22, the British level of military spending per capita drops dramatically due to her extensive colonial possessions. France is affected similarly, although the level of military spending is very similar to Finland and the United States. Even though Figure 22 may accent the significance of the colonial areas too much, it still dis-

plays the huge demands of the colonial defenses, not to mention the strategic demands, on such countries as Great Britain and France.

Figure 22. Military Expenditures (ME) in 1926 Finnish Marks Per Capita (Incl. Colonial Populations, Excl. Colonial Military Spending) in Finland, USA, UK, and France, 1920—1938



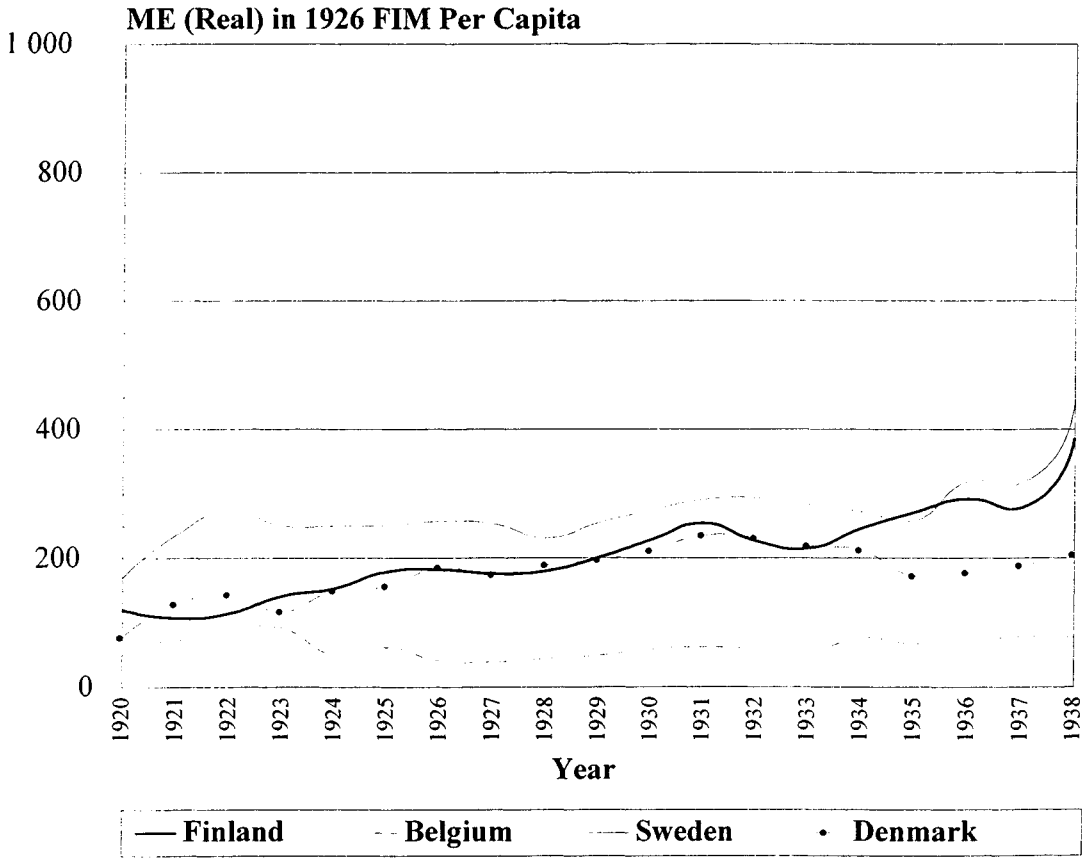
Sources: see Appendices, Series B.

The small nations are naturally not affected as much by the inclusion of colonial possessions[188]. Only Belgian, the only significant colonial power among the compared small nations, military spending drops to an even lower level compared to the other small nations, as seen in Figure 23. Belgium's military spending seems to have been, on the ba-

[188] For definitions on colonial populations, see Appendices.

sis of other comparisons as well, even more modest than in the actively disarming countries such as Sweden and Denmark. However, we must take into account the reservations made about the Belgian case and the relatively small colonial civil and military spending.

Figure 23. Military Expenditures (ME) in 1926 Finnish Marks Per Capita (Incl. Colonial Populations, Excl. Colonial Military Spending) in Finland, Belgium, Sweden, and Denmark, 1920—1938

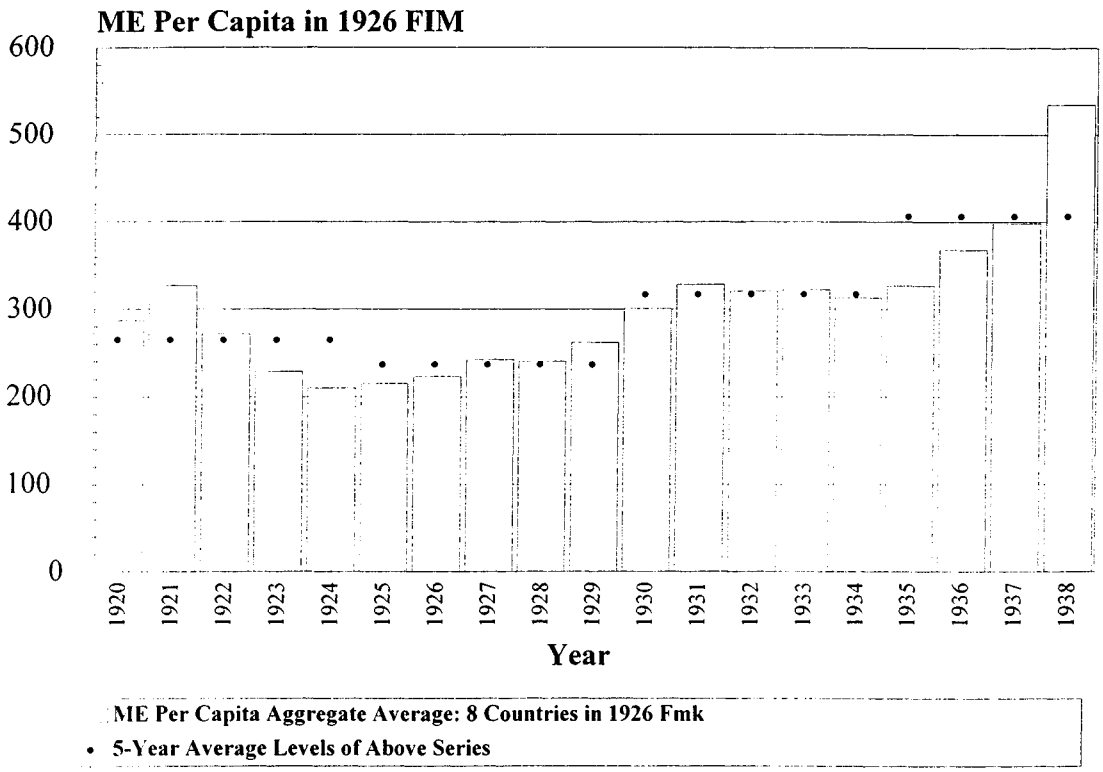


Sources: see Appendices, Series B.

The peace efforts of the 1920s, as superficial as they were, seemed to inspire some confidence in continued peace among the nations, especially in the smaller nations. But

how did they affect the military expenditures as whole? And how did the depression affect the overall level of resources devoted to military needs?

Figure 24. Military Expenditures (ME) of Eight Countries in 1926 Finnish Marks Per Capita (Excluding Colonial Populations and Military Spending), 1920—1938



Sources: see Appendices, Series B.

Similar to the aggregate figures on real military expenditures, military spending per capita (see Figure 24) seems to have risen to a higher level for the 1930s, compared to the 1920s, regardless of the depression. The drop from the First World War levels of spending appears to have been less drastic in this comparison. The growth of military expenditures per capita seems to have begun in the late 1920s, although the growth was quite meager. The depression years of 1930—1934 represented a new, higher level of military spending. The rearmament of the latter half of the 1930s can also be seen quite distinctly in Figure 24. The conclusion must be that military spending was only partially

dependent on economic growth and even less dependent the onset of the depression. A noticeable feature in the development of aggregate military spending seems to have been a time lag in the cutting of military expenditures during the depression. Military spending was consequently very closely linked with the changes of leadership in the world economy from the 1920s to the 1930s: the British and French levels of military expenditures were considerably higher than the American. As we emphasized in the beginning, however, these changes do not explain the phenomena as a whole.[189]

Reasons for this development may have been the relatively high level of central or federal government expenditures and the time lag in cutting military expenditures, the rise in right-wing political power in the various countries, and the mounting international threats and the collapse in the trust for the League of Nations.[190]

Another explanation — which is in fact somewhat connected to the latter — for the rising military expenditures might have been the disruptive nature of the depression, which posed a serious crises for the world economy. The hegemonic, though precarious and reluctant position held by the United States in the 1920s and its collapse paved way for the economic and military competition of the 1930s. A serious crises like the depression made more sweeping legislation, for example in Finland, and funding possible.

Figure 25 displays the same trends in the respective countries development, since no drastic area changes occurred in these countries' proper until in the eve of the Second World War. Military expenditures per area, without the colonial areas, reveal the high level of military spending in Great Britain during this time period. The American mili-

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[189] Further explanations should be searched *within* the nations' economic, political, social, and cultural life. See e.g. Eloranta 1997c; Olson 1982; Tilly 1990.

[190] See e.g. Fitzmaurice 1996, 35—41; Kennedy 1989, 431—436; Tervasmäki 1964.

United States was not threatened by anyone in the 1920s; there were no potential enemies for her. The only disheartening aspect of the military development in the world in the 1920s for the United States seemed to be the naval race — the arms limitations treaties achieved in the disarmament conferences did in fact reassure the politicians and the people in the United States in the 1920s.[191]

Before the 1930s an American capacity to think and act strategically in foreign policy matters (for example, a comprehensive defense structure capable of enforcing treaties) had not become necessary to national survival. A specific national strategy for wartime situations was not developed until the beginning of the Second World War.[192]

How does the inclusion of the colonial areas change the outcome of this comparison? As Figure 26 displays, the American military spending per area is at least equal to Great Britain and France, since she did not face such huge colonial demands on her national defense. Even the Finnish military expenditures per area surpass that of France and Great Britain. Thus, it is important to contemplate on the strategic issues for these countries during the interwar period. How did they orient their national defense? Who was and why were they considered the primary enemy during this turbulent time period?

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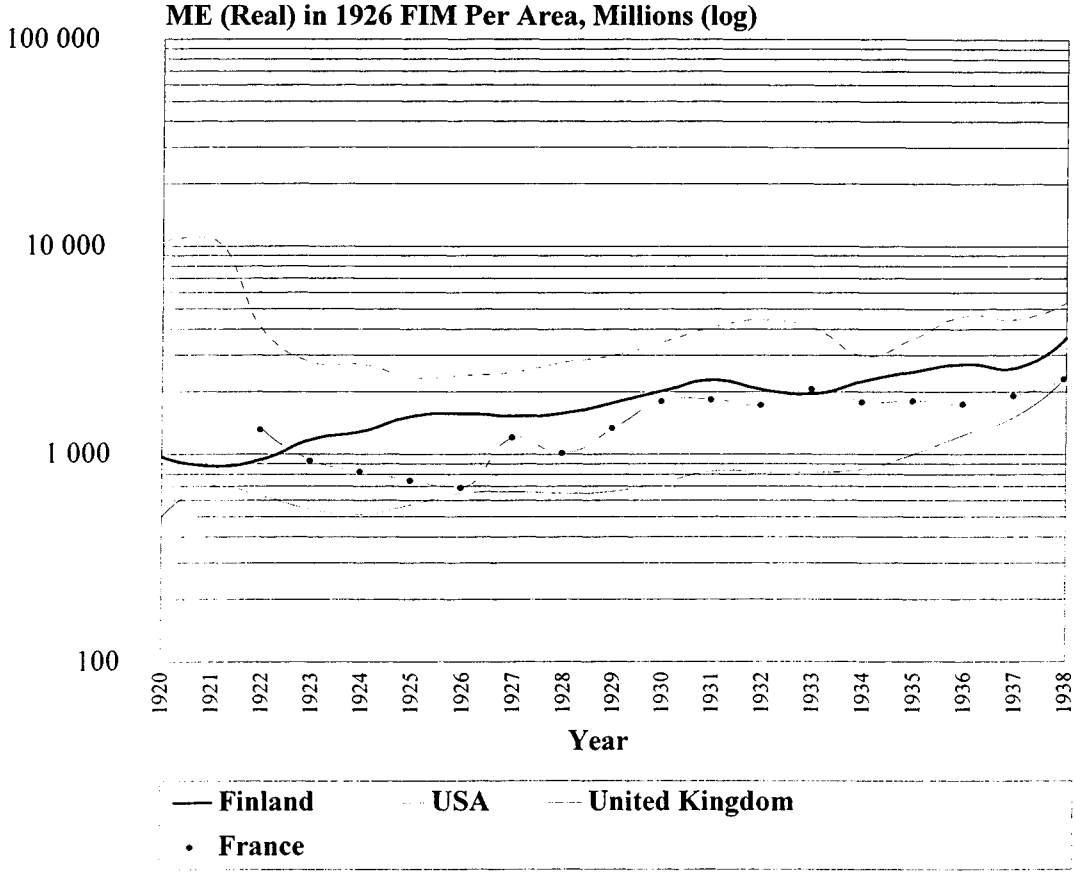
[191] For strategic discussion, see Huntington 1986, 14, 49. The impacts of the naval race included tensions in the United States' relations with, for example, Great Britain in the late 1920s.
[192] Huntington 1986, 49, 54.

Figure 26. Military Expenditures (ME) in 1926 Finnish Marks Per Area (Incl. Colonial Possessions, Excl. Colonial Military Spending) in Finland, USA, UK, and France, 1920—1938 (log)

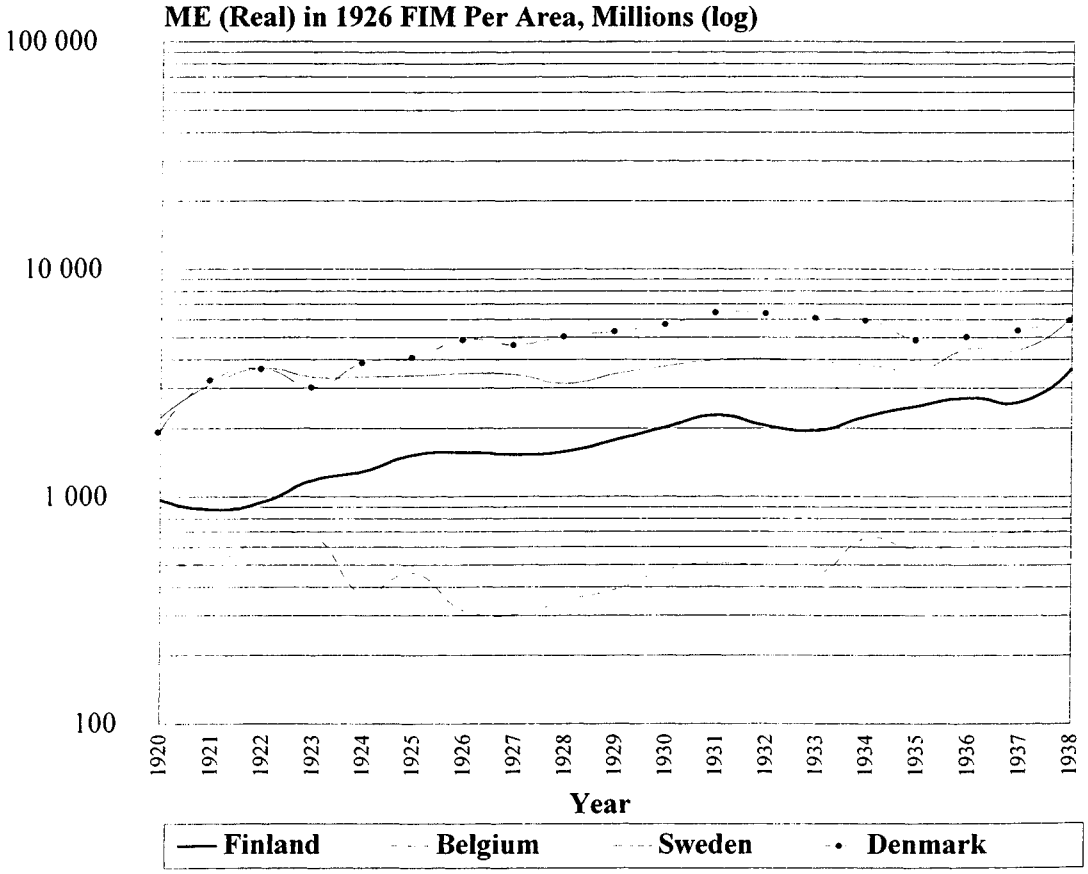


Sources: see Appendices, Series B.

The French military strategy during the interwar period aimed at preserving the political and territorial achievements of the Versailles treaty. They constructed their military doctrine to deal with an "expected resurgence", as Barry Posen has put it, of the German industrial and military power, the main threat to the French security. Overall the French military doctrine was largely defensive with its purpose to deny the German Army entry into French territory. The only significant move of forces deemed necessary in the event

of war was to be the advance into Belgium.[193] The French military doctrine was quite stationary during the interwar period, although the quick pace of political changes in the 1930s had their effects on military doctrine as well. Similarly, even though the French Army became more motorized and mechanized in the later 1930s, the new equipment did not revolutionize military thinking and doctrine in France.[194]

Figure 27. Military Expenditures (ME) in 1926 Finnish Marks Per Area (Incl. Colonial Possessions, Excl. Colonial Military Spending) in Finland, Belgium, Sweden, and Denmark, 1920—1938 (log)



Sources: see Appendices, Series B.

[193] Posen 1984, 105. See also Young 1978. On the discontinuation of military alliance with Belgium, see Kieft 1972.

[194] Posen 1984, 106—140; Doughty 1985.

The British military doctrine has been characterized as defensive yet innovative before the Second World War. Britain's concern was to both preserve her global empire as well as her European interests. British leaders expected a new war to destroy the empire, thus they would have to dissuade potential aggressors from attacking. The solution to this was to rely on their traditional attrition war of industrial mobilization and naval blockade. By the 1930s this strategy also reinforced the policy of appeasement in order to preserve the empire.[195]

Of the small nations Sweden and Denmark fare quite well in comparisons of military expenditures per area. Denmark actually had the largest spending of these countries, with Sweden as a close second, as seen in Figure 27. The Finnish share was considerably lower, not to mention Belgium's. One of the obvious explanations is that the Nordic economies, which were considerably larger than the Finnish equivalent, achieved in these countries a higher level in a similar sized or a smaller country than in Finland, even though the military burden might have been smaller.

[195] Posen 1984, 141—142. On the discussion on the Royal Air Force (RAF), see also Hobkirk 1992.

4. THE IMPORTANCE OF DOMESTIC POWER STRUCTURES AND POLITICAL CHANGES: GREAT POWERS AND SMALLER STATES

4.1. The Hegemony Paradigm in Retrospective

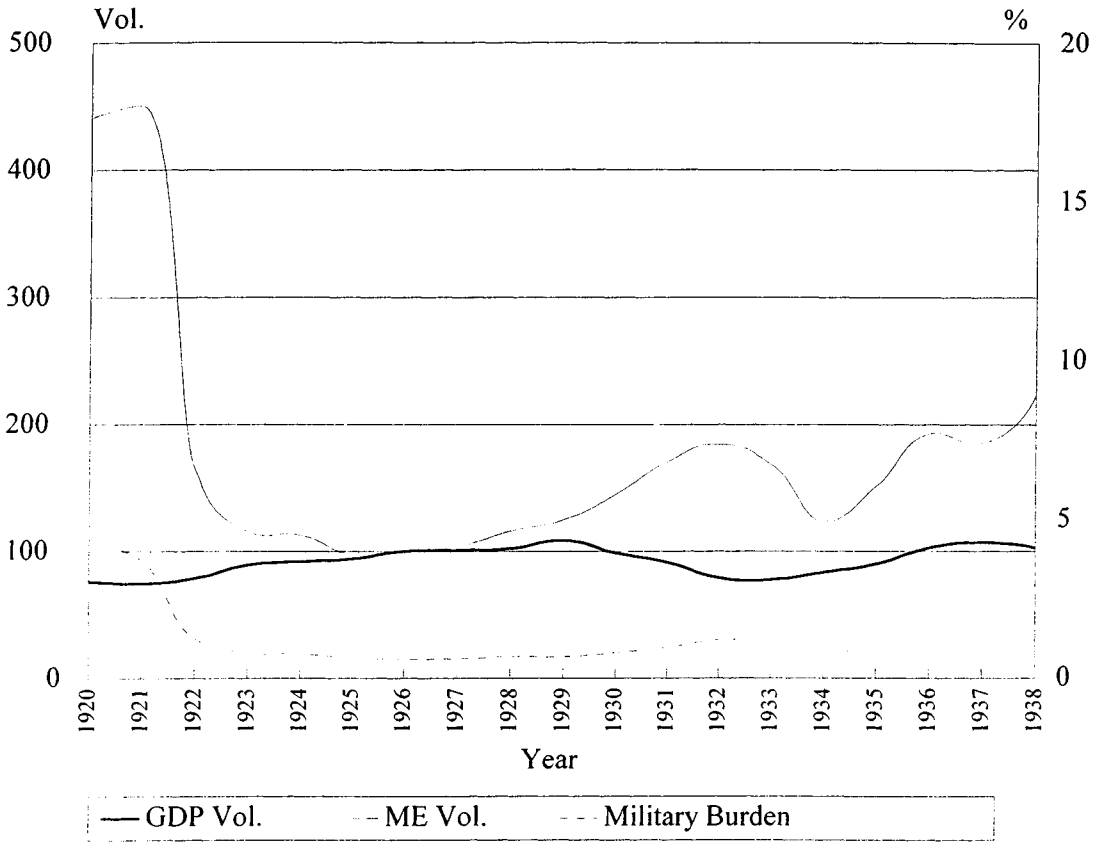
In this chapter we will first analyze the data of the previous chapter through the hegemony paradigm perspective introduced earlier. Then we will complement the analysis of military spending from the standpoint of changes in the role of the central government as well shifts in domestic politics. The analysis of the development in the number of military personnel, respective of military spending, will provide another complementary perspective that recognizes the impact of domestic constraints.

The development of military expenditures turned out very differently in these countries. For example, the Finnish military establishment enjoyed, in comparative terms, relatively steady funding, which in turn formed a relatively high portion of the GNP (compared to the other small nations in the comparison). Central government expenditures continued on an upward trend for most of the period, excluding the early 1930s depression. However, in the United States the military expenditures dropped significantly from the wartime funding, and the 1920s in general represented a time of federal expenditure cuts. This in turn reflected on the resources the military establishment received during the so-called New Era. The Great Depression, however, increased the need for public funding, in for example the various New Deal employment projects. Military expenditures remained quite low in the United States throughout the 1930s. The United Kingdom and France, however, put significant resources into military spending, both in terms of defense share or military burden.

A significant question that infiltrated these comparisons related to a country's ability to pay for its external security. What could they afford to spend on their military establishments? What were their external security needs? Of these countries the United States had by far the greatest resources to build up its military readiness. United States, however, was a reluctant leader — hegemonic nation, if you like — in the world economy in the 1920s yet experienced the most severe depression of these eight countries. But compared to the countries' sizes and population, for example the United Kingdom, France, and Finland seemed considerably more eager to devote resources for military purposes. Of these two especially France assumed an active foreign policy role in Europe in the 1920s and 1930s. Belgium's military expenditures were greatly affected by the cuts in central government expenditures, which also affected their slow growth in the 1930s. Norway's development, using almost any of the comparisons, was in this sense very stable. Of the smaller countries, however, Finland seemed to feel most threatened.

The depression of the early 1930s — or in the case of the United States, the whole decade — did not seem to have a profound effect on the military expenditures. Both the military burden and the military expenditures per head of population taken as annual averages actually seemed to rise to a higher level in the early 1930s. Only a slight dent can be observed in the spending curves. Reasons for this development can be found in the rise of international threats, the rise of domestic political restlessness and right-wing influence, and the rise in the overall level of public spending and, correspondingly, in military spending as well. The "collapse" of the American economy left room for other nations to emerge on the scene in the international struggle for mastery, both economic and military. This also reflected on the aggregate military spending of these nations. Among the new challengers were the dictatorships, such as Germany and Japan. Of the eight democracies here the Great Britain and France seemed to respond to the challenge, as well as Finland of the smaller nations, especially in the late 1930s.

Figure 28. Economic Development and Military Spending in the United States (=Economic Leader) During the Interwar Period 1926=100



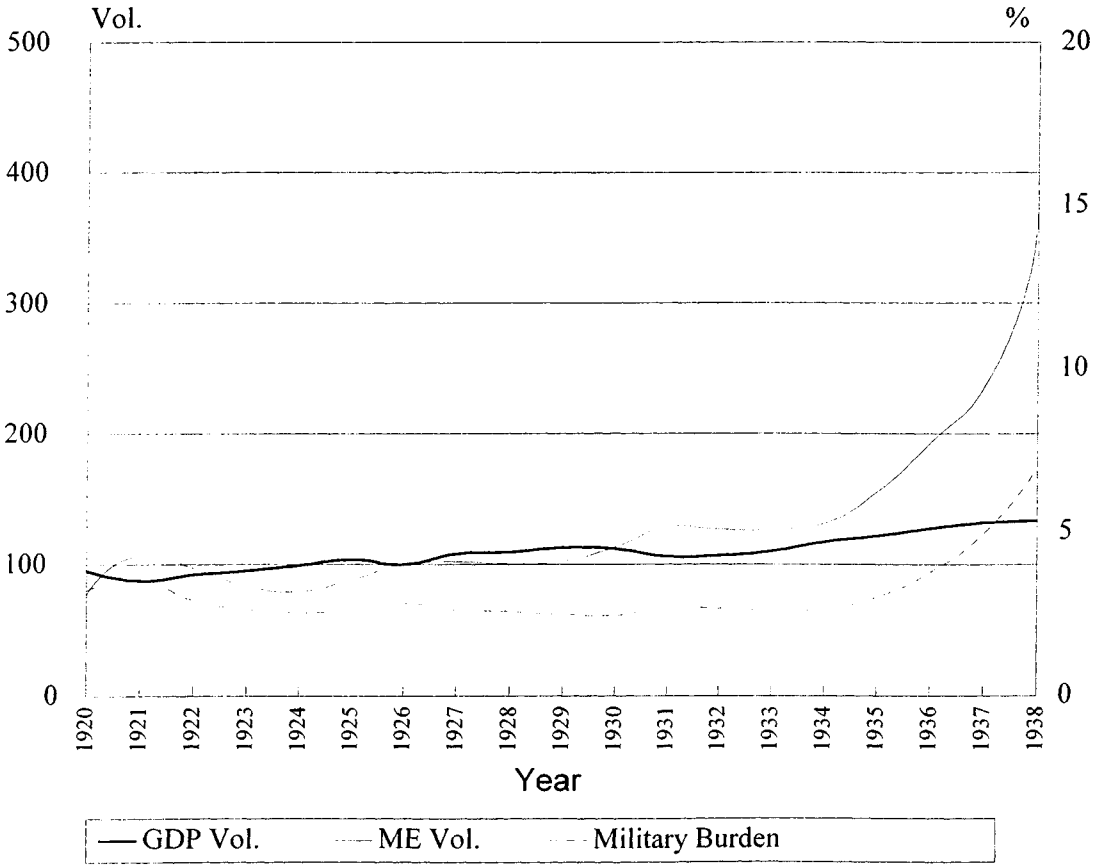
Sources: GDP volume from Maddison 1995; ME volume and military burden, see Appendices for details.

The hegemony model, as advocated by Paul Kennedy, implies competition for economic and political resources among the leader(s) and follower nations. If leadership, economic or political, is not forthcoming from the leader, the system is faced with the task of creating a new leader. This struggle for power means increased armaments spending and international power conflicts.[196] As such Figure 28 displays amply how the world economic leader failed to follow the general development pattern outlined in the

[196] Hodne 1992, 82.

introduction to this thesis in the 1920s. However, the latter part of the 1920s and the 1930s as well would seem to fit quite well to the pattern outlined in the introduction. When the economic development (=GDP volume) started its downturn in 1929, the military expenditures continued to grow (=ME volume). Then in the late 1930s the military burden grew only slightly. Does this mean that we may conclude economic development to be dependent on military spending?

Figure 29. Economic Development and Military Spending in the United Kingdom During the Interwar Period 1926=100



Sources: GDP volume from Maddison 1995; ME volume and military burden, see Appendices for details.

First we need to consider the size of the military burden. The American interwar military burden was, except for years 1920—1922, between 0,6 and 1,3 percent. For example during the 1950s, in the time of the Cold War, the American military burden was over ten percent.[197] Thus we must conclude that the meager burden imposed by the military spending of the interwar years could not have affected the development of the whole economy. The conclusion could be the exact opposite: military spending was, quite similar to the development pattern suggested by Kennedy, dependent on the development of the economy and economic competition in general.

Furthermore, the exceptional nature of the 1920s — the lack of a clear political leader — must be taken into account in the analysis. The British position was that of a challenger; i.e. her objective was to achieve economic leadership once again. Military spending, which was particularly strong right after the end of the First World War, grew strongly again in the late 1920s and throughout the 1930s. Military burden (Figure 29), however, stayed at a high level throughout the time period and did not start to increase noticeably until the late 1930s. The most conspicuous feature in the British economic performance was that the economy did not suffer continued setbacks during the Great Depression. The relatively stable economy enabled the government's continued investments in the armed forces. As far as the hegemony paradigm is concerned, the British pattern of military spending does not contest the basic ideas behind it, although the same reservations apply as in the case of the United States. Also, as we will see in this chapter, the increases in the early 1930s military spending in Great Britain can hardly be explained merely in the terms of a challenge towards world leadership on her part.

What about the French case? France, unlike Great Britain, pursued diplomatic and political leadership in Europe, especially in the 1920s. This fits the pattern of the French military spending from the end of the 1920s onwards. Whereas economic performance

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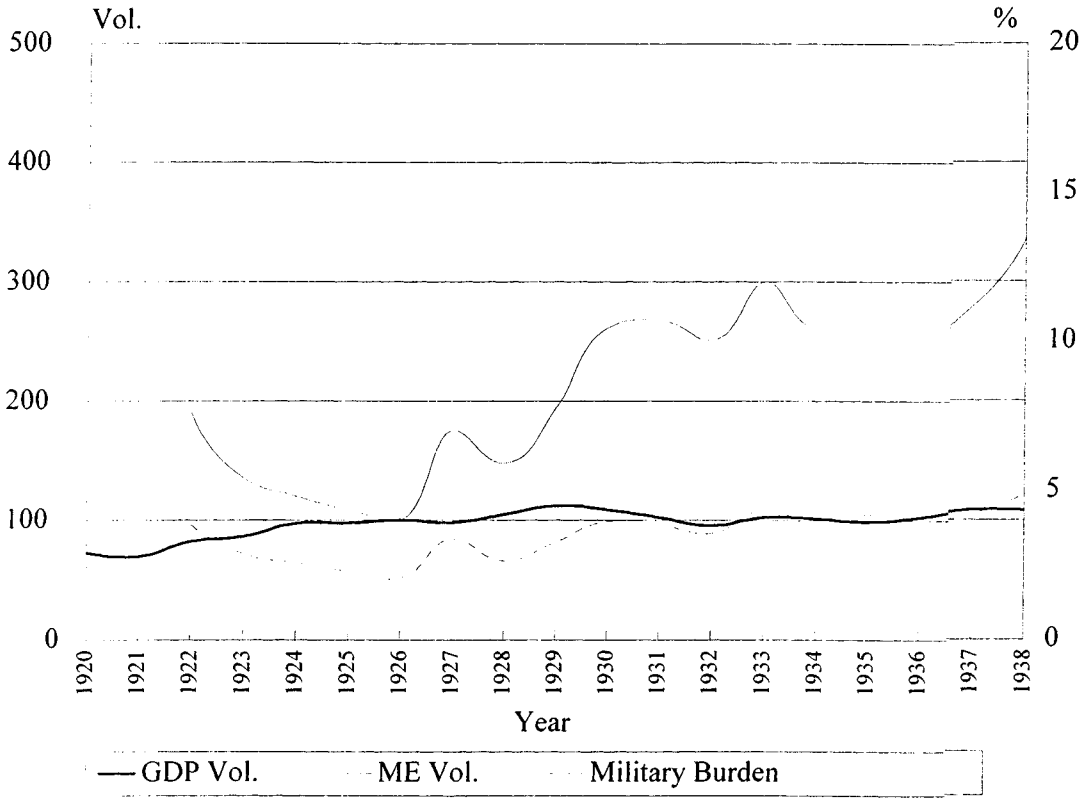
[197] See e.g. Stiglitz 1988, 41—42.

was modest in the 1930s, the military expenditures increased fast almost the whole decade. The same can be observed for the military burden (Figure 30). In the French case it would be possible to argue in the terms of the hegemonic competition that the economy could not withstand the military burden. But, as Paul Kennedy has pointed out, the economic weakening was irreversibly connected to the turmoil in domestic politics

Figure 30. Economic Development and Military Spending in France During the Interwar Period 1926=100



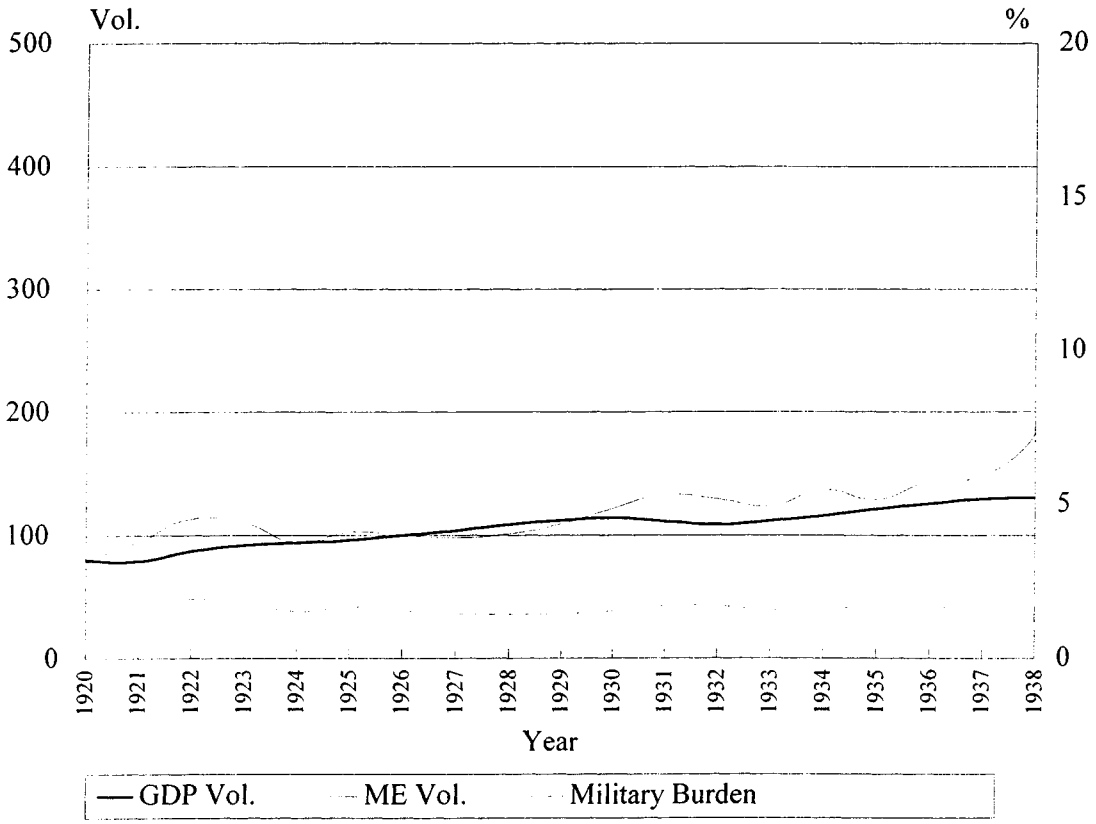
Sources: GDP volume from Maddison; ME volume and military burden, see Appendices for details.

in the 1930s: "As so often in French politics, all this affected civil-military relations and the standing of the army in society."[198] Furthermore, as we will argue later, this type of

[198] Kennedy 1989, 403—404.

interdependence between the society and the military establishment — as well as military spending — is not limited to the French case rather than is an essential part of any nation's behavior in dedicating resources for military purposes.

Figure 31. Combined Economic Development and Military Spending of the Small Nations (=Belgium, Denmark, Finland, Norway, Sweden) During the Interwar Period 1926=100



Sources: GDP volume calculated from the total of these countries GDP in 1990 Geary-Khamis dollars, found in Maddison 1995; ME volume calculated similarly from the sources listed in the Appendices, in 1926 Finnish marks; military burden is the average of these countries' military burdens, as listed in the Appendices.

What about the small countries selected for the comparisons in this thesis? After all, these countries were not included in Paul Kennedy's seminal study. First we must note, as we have seen earlier, that the threats experienced by these countries varied greatly. The position of smaller nations is of course quite different from the Great Powers. Small states could be understood equally well as "players" in the international power games and political blocks and/or possible targets for *lebensraum* among the Great Powers. The smaller nations were also important, especially in Europe, in the international trade competition. The overall economic development among them was quite stable and the impact of the Great Depression was not very long-lasting. Military spending (see Figure 31) increased slightly during the 1930s. However, military burden remained quite even throughout the decade. The obvious conclusion would be that they did not begin active rearmament until the last few years of the 1930s. Of course, there were significant differences between the approaches by the individual nations.

The 1930s overall development in military spending for all of these nations offers perhaps a pattern of hegemonic competition for economic and political resources, especially with the emerging totalitarian states increasing the international tensions. For example, France's poor economic development reflected strongly on the military spending. However, the rearmament efforts in most of the countries in these comparisons were intricately linked to domestic politics and the strong position of the domestic producers. Thus, we need to take a closer look at some of the factors — it would be impossible to present all of them — having an impact in the military spending of these nations.

4.2. Changes in the Role of the Central Government and Domestic Political Structures

It is important to take a closer look at the political upheavals of the 1930s as well as the changes in the role of the government, especially the growth of welfare functions, in order to broaden our analysis of military spending among these nations. Political power shifts within countries had profound impacts on the levels of military spending; in general, left-wing parties opposed high military outlays. The situation changed in some of the countries, for example in Finland, due to structural changes within the nations and the rise of external threats. It is also important to compare whether unstable domestic politics had an impact on military financing. Respectively, a divided political field dominated by a single party or parties within a country could have a profound effect on the military establishments. Also, the growth of government involvement in the sphere of economic matters made the rise in military expenditures at least partially possible — equally, the measures meant to lessen the depression often involved funding military rearmament by favoring domestic industries in the acquisitions as well as directly from the employment projects.

The interwar period consisted of drastic changes in the governments' attitudes towards the role of the government in economic life. For example, in the United States the Republican presidents of the 1920s were against large public expenditures. For example, Calvin Coolidge's (president 1923—1929) basic principles were resistance to war (as he considered it a waste of money), active pursuit of peace without politically "dangerous" entanglements, and showing off America as an example in combining peace and wise financial management.[199]

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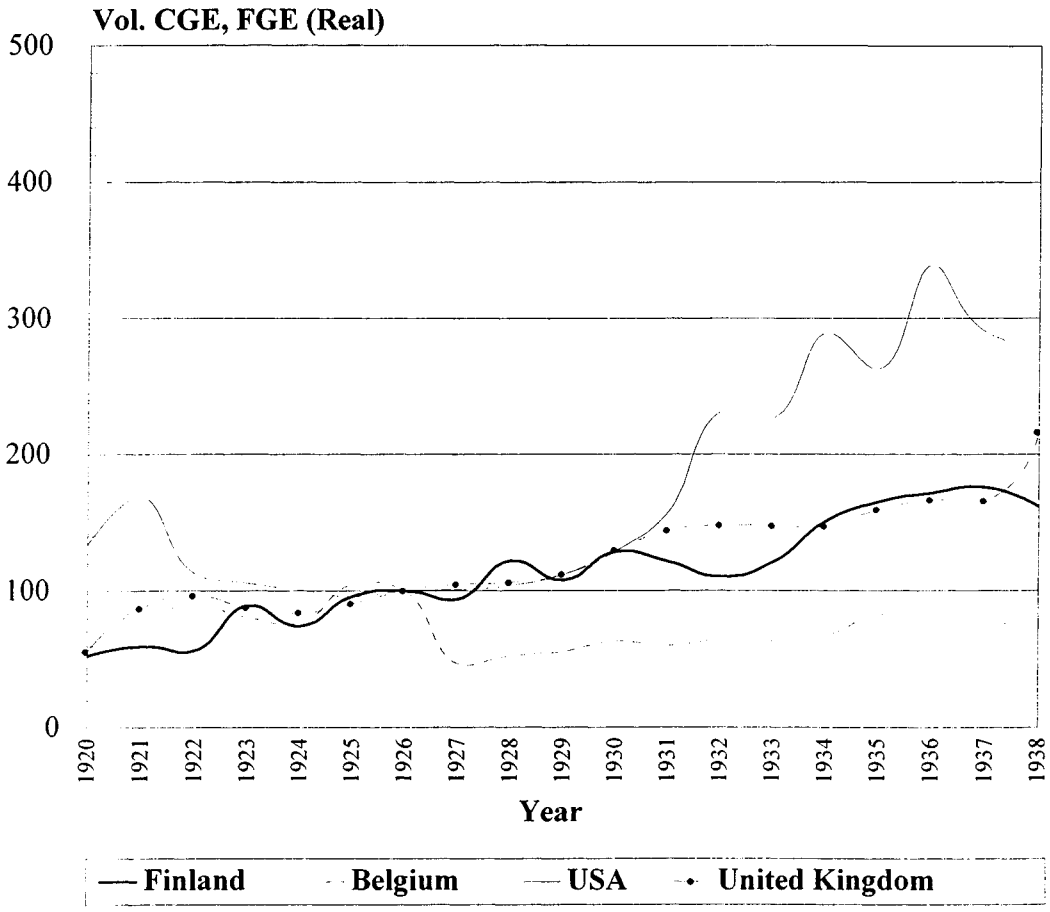
[199] McCoy 1988, 147—149, 168—170; Eloranta 1995.

Figure 32. Volume of Central Government or Federal Government Expenditures (CGE, FGE) in Real Terms in Finland, Belgium, USA, and UK, 1920—1938 1926=100



Sources: see Appendices, Series A.

Furthermore, in fighting the onset of the depression, the Hoover Administration merely tried limited investments in construction and such in order to re-establish confidence in business; thus initiating recovery. The election of Franklin D. Roosevelt and the beginning of the so-called New Deal signaled a change in the government's economic activity. Federal government expenditures and public debt continued on an upward trend,

even though Roosevelt was an ardent supporter of balanced budgets throughout the 1930s.[200]

The 1930s brought with it not only the Great Depression but a major political change within the United States. In order to understand the link between the role of the central government spending and military expenditures, we must first take a closer look at this transformation and its significance. Over a decade of Republican rule ended with the crushing victory of Franklin Delano Roosevelt in 1932.[201] When Roosevelt took over the presidency in March 1933, the country was on the verge of chaos: Circa 15 million workers were unemployed, industrial production was only 40 percent of its previous potential, every sixth family was dependent on relief, and countless of people were starving. Unemployment had already become even worse of a problem than the respective bank crisis.[202]

Roosevelt started a new period in American economic policies as the president's, and the government's in general, role became that of an active participant regarding economic, including employment policies, planning. This change of attitude was evident in Roosevelt's inauguration speech in 1933: "Our greatest primary task is to put people to work."[203] In essence the year 1933 represented the beginning of the actual New Deal and a new type of economic thinking in the United States.

The New Deal has inspired a tremendous amount of debate among historians and economists. It represented two primarily different approaches compared to the Hoover

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[200] Barber 1985, 80—83, 193; Kindleberger 1973, 262—263; Documents of American History 1949, doc. no. 496, 482—484. One of the better accounts of the New Deal is Leuchtenberg 1963.

[201] On political changes, see e.g. Burner 1968; Mayer 1964. See also Appendices, Series A.

[202] Leuchtenberg 1963, 18—19; Robertson 1973, 703; Fite-Reese 1973, 516.

[203] Documents of American History 1949, doc. no. 476, 421—422; Temin 1990, 297, 300; Barber 1985, 192.

Administration: new methods were seen to be necessary in order to control the economy — for example to prevent harmful competition — as well as by price controls the government hoped to prevent further deterioration in the ability to buy and deal with loan-payments.[204] The most significant of such efforts to regulate the economy was the National Industrial Recovery Act (NIRA), which came into effect in June 1933. This measure created the actual National Recovery Administration (NRA), which brought the whole national economy within government control. Some of the features of this law were the regulations for fair competition, workers' guaranteed right to get organized to achieve joint wage agreements, the legalization of price and production agreements, and the setting of a minimum wage.[205] NIRA's Title II concentrated on unemployment measures such as the creation of Public Works Administration (PWA), which was aimed at creating more jobs by increasing expenditures on public works projects thus increasing the demand on construction materials.[206]

Roosevelt's New Deal Administration tried to solve the most difficult problem, the unemployment, with several publicly funded projects. Congress had authorized the formation of Federal Emergency Relief Administration (FERA) in May 1933, which was granted 500 million dollars in order to ease the suffering in the form of both direct relief and employment projects (most of which were economically unproductive).[207] FERA was in essence not just Roosevelt's or a New Deal's employment program as such rather than a spontaneous attempt by the Congress to alleviate the immediate problems.

The first of Roosevelt's employment programs was the Civil Works Administration (CWA), which was founded in November 1933. By January 1934 it employed already

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[204] Barber 1985, 193.

[205] Fite-Reese 1973, 518; Documents of American History 1949, doc. no. 484, 451—452; Kindleberger 1973, 201—202. Leuchtenberg 1963, 53, 57—58; Temin 1990, 300.

[206] Documents of American History 1949, doc. no. 484, 454—455; Fite-Reese 1973, 518.

[207] Fite-Reese 1973, 516.

4,3 million workers, it was better organized than FERA, and it provided a regular amount of work hours weekly. CWA was terminated in July 1934 and the responsibility for the employment was moved back to FERA.[208] The unemployment rate was still very high[209], and a more efficient organization was needed to keep up with the situation. Thus, based on the Emergency Relief Appropriation Act, Roosevelt suggested the formation of Works Progress Administration in January 1935.[210] WPA, established the same year under the leadership of Harry Hopkins, was meant to employ as many of the unemployed as possible — the number of workers employed by WPA was at its highest over 3,2 million in 1938.[211] Civilian Conservation Corps (CCC) was one of the more specific programs of the early New Deal, which enabled about 500 000 young men to be employed in its camps by September 1935.[212]

During the year 1935 Roosevelt and the New Deal started to face an increasing amount of criticism, since the living standards of the "regular people" and the status of the economy had not improved significantly.[213] Many of the setbacks that the New Deal Administration suffered as the result of numerous Supreme Court rulings forced them to re-evaluate their policies.[214] Generally, New Deal was viewed much more critically than before, and the various opposing groups had gained some momentum.[215] By the spring of 1936 even the most basic New Deal programs had begun to face difficulties[216], and

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[208] Fite-Reese 1973, 516; Leuchtenberg 1963, 120—122.

[209] See for example Jensen 1989.

[210] Leuchtenberg 1963, 123, 125; Fite-Reese 1973, 517.

[211] Leuchtenberg 1963, 125; Fite-Reese 1973, 517.

[212] Leuchtenberg 1963, 174; Fite-Reese 1973, 517; Fusfeld 1956, 248, 255; Jensen 1989, 572.

[213] Leuchtenberg 1963, 94. Even though the situation had improved somewhat, millions were still unemployed. The recovery proved to be a slower phenomena than expected. Also, see Jensen 1989 and Robertson 1973, 706—707.

[214] Leuchtenberg 1963, 145—146.

[215] Leuchtenberg 1963, 98—106. Roosevelt faced his toughest competition from even more radical candidates, such as Huey Long and Charles Coughlin.

[216] Leuchtenberg 1963, 231—232.

therefore Roosevelt ended up trying the so-called Judicial Reform, which failed for its most parts.[217]

Even though Roosevelt and the original New Deal had ended up in trouble in the beginning of 1935, Roosevelt managed to come up with a new agenda by the summer of 1935: the so-called Second New Deal. Among the important measures of this program were the Social Security Act, the Wagner Act, the National Youth Administration etc.[218] For the unemployed the Social Security Act was particularly important, since it tried to create a system of unemployment benefit. The states were supposed to get support from the federal government, but the system proved to be inadequate.[219] The Social Security Act had to face the Supreme Court's rulings on many occasions, but it stood its ground in all of them.[220] As NRA was found to be unconstitutional, the Wagner Act replaced it and created the National Labor Relations Board (NLRB), which examined complaints, settled disputes etc. The National Youth Administration (NYA) was responsible for creating part-time jobs for those students who would not be able to study without some financial assistance.[221]

The presidential election in 1936 described very accurately the different types of solutions perceived in fighting the unemployment and depression. Some of the themes of the Republican Party were a total opposition of Roosevelt's New Deal, the securement of

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[217] Documents of American History 1949, doc. no. 515, 562; Leuchtenberg 1963, 232—238.

[218] Leuchtenberg 1963, 162—163. The nature of this "Second" New Deal was quite different from the first one — it did not try to achieve control over the economy anymore rather than try to provide some regulation concerning its defects. The Supreme Court had a profound impact on this newly developed caution.

[219] Documents of American History 1949, doc. no. 503, 508; Leuchtenberg 1963, 132.

[220] Documents 1949, doc. no. 503, 504, 505, 512—513, 514, 519. This law was especially tested on its parts dealing with taxation (Title VIII, IX), for example in cases like Steward Machine Co. vs. Davis 1937 and Helvering et al. vs. Davis 1937.

[221] Documents of American History 1949, doc. no. 500, 493, 495, 498. NLRB was just as successful in the Supreme Court as was the Social Security Act.

Supreme Court's position, and the returning to free competition in American society. As for the cures of unemployment, Republicans simply stated that the "invisible hand" would take care of the problem.[222] The basic idea behind their election themes was a return to the "old" system, without any restrictions, limitations, or controls on the economy. For the Democrats, the most important themes in their Party Platform were the protection of families and homes, equal opportunities for all, and the alleviation of people's suffering by continuing the New Deal. They saw unemployment as a national problem which could solved by organizing federal (and also state-sponsored) employment projects until the economy improved.[223].

What was the significance of these employment programs for the military establishment? First of all, they represented a major change in the role of the federal government in American economic life. Roosevelt's efforts also increased the actual federal government spending, as we saw earlier. This change, and especially the unemployment projects, altered the framework for military funding in the United States in the 1930s. As we have reviewed earlier, the American Army and Navy both faced diminishing funding during the depression decade. How then can it be possible that the domestic armaments industries retained their productive capabilities, unlike in the case of Great Britain?

It is important to note that the Navy's, for example, rermament drive in the United States was funded from the NIRA funds in the mid-1930s. The Army received plenty of indirect benefits from the New Deal building and employment programs as well. Roosevelt's election for a second term in 1936 enabled him to pursue his purposes with

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[222] Documents of American History 1949, doc. no. 508, 533—534.

[223] Documents of American History 1949, doc. no. 509, 536, 539, 540. Roosevelt and the Democratic Party achieved easy victory in the election, partly because they put their emphasis on the most important problem at hand (unemployment). On the other hand, Roosevelt's Second New Deal in 1935 had increased his popularity once again. See also Leuchtenberg 1963, 195—196.

greater confidence, although this applied mostly to military matters. Early in 1937 he gave instructions to start work on two new battleships as well as inquired what else would be needed. As Stephen Roskill has noted: "Obviously he had a further, and major expansion in mind." Also, the Congress viewed the rearmament drive more favorably as the Japanese threat grew in the late 1930s.[224]

The United States' economy did begin a noticeable upward surge in 1936, which was mainly caused by veteran's bonuses and a growth in production achieved by higher wages; both of these elements stimulated the economy. This temporary recovery turned out to be a bubble that burst in 1937 and led the country back into depression.[225] The economy did not start actual recovery until from 1938 onwards which occurred partly because of the new recovery program and partly because of the increased demand in war industry caused by the threat of war.[226] The role of the Second World War was, to say the least, substantial in eliminating unemployment, since over 12 million men were called to arms.[227] However, the American military production enjoyed the benefits of the new international armaments boom and it was ready to face the challenges of the looming crises.

In Britain the public authorities expenditures continued to grow throughout the time period. The percentage share of public expenditures of GNP remained almost the same; only slight growth occurred. The only notable increase took place during the latter part of the 1930s. One reason for this must have been the relatively "good" performance of the British economy during the Great Depression. Some growth pressures relating to the

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[224] Roskill 1976, 177, 361—364; Fogelson 1989, 196—198; Smith 1959, 124—125.

[225] Kindleberger 1973, 262—263, 271—275; Robertson 1973, 706—708. Before the recovery program of 1938 investments and deficit spending in Keynesian fashion was not accepted by the New Deal Administration; see e.g. Documents of American History 1949, doc. no. 496, 482—484.

[226] Robertson 1973, 708; Kindleberger 1973, 275—276.

[227] Higgs 1992, 41—43; Robertson 1973, 709—710; Jensen 1989, 578—581.

machinery to lack an effective body dedicated to improving the status of the military establishment, let alone concentrate on strategic issues.[230]

What about the small countries; can we observe similar changes in their domestic politics? The Belgian foreign relations in the 1930s were dominated by an ambivalence in dealing with the unsure alliance with France. This ambivalence combined with France's assumptions of continuity in military cooperation and King Leopold's active policy of avoiding political commitments led Belgium to neutrality in 1936. These foreign policy issues were intricately linked to the domestic political debates on the military outlays and the size of the armed forces. The Belgian political life in the 1930s was dominated by the Depression and economic hardship, which caused domestic political tensions. The rise of nationalism (Flemish Nationalists) and outright fascism (the Rexists) only heightened internal unrest (see Series A. Table 2, Appendices).[231]

The mid-1930s were a time of new economic policies in Belgium, including measures like devaluation, the lowering of taxes, increased government control over banks, and extensive public works projects. By this time national defense was among the politically most volatile issues in Belgian politics. The underequipped Army was further confused by quarrels within the military establishment over doctrine and between the civil and military leaders over leadership. The divisive influence of nationalism was also a part of these power struggles. Belgian political history after 1935 has been characterized as a "time of crisis".[232]

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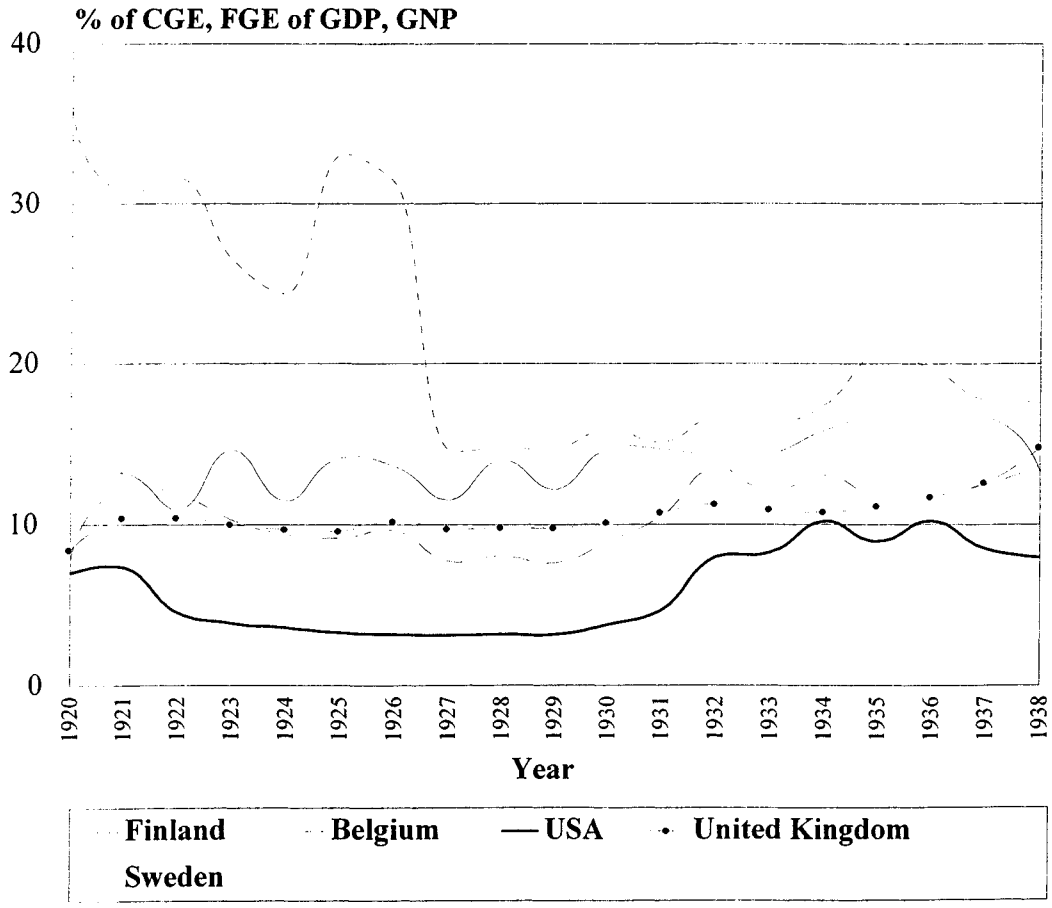
[230] Kennedy 1989, 403—405. For interesting contemplations of right-wing militarism, see e.g. Military Intervention in Democratic Societies 1985; Pinkney 1990. On the Maginot-line and public works, see Pearton 1982.

[231] Kieft 1972, 9—20, 31—32, 36.

[232] Kieft 1972, 39—45; Kossman 1978, 645. On the public sector, see Clement 1995.

Of the political field in Belgium the Liberals and the Conservative Catholics were in favor of increasing military expenditures. Primary opposition came from the Socialists and Flemish Catholics. The Socialists argued that the level of spending and the number of troops ought to be kept the same instead of increases. The Flemish Catholics were committed to the idea of federalism and nationalism and distrusted the idea of 'integral defence of the frontier'. Rexism, which arose almost out of nothing in the 1930s, was not militaristic by nature, compared to some of the other ultra right-wing parties in

Figure 33. Percentage of Central Government Expenditures or Federal Government Expenditures of GDP or GNP in Finland, Belgium, USA, UK, and Sweden, 1920—1938



Sources: see Appendices, Series A.

Europe. Overall, the mixed nature of domestic politics, even though the rise of Rexism turned out to be temporary, made it difficult to pass any laws concerning higher military commitment. Even the lengthening of the military service was not achieved until years of debate in late 1936. Part of this process was the return to neutrality, which was politically the only viable alternative at the time.[233]

Finland of the 1920s experienced the neoclassical principle of reducing government involvement gaining popularity in policy-making. During the 1930s efforts were made in order to reduce the overall amount of public spending. These aims were only partially met. All in all, though, central government expenditures continued to rise almost yearly from their low point on in 1932. During the first year of war, 1939, the percentage share of these expenditures reached an all-time high of 22,3 percent.[234] Finland's efforts in restraining the growth of the central government expenses were almost equally as unsuccessful as the Roosevelt Administration's efforts were in maintaining a balanced budget.

The other small countries —Denmark, Sweden, and Norway — with Belgium being an exception were similar to Finland in this respect: there was a modest rise in central government expenditures to higher level after the Great Depression. In Belgium the central government expenditures dropped significantly after 1926, and stayed at a lower level until the Second World War. Reasons for this included the monetary crisis of 1926 and more cautious government ventures.[235] The First World War meant a rupture with the previous period of liberalism in Belgium. The first social reforms were introduced after

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[233] Kieft 1972, 43—48, 87—95, 129—131, 147—150; Kossman 1978, 570—571. See also Fitzmaurice 1996.

[234] Pekkarinen-Vartiainen 1993, 96—102; Ahvenainen-Vartiainen 1982. See also Eloranta 1996 and Taimio 1986 — the earlier studies have overestimated the level of central government expenditures in the 1920s. On Finnish government loans, see Hjerppe 1997.

[235] Mommen 1994, 9—11. Buyst et al. 1995. For a recalculation and re-interpretation of Belgian public finances, see Clement 1995.

the war. The interwar period for the Belgian government was marked by monetary instability, high public debt, and speculation against the Belgian franc.[236] Significant is also the abnormally high percentage share of these expenditures of GDP after the First World War. In Norway actually both the volume and the percentage share of central government expenditures decreased in the 1930s.[237] Overall, however, the central government expenditures grew among the smaller nations in the 1930s, especially towards the end of the decade.

In Sweden, the least export-dependent of the Nordic countries[238], the 1920s was a period of instability and minority governments with unemployment as the main issue in political discussions. This situation changed in 1932, when the Social Democrats and the Agrarian Party began cooperating with each other. The first coalition government was formed in 1936 and the first of the corporatist agreements between the trade unions and the employers federation was reached in 1938. The 1930s represented a totally new period in the development of the Swedish public sector — among the new policies there were state employment creation programs, state subsidies to voluntary (trade union) unemployment benefit societies, a housing program for families with many children etc. The level of state involvement was unprecedented compared to the previous decades. At the outbreak of the Second World War, the Social Democratic/Agrarian government was replaced by a broader coalition with Per Albin Hansson, the creator of the Swedish "folkhemmet"-ideal, still as the prime minister. Four of the five parties represented in the parliament were involved in the cabinet with support of over 95 percent of the electorate. The Social Democratic party reached practically a hegemonic position in the Swedish society by the end of the 1930s.[239] This integration of the Swedish society en-

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[236] Mommen 1994.

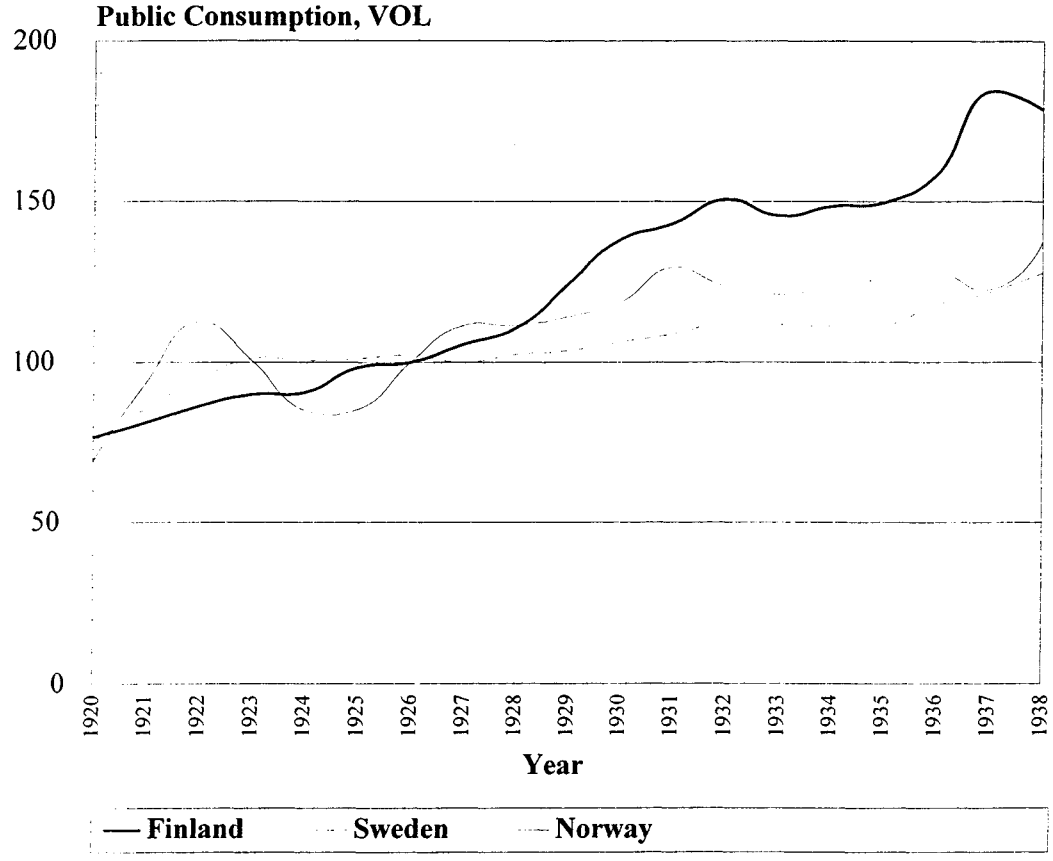
[237] See Eloranta 1996 for details.

[238] See Hodne 1994.

[239] Olson 1986, 5—6; Rojas 1991, 70—73. On longer term comparisons, see e.g. Eloranta 1997c.

abled tight cooperation between the state and the private industries in the rearmament effort of the late 1930s[240]

Figure 34. Volume Indices of Public Consumption in Finland, Sweden, and Norway, 1920—1938



Sources: see Appendices, Series A.

The 1930s, however, did not yet impose radical increases in public consumption[241] in Sweden. The reform measures of the 1930s, as Mauricio Rojas has astutely pointed out,

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[240] See Olsson 1982.

[241] Public consumption includes wages, employer's social security payments, depreciation of capital and rents (these equal the *value added of the public sector*), goods bought. However, it excludes the sale of goods to other sectors. As Hilkka Taimio (1986) has shown, only circa ten percent of public consumption

were "nothing spectacular", and for example total public expenditure did not exceed the German, British, or Danish level.[242] This decade could be characterized as a decade of welfare state planning in Sweden, yet not a time of actual growth. As we can see in Figure 34, the Finnish public sector service production growth was considerably stronger during the interwar period, especially in the 1930s.[243] The Swedish public consumption developed very evenly throughout the interwar period, compared to for example Finland or Norway. However, in Finland and Sweden the 1930s consisted of increases in public consumption, whereas in Norway public consumption stagnated, at least until after mid-1930s. What was different about the Norwegian case?

During the period between the end of the First World War and 1935 very little happened in Norway in regards to social reforms. The second half of the 1930s, which is also displayed in Figure 34, was a time of marked social reforms. The reasons for this change included a new government (Labour Party reached over 40 percent of the votes in the parliamentary election of 1936), improving economy, and a newly-developed consensus among the parties on the development of social policy. Similarly to Sweden, a corporatist agreement between the trade union confederation (LO) and the Norwegian Employers' Association (NAF) was reached in the mid-1930s.[244] In Denmark the so-called Great Social Reform of 1933 represented a rationalization of the previous acts on the field of social policy. The reform of 1933 in itself was not altogether revolutionary

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is usually sold; thus, it could be said that the value of public services production is almost equal to the public consumption. Public consumption expenditures include such services as general administration and national defense, education, health care, and other social services. *Central government aggregate expenditures* consist of consumption expenditures, transfer expenditures, investment expenditures, and other expenditures. For example, in Finland in 1920 public consumption equaled almost 614 million FIM, whereas central government aggregate expenditures were over 1760 million FIM. See Taimio 1986 for more, as well as Eloranta 1997a.

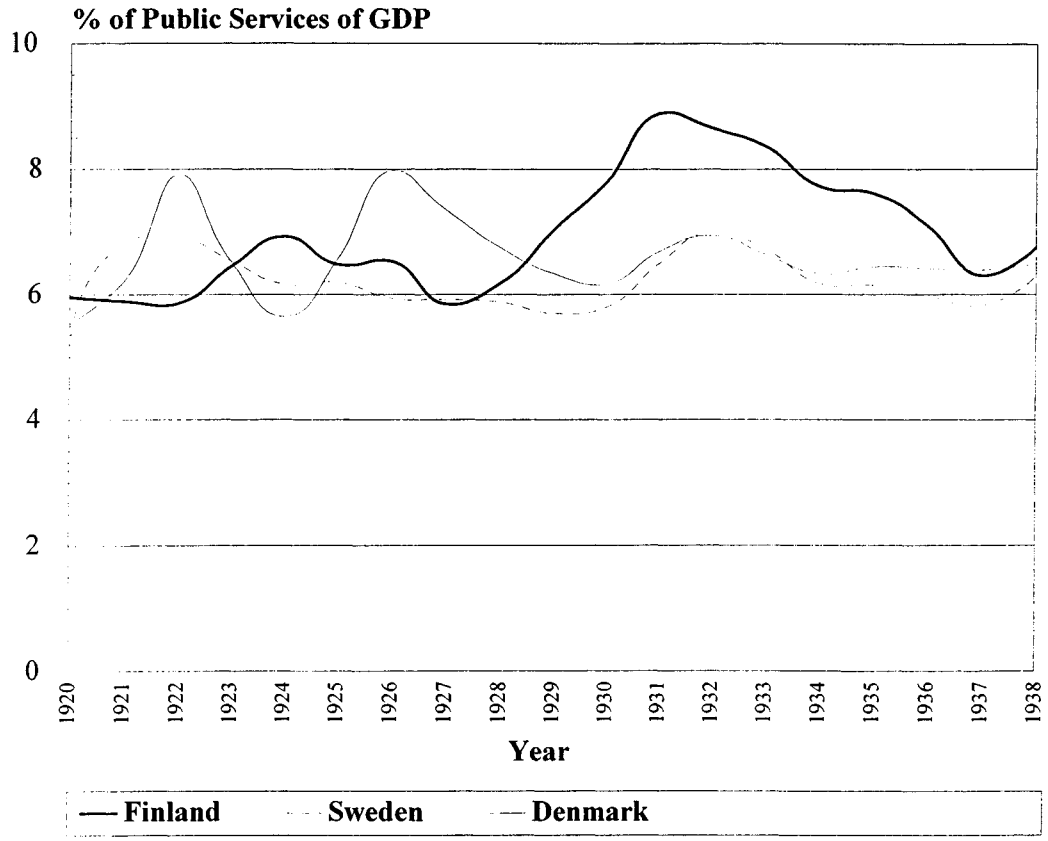
[242] Rojas 1991, 73.

[243] Naturally the actual (in real terms) levels were much smaller in Finland than in Sweden.

[244] Kuhnle 1986, 120—121; Fagerberg et al. 1990, 62—64.

rather than political effort of the Social Democratic government, with Radical Liberals, to codify the development within the social policy.[245]

Figure 35. Percentage of the Value Added of the Public Sector of GDP in Finland, Sweden, and Denmark, 1920—1938



Sources: see Appendices, Series A.

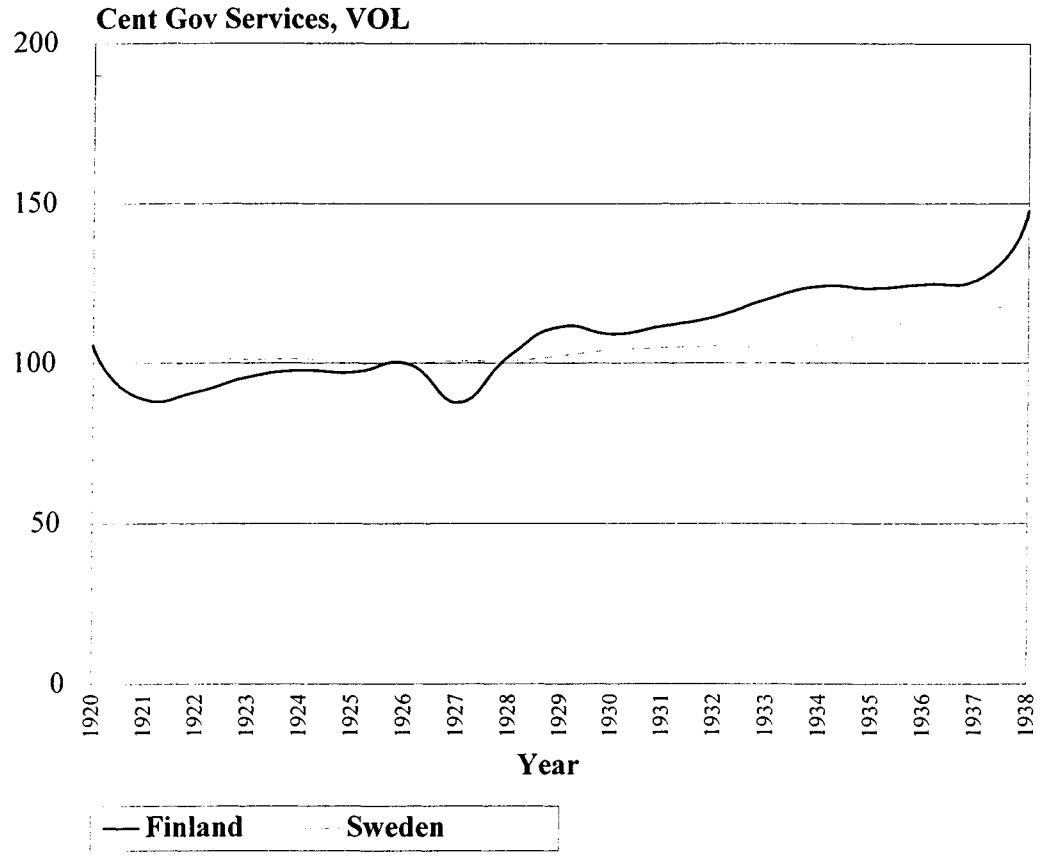
As we can see in Figure 35, the percentage share of the public services[246] production varied greatly during the interwar period. The Finnish public sector growth was noticeable from the late 1920s to the early 1930s. After that the depression seems to have

[245] Johansen 1986, 299—300.

[246] See the earlier definition of the valued added of the public sectro or see e.g. Eloranta 1997a.

stopped this growth trend. Thus, the strong GDP growth of the 1930s in Finland did not benefit the public sector on the whole, especially in the late 1930s. The overall level was, however, higher in the 1930s than in the 1920s.

Figure 36. Volume Indices of the Value Added of the Central Government in Finland and Sweden, 1920—1938

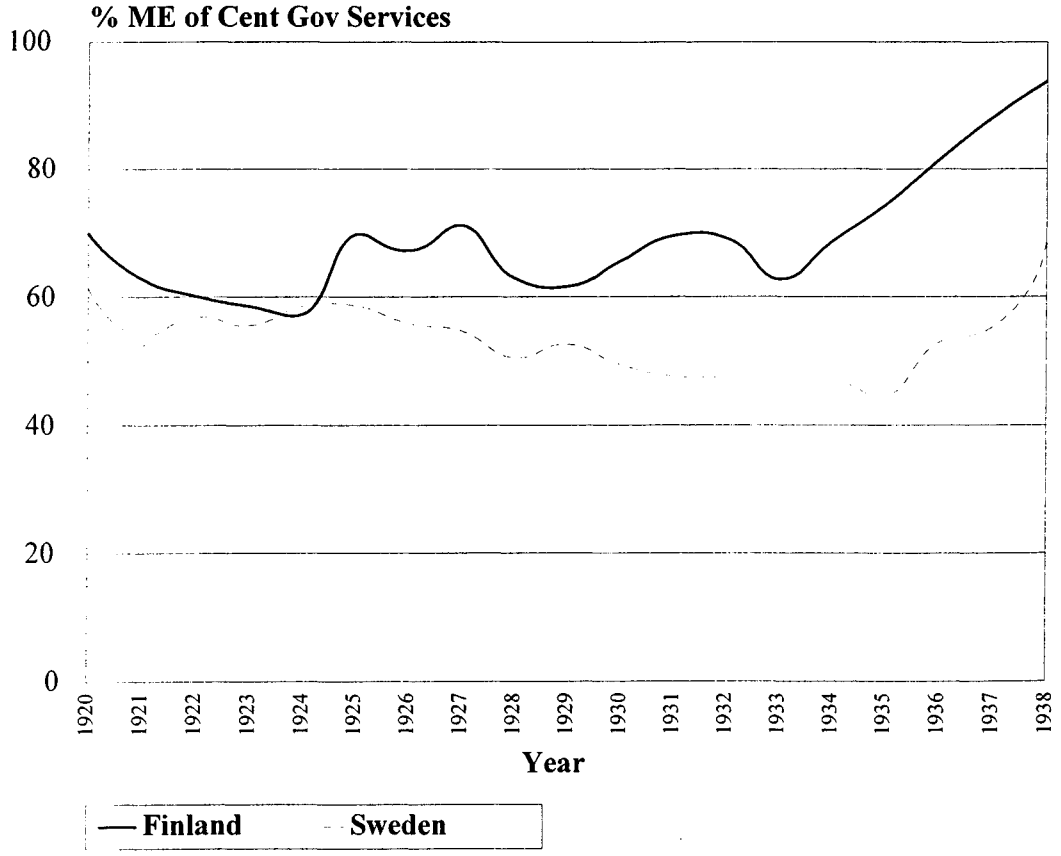


Sources: see Appendices, Series A.

Sweden experienced also strong GDP growth in the 1930s, and a somewhat similar pattern as in the case of Finland can be detected. The depression cut short the public sector growth in relation to the GDP in the early 1930s. In the Danish case there are interesting fluctuations in this level in the 1920s. Also, the 1930s were a time of lower

level of public sector value added in relation to the GDP. Similarly, in Figure 36 we may observe that the central government value added grew in both Sweden and Finland, with the Finnish growth performance as much stronger than the Swedish.

Figure 37. Percentage of Military Expenditures (ME) of the Value Added of the Central Government in Finland and Sweden, 1920—1938:



Sources: see Appendices, Series A.

The Finnish "welfare state" building, which may be an overstatement in regards to Finnish development in the 1930s, was slow during the interwar period. The political and social division caused by the Civil War of 1918 affected social policy legislation as well. Among the few acts of the 1920s was the act prescribing a compulsory eight year

period of education, although it was not implemented until the late 1930s. In financial terms social legislation was not extensive. In the 1930s the role of state increased, especially in economic policy matters, only to decrease in the late 1930s.[247] The more cooperative stance of the Social Democratic party (for example, towards military legislation) as well as the re-integration of the Finnish society were much more influential features of the 1930s Finland than the welfare state measures.[248]

Figure 37 displays that the percentage share of military expenditures of central government value added[249] increased from the early 1930s onwards in Finland. The rearmament measures of the 1930s pushed the military expenditures to grow strongly in comparison with the central government value added. In Sweden, however, the disarmament measures and the new social programs caused this share to decline in the 1930s, at least until the very end of the decade.

4.3. The Development of Military Personnel and the Rearmament of the 1930s

The number of military personnel is quite naturally an important measure of how the military establishment develops, especially respective of the country's military spending. It should be noted that of these countries all but the United States and United Kingdom based their military force on conscription. A paid military force was more costly for these two countries yet it was a necessity for them after the First World War due to the strong anti-war sentiments and the lack of tradition in conscription. For smaller countries conscription was also a necessity in the interwar period.[250]

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[247] Alestalo-Uusitalo 1986, 200—201. See also Hjerppe 1988.

[248] See e.g. Tervasmäki 1964.

[249] This comparison is less descriptive than comparing military spending to central government aggregate spending, because the value added of the central government does not include the purchases of goods and services as well as e.g. transfer payments. See Taimio 1986 and Hjerppe 1988 for details.

[250] Eloranta 1996; Eloranta 1997c. See also Conscription 1968 — here this book is used only for

Great Britain remained committed to a voluntary military force long after other European powers had applied conscription, which was perhaps connected to the lack of land frontiers. The opening years of the 20th century, however, brought with them growing support for conscription, partly due to the heightened international threats and partly due to "the determined propaganda of a powerful aristocratic-military pressure group".[251] Conscription was finally enacted with the Royal Assent to the Military Service Act of January 27, 1916, which was in effect during the war. Conscription was not put into effect until 1939, after an interval of about twenty years, when Military Training Act established compulsory full-time military training for six months with obligations as militiamen for a further three and a half years.[252]

The United States had not had a conscription law before the First World One since the Civil War. In 1917 the president was authorized to draft all male citizens or non-enemy aliens applying for citizenship, for military service. The Act of May 18, 1917 was repealed in 1919. The next conscription law was not enacted until 1940, when the Selective Training and Service Act of September 16, 1940 was passed, only a year before the United States entered the Second World War.[253]

Belgium had a long history of universal conscription dating to 1870 of which the conscription laws of 1923 and 1928 (one year service for the first term) were a part of. The Military Law of 1937 made all male subjects liable to a period of compulsory military service of 17 months followed later by a period of 12 months and 13 years in the reserve.[254] Finland, who had to create armed forces on the basis of the White Army victo-

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information on conscription practices.

[251] Conscription 1968, 54.

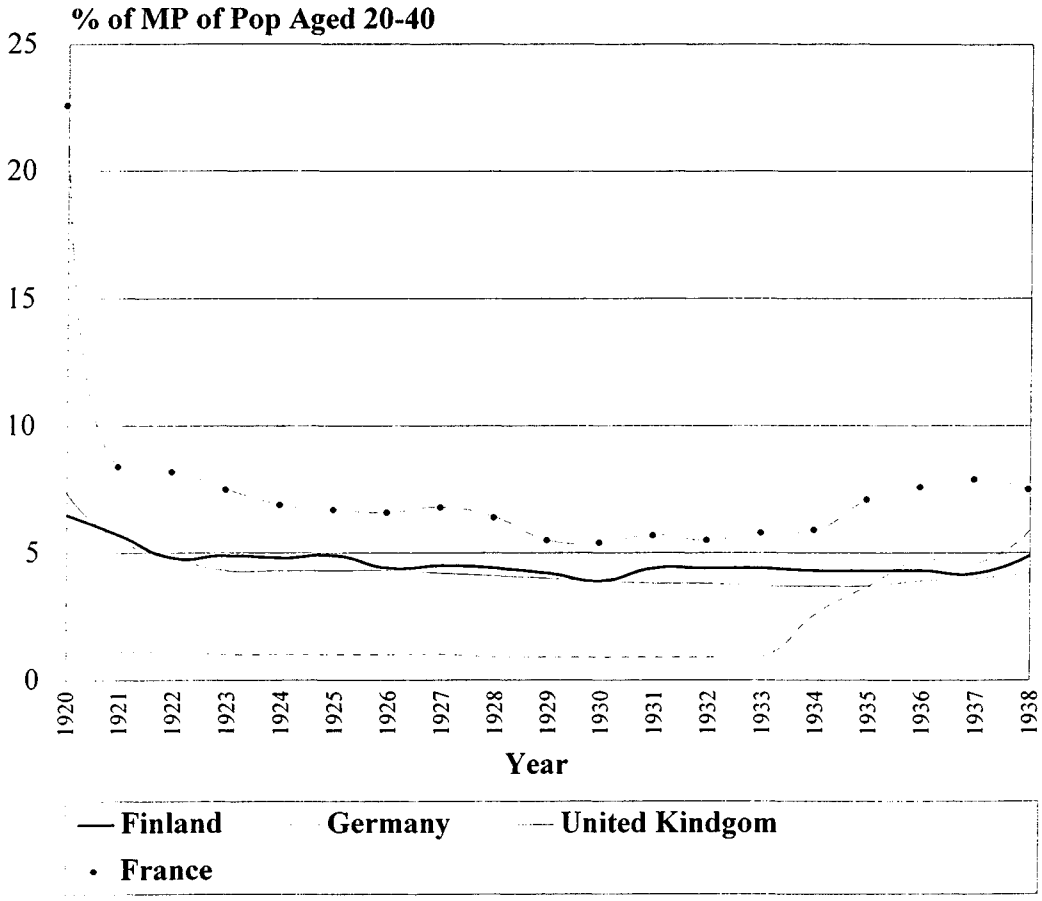
[252] Conscription 1968, 55—57.

[253] Conscription 1968, 139—140.

[254] Conscription 1968, 12. Belgium's shorter service in the 1920s has been criticized, see Kieft 1972.

rious in the Civil War of 1918, obliged all citizens fit enough to be duty-bound to take part in the military service.[255]

Figure 38. Percentage Share of Military Personnel (MP) of Male Population Aged 20—40 in Finland, Germany, UK, and France, 1920—1938



Sources: see Appendices, Series B.

The size of the military force is important in trying to estimate how military expenditures were allocated. As Figure 38 displays, the French army[256] was the largest of the

[255] On Finnish conscription laws, see chapter 5 for details.

[256] On the specific concept of military personnel referred to here, see Appendices for details.

countries compared here. The Finnish and the British armed forces were very similar in size throughout the interwar period. Germany's, which has been included in Figure 38 in order to display the sharp rise in the size of its armed forces in comparison with the countries included in this study, number of military personnel increased dramatically in the 1930s. Only France followed the suit, and even at that very half-heartedly. In general the size of military personnel in these countries declined especially in the 1920s until they leveled out in the 1930s. Some of the reasons for this development were the tighter budget control and the deep depression of the 1930s.

What was the development within the military establishment like in a Great Power such as France? The impact of the horrors of the First World War resulted in massive resignations among the officers of the upper classes in France, partly influenced by the strong peace movement of the 1920s. Other reasons included the ever poorer pay influenced by the economic instability of the 1920s. In the 1930s the French Army was greatly affected by the power struggles between the civil administrators and the military officers: the Ministry of War and the General Staff.[257]

At the end of the First World War the United States had circa 3,5 million men in arms. The peacetime military policy was defined in the National Defense Act of 1920, which specified the peacetime Army not to exceed 280 000 men. In addition, the men in the National Guard were supposed to raise this figure by 425 000 men. The size of the interwar Army did not come close to these specifications. The lack of funds together with the limitations placed upon it by the appropriation acts' definitions ensured merely an "army of a dream": National Guard units were seldom to achieve even half strength and the Army was cut down to 119 000 men in 1927. For the bulk of the period Army strength was around forty percent of the target expressed in 1920. These developments

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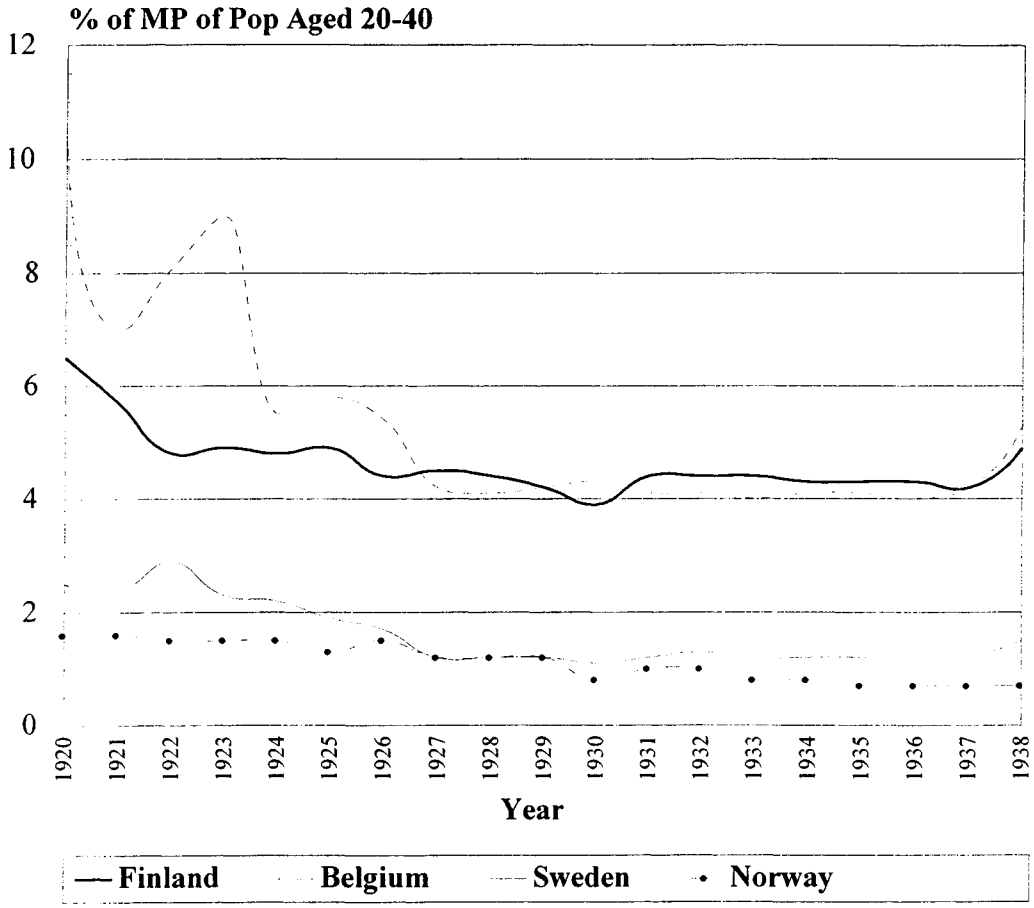
[257] Horne 1984.

meant an attrition in the size and readiness of the interwar Army.[258] How about the military establishments of small nations, such as the Nordic countries?

Figure 39. Percentage Share of Military Personnel (MP) of Male Population Aged 20—40 in Finland, Belgium, Sweden, and Norway, 1920—1938



Sources: see Appendices, Series B.

The development among the small nations was very similar to the Great Powers, as seen in Figure 39. In Finland and Belgium, which had considerably larger number of military personnel, the relative size of armed forces declined in the 1920s only to even out at

[258] Smith 1959, 121—123; Eloranta 1995, 41. On American officer training, see Masland-Radway 1957.

little over four percent in the 1930s. In Sweden and Norway this decline lasted for most of the period, although admittedly the decline was slower in the 1930s.

In all of the Nordic countries the regular forces were supplemented, to varying degrees, by politically conservative either secret or semi-legal security forces. These forces were intended to ensure the conservative political order and the status of the military establishment against the impeding advances of socialism and revolution. According to Nils Ivar Agøy, two characteristics of these military security measures were striking: namely their size and durability. These forces imposed a considerable burden on the military establishments as well. Mostly the military officers felt neglected and humiliated by the political leaders as disarmament measures were passed, which in turn contributed to the support for more secretive armed troops.[259] Whereas in the other Nordic countries these security forces mostly faded away in the wake of rising external threats of the 1930s, in Finland the right-wing Civic Guards formed an important part of the military establishment, although only part of the funding came from the Finnish central government.

The Civic Guards were not formally recognized, due to strenuous resistance from the political left, until the Civic Guard Act of 1927. However, in the 1930s the Civic Guards formed an important part of the armed forces' mobilization system in Finland.[260]

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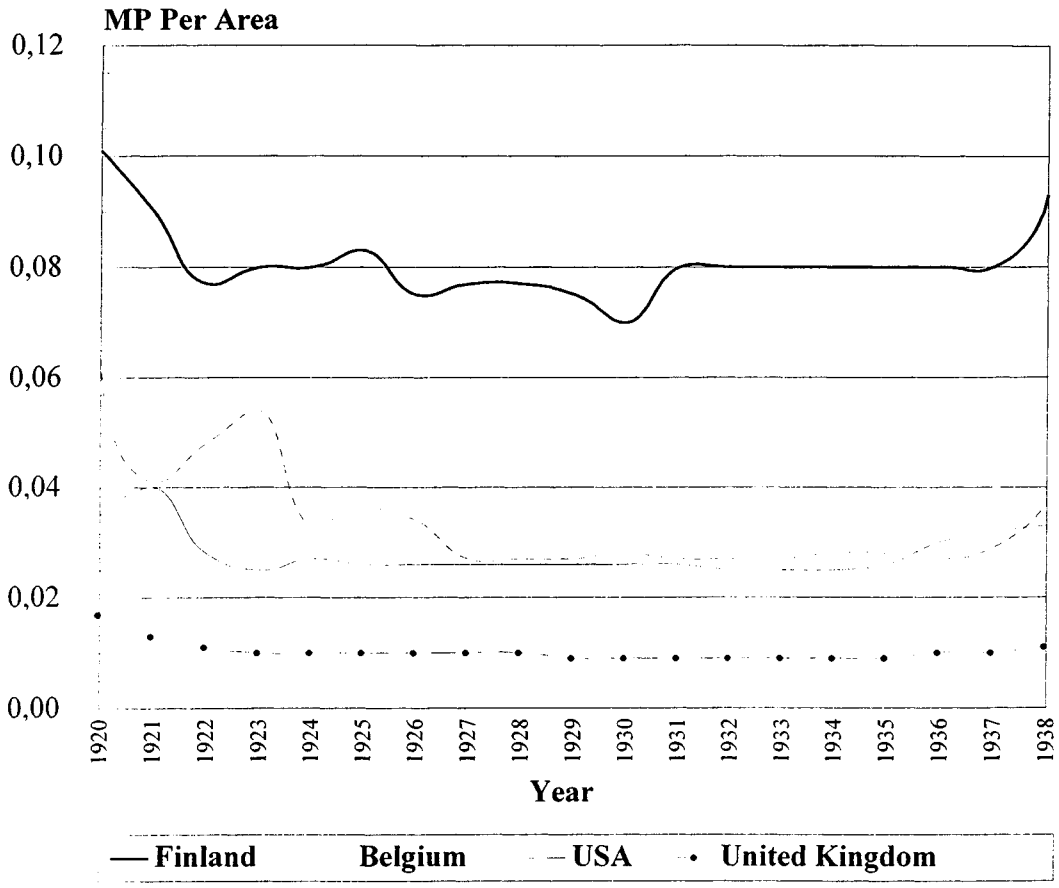
[259] Agøy 1996.

[260] Kronlund 1990; Jääskeläinen 1973, 140—141; Tervasmäki 1964; Raikkala 1964.

Figure 41. Military Personnel (MP) Per Area (Including Colonial Possessions) in Finland, Belgium, USA, and UK, 1920—1938

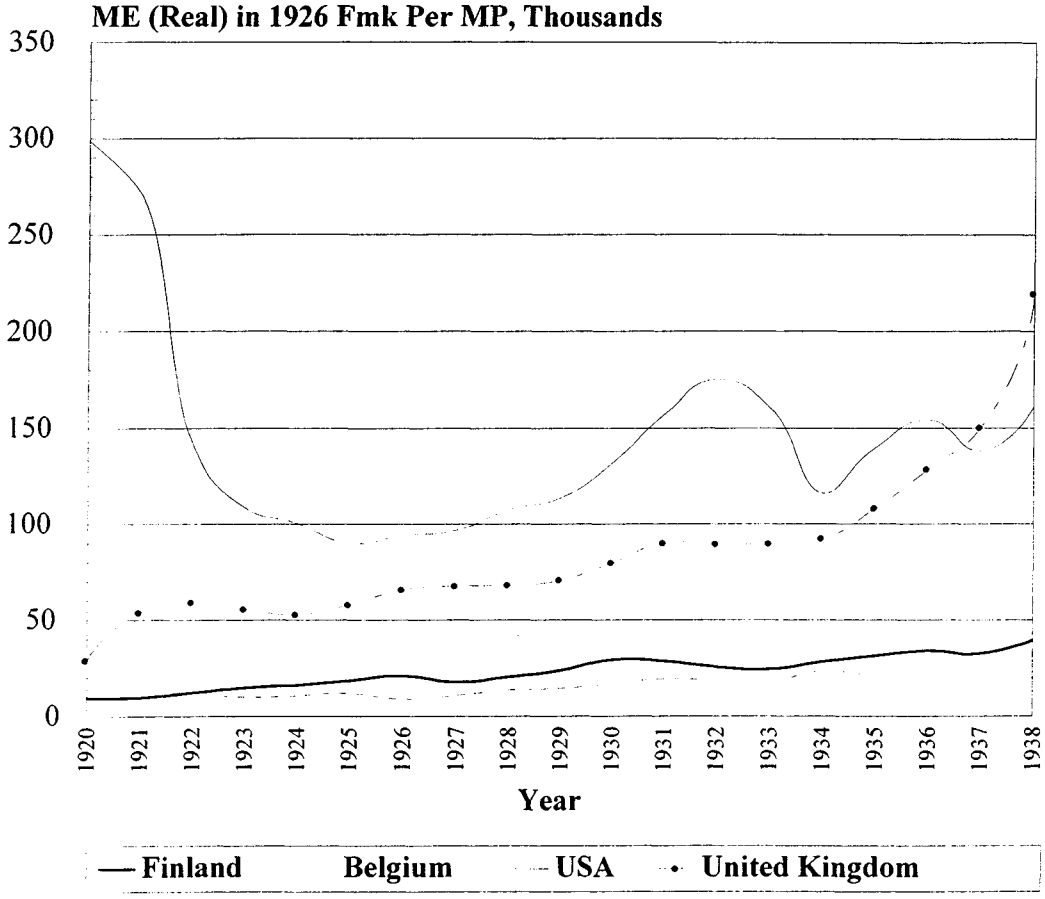


Sources: see Appendices, Series B.

comparisons. The population densities Belgium and Great Britain are considerably different this comparison: 7,7 and 13,1 persons per square kilometer respectively in 1926. The Finnish share seems to be comparatively quite high.[261]

[261] The figures were calculated by using the sources listed in the Appendices.

Figure 42. Military Expenditures (ME) in 1926 Finnish Marks Per Military Personnel (MP) in Finland, Belgium, USA, and UK, 1920—1938

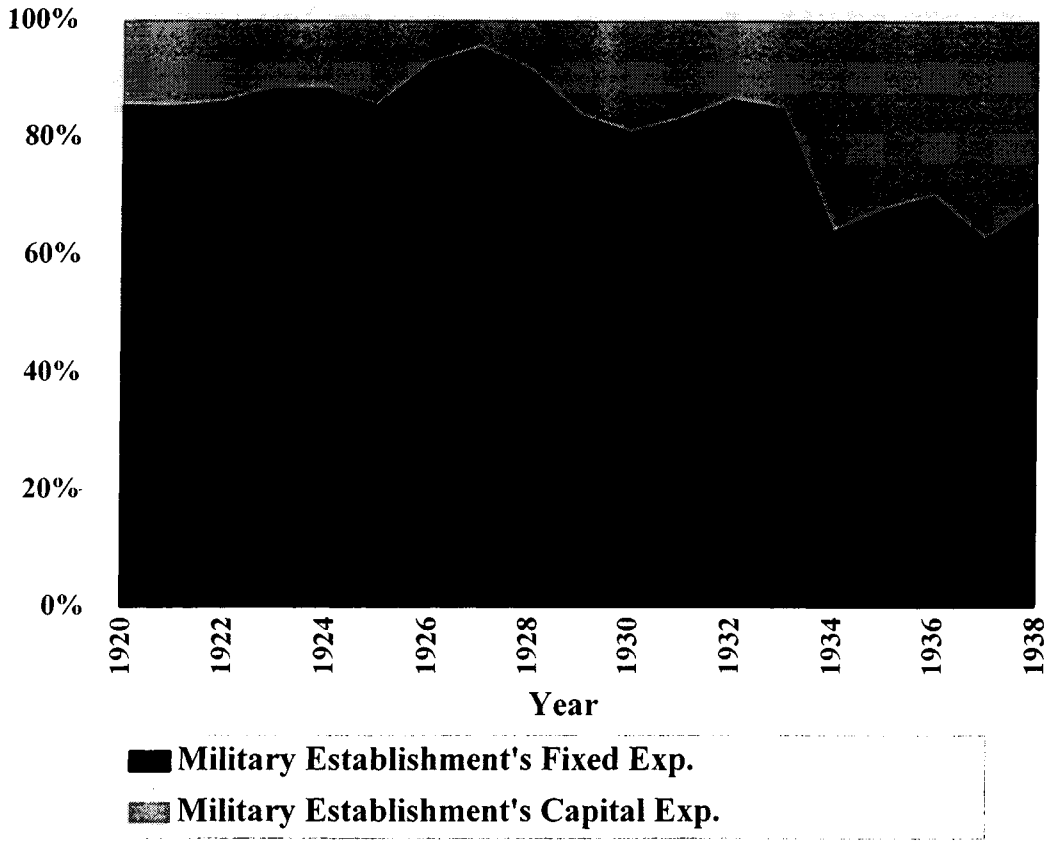


Sources: see Appendices, Series B.

Figure 42 displays interesting data on how much money was spent per military person. What does this tell us? Firstly, this ratio could be influenced by the wages of the military personnel being high, which would then make the ratio high. Conversely, it could also be influenced by the military spending being capital intensive, which would raise this ratio as well. The lack of comparable wage data for the military personnel inhibit any far-reaching conclusions — although it is unlikely that the wages increased strongly

during the depression decade. This did not occur at least in the Finnish or the French case.[262]

Figure 43. Belgian Military Establishment's Fixed and Capital Expenditures (%), 1920—1938



Sources: see Appendices, Series A.

Also, in the Belgian case, as seen in Figure 43, the share of wages and salaries increased only slightly in the first years of the 1930s. Capital expenditures started to increase strongly after 1933, which can be interpreted as the beginning of the Belgian rearmament period.

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[262] See Appendices, Series A for further details on Finland; Horne 1984.

The Finnish and Belgian ratios of military spending per military personnel were low compared to Great Britain and the United States. The American level was the highest until the Great Depression caused a sharp decrease in this ratio. The British level even surpassed the American spending in the late 1930s. The military spending of these Great Powers was indeed very capital intensive, especially since both of them possessed large navies.

The British Navy faced heavy demands to "economize" during the unstable economic development of the interwar years. Compared to the Army, the Navy emerged from this economy drive somewhat better. Nevertheless, the cutbacks in naval budgets and strength were considerable and speedy compared to the pre- First World War armaments boom, especially in the 1920s. As Paul Kennedy has pointed out, for the first time in centuries the Royal Navy was content, in the aftermath of the Washington Conference, with mere parity (in this case, with the United States) in strength than outright naval mastery. The most of the shipbuilding industries in Great Britain were unable to survive the mere maintenance operations of the interwar period. Only some of the biggest manufacturers, such as Vickers, were able to cope with the dwindling government contracts. The British governments wanted to avoid at all cost an Anglo-American naval race, which was briefly an actual possibility at the end of the 1920s.[263]

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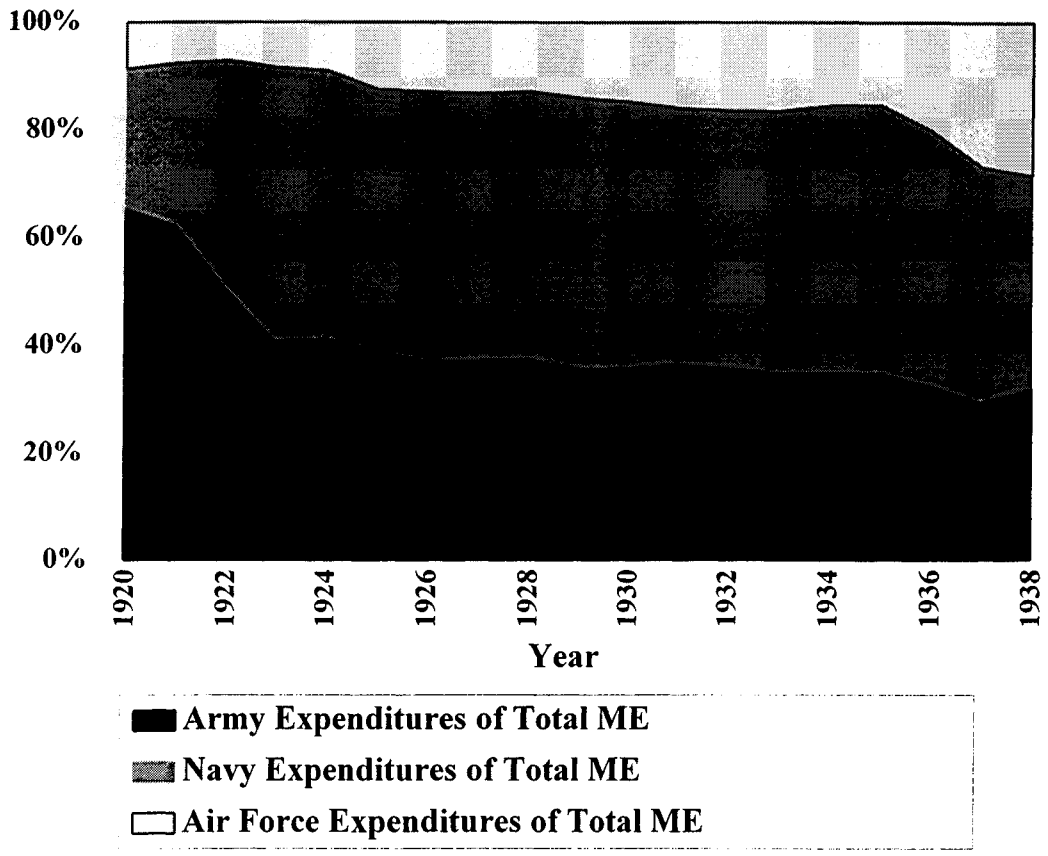
[263] Kennedy 1991, 315—328; Gordon 1988, 76—91. Gordon's study is perhaps the most thorough account of the decision-making relating to the armaments in Great Britain.

Figure 44. British Military Spending by Branches (%), 1920—1938



Sources: see Appendices, Series A.

What were the reasons behind warship construction starting as late as 1936—1937, when the rearmament effort had been underway in Britain for several years already? The most important obstacle was the opposition of the Labour and Liberal parties to the idea of rearmament. Secondly, the main emphasis in the British armaments policy during the interwar period was on air power, especially in the 1930s. Thirdly, it was discovered that Britain was not able to produce armaments, especially warships, that were required

in the mid-1930s. Other reasons included the struggle for power within the military establishment and disagreements between the civil and military administrators.[264]

The first moves towards rearmament in Britain took place after the disappointments in disarmament measures in 1933, at which time naval building programs were revised. New larger plans were drawn among the naval circles, but the time was not yet ripe for a total commitment to an armaments race. The full weight of the naval rearmament was not reached until the late 1930s due to the reasons listed above (see Figure 44). As G. A. H. Gordon has pointed out, the reality of the naval rearmament was not limited, especially after 1936, by financial considerations rather than production constraints. The government did pursue the stretching of these constraint barriers by actively negotiating with the domestic arms producers in the 1930s. The demands of the armaments programs, also Air Force investments, were felt among the industries especially from the end of 1935 onwards. As we have seen already, the British military spending was high, in proportion to the country proper, towards the latter part of the 1930s.[265]

The relative importance of the United States in the world affairs declined during the interwar period, or more correctly during the 1930s, when the other Great Powers made their bid for hegemony. In the aftermath of the armaments limitations of the 1920s, the United States could reduce its armed forces and military spending to a minimum, as Paul Kennedy has emphasized.[266] During the Great Depression, however, the American military expenditures were cut even further in the face of economic hardship. Did this mean that the American military establishment and military industries suffered similar

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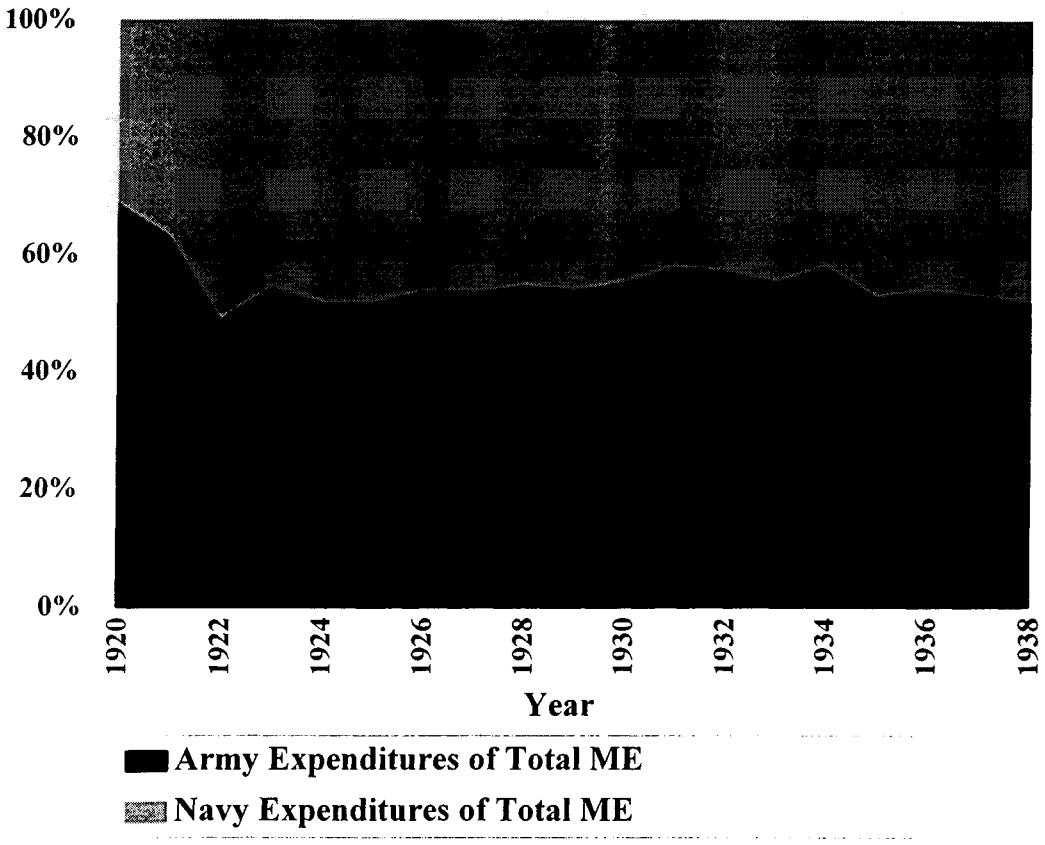
[264] Kennedy 1991, 336—340; Gordon 1988. See also Roskill 1976. On the American Navy, see e.g. Howarth 1991; Eloranta 1995; Carrison 1968 — in the 1920s the American Navy avoided the limitations of the Washington Treaty by especially converting battle cruisers into aircraft carriers.

[265] Gordon 1988; Roskill 1976; PRO, Cabinet Office, CAB 21/429—432: Rearmament: negotiations with industry. 1934—1939. See also PRO, Cabinet Office, CAB 21/533—535: Defence Expenditure. 1937—1939.

[266] Kennedy 1989, 423—425.

Figure 45. American Military Spending by Branches (%), 1920—1938



Sources: see Appendices, Series A.

difficulties as in Great Britain? As Francis W. Hirst pointed out already in 1937, the American contribution to its military establishment cannot be dismissed quite so easily:[267]

> "Nevertheless, the growth of expenditure on armaments since the Spanish War, and especially since the Great War, has been prodigious, and in the last few years the United States may claim a foremost position in the armaments race, though the burden, owing to its immense resources, is felt comparatively lightly."

[267] Hirst 1937, 150.

Thus, the American industry's military *productive potential* remained significant regardless of the Depression, as has been repeated earlier. The American "relative war potential" in 1937 should still be regarded, Kennedy's opinion, as superior when compared to the other Great Powers of the time.[268] However, contrary to for example Great Britain, the American military spending was balanced between the two branches. Naval investments during the New Deal era were balanced with similar investments on other branches (see Figure 45).

How about small nations? When did they begin their drive towards rearmament, especially in countries previously favoring disarmament?[269] For example in Sweden the rearmament began in the middle of the 1930s. The new defense plan of 1936 increased military expenditures considerably. The emphasis on the rearmament was on the acquisition of more modern and more mechanized equipment, as Ulf Olsson has pointed out. He regards the mid-1930s as a "qualitative turning point in the history of Swedish rearmament". The rearmament drive was mainly met with domestic production, which was an important trend among the other Nordic countries as well. The biggest arms firm in Sweden at the time, Bofors, was placed almost entirely to serve the purposes of Swedish rearmament. The need to import military products centered around articles such as tanks, aircraft etc. This type of production was not available in Sweden in the late 1930s. The most important importers before the outbreak of the Second World War were the continental European countries (Great Britain, France, Holland, Belgium), and afterwards, Germany.[270]

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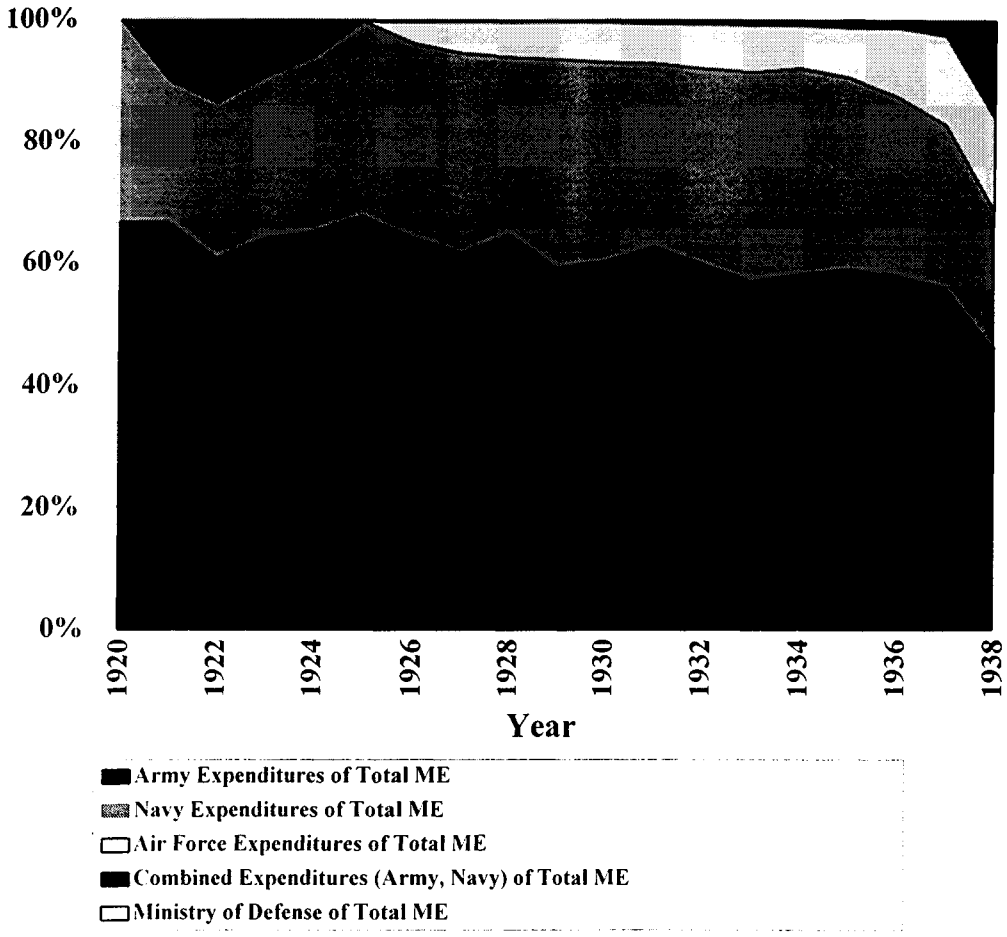
[268] Kennedy 1989, 427—430. The statistical basis for Kennedy's figures is not entirely convincing and he fails to make comprehensive comparisons of defense shares and military burdens for the interwar period. On German rearmament, see e.g. Kennedy 1989; McNeill 1982; Spoerer 1997.

[269] The Finnish rearmament will be reviewed in chapter 5.

[270] Olsson 1982, 5962; Olsson 1973. For comparative figures on Swedish military expenditures just before and during the war, see Olsson 1973, e.g. 21—23.

Figure 46. Swedish Military Spending by Branches (%), 1920—1938



Sources: see Appendices, Series A.

It appears that military spending increased strongly in Finland in the 1930s, regardless of the comparison. Thus it would seem that a small nation like Finland did respond to the increasing threats in the 1930s. However, in many cases — for example Sweden and Belgium — small nations did not respond to the threats as strongly. Also, it is to be noted that the Finnish level of military spending was comparatively quite high in the 1920s as well. As we have seen, there were notable differences between the political development within the nations. Even among the Great Powers there seem to be quite

significant differences. Obviously the hegemony paradigm can not sufficiently explain these different approaches to military spending, especially among the small nations. What were the primary "causes" in the formation of military spending? In order to analyze this further, we need to take a closer look at one of the small nations in the comparison; namely, Finland. However, the hegemony paradigm should not be abandoned rather than complemented with the analysis of the development of the decision-making machinery and political power *within* nations. The struggle for power, hegemony, is definitely part of the answer, as a famous Finnish statesman and diplomat Juho Kusti Paasikivi contemplated during the Second World War:[271]

> "But maybe Great Powers do not pursue their own 'concrete' interests, although they always refer to them. Perhaps they, or actually their governments, are led by a mysterious instinct based on human nature, a strive for supreme power, lust for hegemony, an ambition towards the greatness of their own nations and 'glory', and the 'imperialism' that is characteristic to all of them. 'Man is a beast' — they say."

[271] Paasikivi 1979, 54.

5. THE CASE OF FINLAND: INTERACTION BETWEEN MILITARY SPENDING AND DOMESTIC POWER STRUCTURES, 1920—1936

5.1. Path Dependence and the Theory of Bureaucracies— Building an Explanatory Framework

The neoclassical economic models or the hegemony paradigm are insufficient alone in order to explain military spending without the inclusion of institutional analysis — thus, the interaction of institutions and organizations — into the explanatory framework. New Institutional Economics (NIE) offers us a possibility of explaining phenomena from the perspective of formal and informal constraints. An important part of the NIE approach is the application of the so-called path dependence hypothesis (introduced first in the Introduction), which attempts to rationalize historical development with limited — time, place, actors, culture etc. — causal explanations[272].

Here path dependence should be understood as an economic history tool, a way of analyzing structural development, which is constrained by the economic factors and historical continuities, as well as discontinuities, of the initial observation year forming an institutional framework. In economics path dependence is centered around the idea that even small changes in initial conditions may have a significant impact on the outcome of a process. The end result is intricately related to the events leading up to it. Another interesting aspect of this concept relates to the idea that static equilibrium analysis is simply inadequate in economic analysis. Path dependence, in Northian terms, consists of two essential parts: 1) historical constraints created by the different institutional development, for example cultural constraints affecting the decision-makers' disposition towards military establishments; 2) organizations' activities in order to maximize their

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[272] On definitions of causality, see e.g. Ringer 1989. See also Olábarri 1995; Iggers 1984. In historical research the utilization of time-oriented, strictly defined microlevel causal relations is even common. See

gains. Different types of historical conditions and structures create different types of preconditions for the actions of the various organizations. The interaction of organizations and institutions, formal and informal, shape the evolution of economic polities.[273] Paul David's recent definition also emphasizes the dynamic nature of this process:[274]

> "Path dependence, as I wish to use the term, refers to dynamic property of allocative processes. It may be defined either with regard to the relationship between the process dynamics and the outcome(s) to which it converges, or the limiting probability distribution of the stochastic process under consideration."

In economics the path dependence hypothesis has mainly been applied to explaining technological development.[275] It has been aptly characterized by the phrase "lock-in by historical events". Recent research in economics has defined three stages of path dependence in technological development. In the first degree the initial conditions in the observation point influence the development, but actual inefficiency can not be found. In the second degree of path dependence information at the initial observation point is incomplete, and once the inferiority of the chosen "path" is revealed, the required change would be too great to undertake — due to incomplete information the choice, however, can not be "judged" as inefficient. For example, if a certain country decides to manufacture all the rifles its armed forces need domestically, perhaps even in government-owned facilities, and later they discover this to be economically unsound, we might refer to this as an example of second degree path dependence.

Jarrick-Söderberg 1993 for further discussion, e.g. 72—73, 77—78, 97—101. See also Isaac 1997.

[273] Ruttan 1997; North 1994, 93—94; North 1996c. For applications of *path dependence* in historical sociology, see Isaac 1997. See also Griffin et al. 1997. On military power application, see Isaac-Leicht 1997.

[274] David 1998, 7—8. David defnes stochastic processes as possessing a quality to be able "eventually to shake free from the influence of their past state(s)". David's article is perhaps the most precise theoretical contribution into the concept and application of path dependence.

[275] See e.g. Rosenberg 1994. See also Ruttan 1997.

The third degree involves again choosing the inefficient option, even though there would have been a more efficient alternative available in the initial observation point. These degrees of path dependence also mean that the dependence on the chosen path strengthens from the first to the third degree. Only the third degree path dependence — according to Stanley Liebowitz and Stephen Margolis almost impossible to pinpoint — when a *conscious*, inefficient choice is made as a result of political pressure action, to protect domestic production for example, differs from the rationality expectation of the neoclassical economic theory.[276]

According to Douglass C. North increasing returns and imperfect markets, which embody transaction costs, are necessary prerequisites in order for path dependent development to occur.[277] He has also been the first to attempt to apply this concept to economic history by performing comparisons between two, differing development paths. He does not, however, attempt to define what path dependence might actually mean and how it could be applied to historical research, for example as we have previously undertaken as a sum of the "game" , or interaction, between historical constraints and organizational profit-maximization.[278]

Olle Krantz has characterized path dependence in a way that "original institutions or important institutional rules prevailing at a certain moment can determine the ensuing performance for a long period of time." However, path dependence is not necessarily merely a long-term research tool; it may consist of small events that can lead to "smaller paths", or they may simply not have long-term economic (or political) consequences. Also, it is important analyze such factors in a path dependent process which re-inforce the process or, respectively, weaken the path dependence in a particular historical proc-

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[276] Liebowitz-Margolis 1997. On rationality contemplations, see Lamberg et al. 1997.

[277] North 1994a, 94—96. See also Ruttan 1997.

[278] North attempts to avoid defining *path dependence* in a specific manner. See also Lamberg et al. 1997.

ess. As we have defined path dependence, it relates especially to the study of groups and continuities and discontinuities in history over time.[279]

How can we apply this concept into explaining historical development? One of the most difficult aspects of applying path dependence is the problem of quantification, which is common for all institutional applications. For example, the measurement and quantification of transaction costs may indeed be impossible on a large scale.[280] What other problems does the researcher face? It is difficult to make a value judgment on the efficiency or perhaps even irrationality — if there indeed can be any irrational acts in our analysis due to the acceptance of the rationality ideal represented by Mancur Olson as our starting point — of different kinds of historical choices. For example, a certain nation's defense acquisitions may be consciously directed towards significantly more expensive domestic production in certain year, which would make it tempting to classify this situation and its consequences as the third degree path dependence. The analysis must, on the other hand, take into account the personal motives of the decision-makers (which form the collective whole), the social and political incentives created by group dynamics as well as other ideological and cultural constraints.[281] Most likely the outcome is a combination of several causal factors, which are often inseparable. For example, favoring domestic production may also be positive for the entire economy, even though at first it might appear to be economically inefficient. Thus, path dependence

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[279] Krantz 1997, 30. See also Olson 1971. The historigraphy of groups and structures is hardly a new phenomena in less economically defined terms. As Toivo Nygård has characterized historical research of groups and movements: "Broad processes of change establish the background for the groups and individuals, but their personalities, historical tradition as well as the contemporary socio-political situation are largely responsible for their actions." Nygård 1982, 5.

[280] See e.g. Ojala 1997; Menard 1997. On quantitative empirical solutions, see especially Alston et al. 1996.

[281] The application of different degrees of *path dependence* to e.g. political and economic phenomena should include an element of caution. The starting point for the analysis must be the different views of the world by the individuals and their effect on the group, however large, behavior.

should first and foremost be considered a research tool, a way of rationalizing the research problem with the help of institutional theory.

Table 2. The Elements of a Total Security Approach

Internal security factors		External security factors	
Defense policy	Domestic politics	Foreign relations	International system
military	power political	political	political
economic	relational	military	military
ideological	idea and opinion political	economic	economic
	social political	cultural	cultural
		formal-technical	formal-technical

Source: Mylly 1978.

Another way to rationalize the study of the security interests and needs of a nation would be to re-determine the term security policy, as for example Juhani Mylly has done. He has approached the study of security needs, similar to this thesis, by conceptualizing the security of a nation as a result of the internal and external constraints, or security factors, as he refers to them. Mylly has divided the internal constraints further into defense policy and domestic policy factors, and the external constraints into foreign relations and the effect of the international system.[282] Thus, Table 2 displays these constraints in a comprehensive, concise form. In this study path dependence relates essentially to the developments within the fields of defense policy and domestic politics as well as their interaction. The path dependent aspects of Finnish military spending emerge clearly, for example, from the analysis of the internal division in both the public

[282] Mylly 1978, 16—18.

political sphere as well as within the military establishment. As such, the term power politics here relates to the power struggle and balance of power between the political parties, interest groups, social classes etc. within the, in this case, Finnish society, which is an important part of any explanation of a country's security needs.[283]

However, in order to analyze the impact of organizational interplay in the formation and allocation of military expenditures we need to utilize some of the concepts from the public choice research. First we need to identify the "players". The different official political organs capable of influencing the size and the nature of military expenditures were the military establishment and the Ministry of Defense, the State Council, and the Diet in the Finnish system.[284] The Diet of course had the ultimate power in budgetary matters. It is also important to analyze the Finnish military establishment's internal disputes and power struggles in order to comprehend its role in acquiring funding. In the Finnish system, as in most democracies, there were also quite a few political and economic interest groups that had a stake in the distribution of public goods. The most important of these in the case of Finnish interwar military funding were the Federation of Finnish Industries and the various naval lobbies. Mancur Olson's ideas, as introduced earlier, on the behavior of groups, especially interest groups, are directly applicable in analyzing the actions of these groups and individuals.

However, we need to utilize the theoretical tools of the research of bureaucracies in order to understand the activities within the official political framework. As Rune J. Sørensen has shown, research of bureaucracies has tended to emphasize two often opposing features of bureaucracies: 1) complexity of budget making, limitations of knowledge, time, and resources lead decisionmakers to focus on marginal adjustments in the

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[283] See Mylly 1978, 16. Also, see Eloranta 1997c.

[284] The presidents would have been able to influence military budgets but in practice did not choose to do so.

previous year's budget, thus making it a determinant of the next year's appropriations; 2) each bureau maximizes its appropriations knowing the demands of the decisive organs and keeps its costs of supplying the good a secret within the bureaucracy.[285] Therefore we need to inspect the functions of the official political organs, from the issue of budget suggestions by the Ministry of Defence to the parliamentary decision-making. A key question is, following the application of path dependence, how much it was actually possible to radically change the level of military expenditures.

The ideas introduced by Anthony Downs provide us with interesting opportunities for application for analysis of activities within a particular bureaucracy. He defines all officials and politicians as utility maximizers, which should here be understood within a close proximity of the definition of rationality provided in the introduction of this thesis.[286] Downs describes the following goals available to explain the behavior of officials: power, money income, prestige, convenience, security, personal loyalty, pride in proficient performance of work, desire to serve the "public interest", and commitment to a specific program of action. Furthermore, he divides officials into categories, ideal types of sorts, of purely self-interested officials (climbers, conservers) and mixed-motive officials (zealots, advocates, statesmen). For climbers power, income, and prestige form the most important values, whereas conservers seek to retain the amount of those factors they already possess. In contrast zealots seek power for both its own sake and to effect the goals they value. Advocates in turn are loyal to the organization and want to have an influence upon the policies, and statesmen see themselves as loyal to the society as whole.[287] These ideas in the Finnish interwar context are especially interesting in the

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[285] Sørensen 1987, 63. On the definition of a bureaucracy, see Downs 1967, 26—27.

[286] Downs 1967, 81—82; also, 1—2. Downs' definition is less stringent than e.g. Niskanen's proposition that bureaucrats are essentially attempting to maximize their budgets, which in turn leads to bureaucratic inefficiency — see Niskanen 1971. On criticism of this notion, see e.g. Lane 1987, 11—16.

[287] Downs 1967, 84—111.

analysis of the internal disputes of the military establishment and the Ministry of Defense.

In this chapter we will also link the "official" (i.e. political actions) and "unofficial" (i.e. interest groups) spheres of influence by analyzing not only their direct functions but including also analysis of their contact surfaces in different kinds of committees. As Downs intuitively points out, "committees to study the situation and recommend possible action are almost always used whenever substantial changes in a bureau's organization are required".[288] This perspective in this thesis is analyzed through an in-depth review of the workings of such committee, the Defense Revision committee, designed to alter the premises of the entire military establishment, both funding and organization. It is equally beneficial to analyze the workings of more permanent committees, especially relating to the allocation of military outlays, which formed an important part of the Finnish interwar governance system.

Thus, next we will attempt to analyze and recognize the institutional factors that might have contributed to the formation of a path dependent process in the Finnish interwar military spending. Also, we will assess the economic realities that instigated constraints, in connection with the institutional framework, for Finnish military spending. Finally we will review the actions of small organizations, namely committees and interest groups, in the creation of specific "path". In this thesis we follow explicitly the public choice notion that central government decisions, thus formal constraints, are the sum of both the large (for example, Parliament) and small (for example, committees) organizations as well as private sector influence; governmental bodies and bureaucracies are also possible "players" in the political markets.[289]

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[288] Downs 1967, 207.

[289] See Johnson 1991, e.g. 4—13. On the basic principles in public choice research, see Buchanan 1990a for details.

5.2. Heritage of the Civil War and Economic Constraints of the Finnish Military Establishment

Finnish interwar military expenditures have been characterized as insufficient, although there have been different interpretations as well.[290] However, as we have seen through comparisons, the development of the military spending in Finland matched and even exceeded many nations' relative military outlays[291]. In addition, the material status of the Finnish armed forces before the Winter War has been criticized quite often. The answers to possible material shortcomings must be sought elsewhere: mainly, in the decision-making structure behind the military expenditures as well as how they were actually spent. Are there historical/institutional constraints to be found behind the development? Is there a certain "path" to be detected in military spending in Finland in the 1920s and 1930s? And what is the role of various types of organizations in this process? First we should take a closer look at the development of military legislation and the ensuing political constraints.

The years 1924—1931 represented a time of restless domestic politics as well as social and political division in Finland, as Table 2 displays. The Civil War of 1918 divided the country sharply, politically and socially, which had its impact especially on the Diets of the 1920s. Parliamentary politics involved often deliberation on military issues throughout the decade. A typical feature of the 1920s was a kind of a "power balance", which resulted in dissension and indecisiveness.[292] The disquiet of domestic politics is also

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[290] See e.g. Grandell 1963, 56—57; Mannerheim 1952, 11—12. Cf. Kronlund 1990, 11.

[291] Finland's strategic position next to a Great Power considered to be hostile must of course be taken into account.

[292] On the division of political parties in relation to national defense issues, see e.g. Tervasmäki 1964, i.e. 275—279; Mylly 1978. This division can be seen especially well in the functions of the Military Affairs Committee of the Diet (*sotilasasiainvaliokunta,* from 1926 on it was called the Defense Affairs Committee of the Diet, *puolustusasiainvaliokunta*). See e.g. PA, The Military Committee of the Diet, MF 1 (1928—1927); MF 2, i.e. 14.9., 15.9., 16.9.1927.

displayed in the rapid succession of Cabinets in Table 3: Most of these Cabinets faced difficult military issues, and some even had to resign due to some of these issues.

Table 3. Changes in Cabinets in Finland, 1924—1931

Name of the Cabinet:	Duration of the Cabinet:
Cajander's II Cabinet	18.1.1924—31.5.1924
Ingman's II Cabinet	31.5.1924—31.3.1925
Tulenheimo's Cabinet	31.3.1925—31.12.1925
Kallio's II Cabinet	31.12.1925—13.12.1926
Tanner's Cabinet	13.12.1926—17.12.1927
Sunila's I Cabinet	17.12.1927—22.12.1928
Mantere's Cabinet	22.12.1928—16.8.1929
Kallio's III Cabinet	16.8.1929—4.7.1930
Svinhufvud's II Cabinet	4.7.1930—21.3.1931 *

*Svinhufvud became the president of Finland.

Source: Jääskeläinen 1977.

The amount of military establishment fixed expenditures[293] was more difficult to change through legislation than the capital expenditures, because the fixed military expenditures were based on statutes of wages and conscription. During the interwar period the length of military service was particularly hard to alter in the Parliament. The size of capital military allocations, on the other hand, was also affected by the contemporary domestic politics' deadlock between the major parties: Laws concerning the military establishment were often stuck in the Diet for several years. A descriptive example of this was the process of allocating funds for establishing a Navy in the 1920s. The delays in mili-

[293] On definitions of fixed and capital military expenditures, see Terä-Tervasmäki 1973, e.g. 200—202 as well as the Appendices of this thesis.

tary legislation were mainly caused by the deep division of the political field to right and left by the Civil War.[294]

For example, the most difficult problem dealt with by Cajander's II Cabinet (18.1.1924 — 31.5.1924) was the so-called officer-conflict[295]. The State Council did not wish to take a stance in the personnel issue, yet other reform plans were executed quickly.[296] The attempt to solve the personnel crises within the military establishment centered around a quicker pace of reforms, although actual personnel changes were left to future Cabinets. Tulenheimo's Cabinet (31.3.1925 — 31.12.1925) ended up in difficulties over the issue of establishing a Navy and was forced to resign after a loss of credibility.[297] Kallio's II Cabinet (31.12.1925 — 13.12.1926) had clear aims of at least attempting to improve the military establishment's financial status, since the international political climate was not yet favorable for peace efforts. This Cabinet's ran into difficulties over the issues of Swedish language in the Army as well as the unveiling of certain inconsistencies in military acquisitions.[298]

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[294] The purpose of this thesis is not to attempt to describe the entire development of military legislation or political debates on military issues, merely the decisive and central features corresponding to the military funding. On adequate, comprehensive narratives on the policy development, see e.g. Tervasmäki 1964; Juottonen 1997. On the formation of the so-called spirit of Winter War, see e.g. Soikkanen 1984; Mylly 1989.

[295] This issue will be reviewed in more detail later in this chapter.

[296] Jääskeläinen 1977, 363—365.

[297] Jääskeläinen 1977, 403—405; Jääskeläinen 1973. The Navy issue caused difficulties and internal conflicts for the previous Cabinets as well, see e.g. MA, Archive of the Ministry of Defense, minutes of the State Council, introduced by the Ministry of Defense, Ca 11. Minutes 1923, 25 November; Ca 12. Minutes 1924, 22 April. These internal disagreements within the Cabinet worsened during Tulenheimo's Cabinet, see e.g. MA, Archive of the Ministry of Defense, minutes of the State Council, introduced by the Ministry of Defense, Ca 13. Minutes 1925, 26 February, 9 March. The Navy Act and the corresponding acquisitions will be reviewed in detail in the later chapters.

[298] MA, Archive of the Ministry of Defense, minutes of the State Council, introduced by the Ministry of Defense, Ca 13. Minutes 1925, 26 May; 11 June — an indication of other problems in military came when the Diet actually told the Cabinet to investigate the mistreatments "which had emerged in the military establishment in relation to the staff's treatment of the personnel". There had been other instances of the Diet's concern, e.g. concerning spending malpractices, see MA, Archive of the Ministry of Defense, the Minister and Adjutancy 1918—1937. Other documents arranged by their content 1920—1923. Hc 3. See also Jääskeläinen 1977, 407, 409, 414—416; Jääskeläinen 1973, 67—69. Kallio's II

Tanner's Social Democratic minority Cabinet (13.12.1926 — 17.12.1927) formed, at least in principle, a new episode in the Agrarian Union and right-wing parties' dominated 1920s Cabinet politics. Tanner's Cabinet aimed at reducing military expenditures by, among others, shortening the military service and decreasing the size of the active forces. The Cabinet still recognized the necessity of a functioning national defense due to external threats.[299] It also pursued an active League of Nations' participation and continued the policies of the previous bourgeois Cabinets: the 1927 Diet approved the laws on the establishment of a coastal Navy, the status of the posts in the Ministry of Defense and the military establishment was legalized on permanent basis, and the position of the Civic Guards was made official by law.[300] The Social Democrats had changed their views gradually to a more moderate stance towards military issues, which became even more evident in the handling of the large basic acquisition programs of the 1930s.[301]

The division caused by the Civil War determined the course of domestic politics within the Diet, especially in the 1920s. Issues relating to national defense were politically volatile and often reviewed in daily politics. The key issues for the military establishment were the length of military service and the amount and content of basic acquisitions, for example the naval acquisitions. Some of the more important laws concerning the credibility and "pride" of the military establishment were the State of War Act and the legalization of the posts within the military establishment and the Ministry of Defense.

Cabinet ended the cooperation between the Agrarian Union and the National Coalition. For details, refer to Mylly 1978. On the issue of Swedish language, see also Mylly 1978, 191—197.

[299] Jääskeläinen 1977, 424. On the functioning of the Social Democrat minority Cabinet, see e.g. MA, Archive of the Ministry of Defense, minutes of the State Council, introduced by the Ministry of Defense, Ca 15. Minutes 1927.

[300] Jääskeläinen 1977, 427—428, 432; Jääskeläinen 1973, 81; Statute Collection 1927.

[301] Tervasmäki 1964, 275—279; Soikkanen 1984, e.g. 8—11, 16—23. On the ideologies of the political parties on national defense, see Tervasmäki 1964 for details. The basic acquisition programs will be reviewed in more detail later. See also Terä-Tervasmäki 1973.

Conscription was one of the most debated laws in the 1920s. The only Diet between 1919 and 1932 not to debate on this Act or factors relating to its execution was the Diet of 1923.[302] The Diet of 1922 approved, after the provisional arrangements of the first years of independence, the previous years' motion on the conscription.[303] The Conscription Act was complemented in 1924 with Representative Manner's proposal, yet the essence of the law was kept intact.[304]

The conscription issue was debated again in the Diet of 1926, when the members of several parties suggested shortening the length of the military service. Most of these proposals supported 6—9 months length for the service. The justifications for these measures included savings on military expenditures, the significance of fixed expenditure cuts for basic acquisitions and employment as well as other economic reasons.[305] The suggestions were unsuccessful but the Cabinet was instructed to issue a proposal on the matter[306]. Conscription was dealt upon next until the year 1929, when the left-wing parties made some futile attempts to achieve results. A concrete solution was not forthcoming until 1931, when the Diet accepted the Cabinet's proposal for a new Conscription Act with only minor amendments.[307]

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[302] Parliamentary Minutes 1919—1932; PA, The Military Affairs Committee of the Diet, MF 1 (1918—1927).

[303] Jääskeläinen 1973, 136—137. On the provisional conscription measures and their handling, see e.g. Parliamentary Minutes II/1919, 1976; Parliamentary Documents I:1/1921; Parliamentary Minutes II/1920, e.g. 1739—1775. On the Cabinet's proposal, see MA, Archive of the Ministry of Defense, Minutes of the State Council, introduced by the Ministry of Defense, Ca 7. Minutes 1921, 18 March. The general length of military service was defined to be one year, except for Special Forces, officers in the Reserve, and the non-commissioned officers 15 months. On divisions between parties, see PA, The Military Affairs Committee of the Diet, MF 1 (1918—1927), e.g. 21.11., 22.11., 26.11., 27.11., and 13.12.1918, as well as 9.2.1920, 25.2.1920.

[304] Parliamentary Appendices/1924, 585, Diet's proposal n:o 52, Parliamentary Documents. V:1/1924.

[305] Parliamentary Appendices /1926 X: 1, 2, 3, 4, 5. See also Jääskeläinen 1973, 137.

[306] Parliamentary Documents V:1/1926; Jääskeläinen 1973, 137. The Cabinet, however, did not issue a proposal on the matter to the parliament.

[307] Jääskeläinen 1971, 37, 351. The legislation proposal defined the length of service as 350 and 440 days.

The different political parties made so many proposals on shortening the conscription during 1926—1932 that even a majority of the parties — especially the Agrarian Union and the left-wing parties — seemed to support the notion, although they could not agree how long the military service should be. According to Vilho Tervasmäki the reasons for the failure of these proposals include also the gradual change to a more favorable attitude towards military issues among the parties as well as the weakened status of the military establishment.[308] Equally, the division in the domestic politics and the ensuing difficulties in formal decision-making must have been influential factors. Right-wing radicalism and the threat to a democratic system changed especially the Social Democrats' security policy principles. Moreover, the new Conscription Act of 1931 did not differ in the end from the minimum service length of one year defined by the Defense Revision committee; thus, "the ability to wage war was not weakened".[309]

The difficulties in pushing through the State of War Act describe well the political deadlock of the 1920s. The significance of the law was great for the military establishment, because it defined the legal framework for declaring a state of war. As Ilkka Nummela has pointed out, this law was also essential in the planning for war-time rationing.[310] This law was proposed for the first time in 1922, and it was rejected by the Diet[311]. The Cabinet made its next proposal on the matter in 1924, and the Diet tabled the Act until after the elections. The law was rejected ultimately by the Diet of 1927.[312] The Cabinet made a new proposal on it to the second Diet of 1929, which was reviewed

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[308] Tervasmäki 1964, 146—147, 149, 150—151; PA, The Military Affairs Committee of the Diet, MF 1 (1918—1927), e.g. 8.10.1924. See also Mylly 1978.

[309] MA, DRArch, roll 2, folder 13: *Puolustusrevisionin mietintö*, sections I and II, 1. part, 6. chapter, 122, 133—137.

[310] Nummela 1981, 140.

[311] Jääskeläinen 1973, 138; Parliamentary Documents I/1922.

[312] Cabinet's proposal n:o 7, Parliamentary Documents I/1924; (tabling the act) the Diet's response, Parliamentary Documents III/1926; (rejection) Parliamentary Documents I/1927. See also Objection I, Parliamentary Documents III/1926; Parliamentary Minutes/1926, 1015—1018; Objection II,

and accepted almost in its entirety by the first Diet of 1930.[313] From the standpoint of the military mobilization plans alone, this law was major breakthrough for the military establishment. As far as the later mobilization needs were concerned, the law was still too much of a compromise to suffice in a time of crises.[314]

The legalization of the posts within the military establishment and the Ministry of Defense 30 September 1927, despite opposition from the political left, was an important step towards stabilizing the status of the defense organization[315]. As Kari Selén has described it: "A couple of days before the Christmas Eve of 1927 the national defense attained a Christmas gift it had been waiting for."[316] The Act on the Ministry of Defense defined the structure of the Ministry as following: 1) Central section; 2) Military affairs section; 3) technical section; 4) Commissariat; 5) Naval affairs section; 6) Medical affairs section. The armed forces were to consist in a time of peace of the high command, the Army, the Navy, the Air Force, military schools and courses, military hospitals and pharmacies, military archive, storage depots, technical institutes, the draft machinery, and the military courts.[317] However, the significance of these laws was compromised by the unclear command structure in the division of tasks between the Ministry of Defense and the military command, like in many other countries during the interwar period.[318]

In order to view the different ways of relating to the national defense needs, it is enlightening to take a closer look at one key political party's, the Agrarian Union, security

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Parliamentary Documents I/1927 — the left-wing parties took a negative stance on this law, because they feared it would be used against "the working population".

[313] Cabinet's proposal n:o 66, Parliamentary Documents III/1929 II Diet; (the process and the approval) the Diet's response, Parliamentary Documents III/1930; Parliamentary Minutes/1930, 1052—1053. The State of War Act and the foundations of compensating property were approved, proposal n:o 2 was tabled after the next election (a complementary part to the law). See also Jääskeläinen 1973, 138.

[314] Nummela 1981, 140.

[315] Parliamentary Minutes/1927, 394; Statute Collection 1927; Jääskeläinen 1973, 139.

[316] Selén 1980, 10.

[317] Statute Collection 1927.

policy orientations. A basic assumption in the Agrarian Union's security policy stance was that the Soviet Union formed a continuous and the only external threat to Finland. The Social Democrats, for example, felt that the Soviet threat was overrated and demanded friendly relations to be the basis for a lasting peace. However, the Agrarian Union, which was the second largest political party in interwar Finland and strengthened its position especially in the 1920s, was also a strong advocate of the idea of thrift in government finances as well as the fact that a small nation's defense capabilities were not going to hold against a Great Power. Thus, the party favored forming some sort of an alliance with other nations to compensate for this. The disappointments in foreign policy prepared the party for a more favorable disposition towards increased military spending in the mid-1930s. Also, the great influence of the Jaeger officers within the party kept the admiration of an armed response in crises intact.[319]

How coherent then was the Finnish military establishment during the interwar period? The Finnish military was established on the basis of the so-called White Army, almost out of nothing. The problems and debates within the military establishment received, compared to other political issues, a great deal of attention in the newspapers. Especially the power struggle of between the so-called Czar's officers, educated in the imperial Russia's Army, and the German-trained Jaeger officers drew a lot of public attention to the problems in the armed forces.[320] This officer-conflict led to a change in leadership in the Finnish interwar armed forces: from the mid-1920s on officers holding the highest posts were only Jaeger officers (see Table 4).

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[318] Selén 1980; Defense Revision 1926.

[319] Mylly 1978, 154—156, 207—210, 223—227, 252—269.

[320] Arimo 1986/1987, part I, 4, 36—42, 145—149; Paasivirta 1984, 238—239.

Table 3. Leadership Changes Within the Finnish Military Establishment During the Interwar Period

1. COMMANDER OF THE ARMED FORCES
Major General K. F. Wilkama (RO) 12.9.1919—7.8.1924
Major General V. P. Nenonen (RO) 8.8.1924—18.4.1925
Jaeger Colonel L. Malmberg (JO) 17.4.1925—2.10.1925
Major General K. F. Wilkama (RO) 2.10.1925—22.5.1926
Lieutenant General A. Sihvo (JO) 22.5.1926—13.1.1933
Lieutenant General H. V. Österman (JO) 18.1.1933—29.11.1940

2. CHIEFS OF STAFF
Major General O. P. Enckell (RO) 12.9.1919—18.9.1924
Lieutenant Colonel A. E. Heinrichs (JO) 18.9.1924—17.7.1925
Colonel K. M. Wallenius (JO) 17.7.1925—27.10.1930
Lieutenant General K. L. Oesch (JO) 27.10.1930—16.12.1940

Source: Arimo 1986/1987, part III, 36; Heikinheimo 1955. RO = Russian trained officer; JO = Jaeger officer.

The Army officer corps was divided into different language orientations, views on military education, social backgrounds, generations, and historical experiences.[321] The differences between the opposing groups of officers had been evident ever since the independence, for example in 1922—1924, yet they did not develop into an open quarrel until the spring of 1924. The opposing groups consisted of the younger Jaeger officers and the older, higher-ranking Czar's officers, who still occupied the key positions

[321] Mylly 1978, 191—192. On the impact of the question of Swedish language and foreign policy in the 1930s, see e.g. Selén 1980, 207—212.

in the high command.[322] The two groups differed in opinion, among other things, in the content and execution of mobilization and defense plans[323]. The Jaeger officers even threatened with a joint resignation, if their demands were not met. As a result of this pressure — as well as the fact that the Jaeger officers had excellent connections among the civilian power elite — the high command of the armed forces went through a thorough change in leadership in 1924—1926: Many experienced high-ranking officers were replaced with less-experienced Jaeger officers.[324] The ascendancy of the Jaegers was culminated in the appointment of Aarne Sihvo as the commander-in-chief in 1926, when Karl Fredrik Wilkama, the figure perhaps criticized the most by the Jaegers, was removed from the position for good.[325]

The impact of the new Jaeger dominance was noticeable in the high command, especially in the strategic thinking. The Jaeger officers, which had also dominated the strategic planning in the Defense Revision, initiated a change from the more defensive plans of Major General Carl Enckell towards clearly offensive thinking in the Finnish defense planning. The first sign of this was the new Defense Plan of 1927 (so-called Russian Concentration 27), which was based on the idea of defeating the superior Soviet forces with a quick, decisive strike.[326] This defense plan was later admitted to be confusing and ostentatious, and the new, amended plan of 1931 already represented a more cautious effort in defense planning. In the 1930s the Finnish military strategists slowly began to

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[322] Nummela 1984, 302; Paasivirta 1984, 247—248; Alanen 1975.

[323] Turtola 1988, 92; Kronlund 1990, 274—275.

[324] Paasivirta 1984, 247—250. The situation tipped decisively in favor of the Jaegers when Relander was elected president in 1925. Turtola 1988, 103. See also Mylly 1978.

[325] Turtola 1988, 103; Kronlund 1990, 274—275. It has been estimated that the biggest negative impact on the high command of the armed forces was caused by the resignation of Major General Enckell in 1924, since the preceding military planning and organization had largely been his doing. On the so-called Wilkama-crises, see more Alanen 1975 and Saarikoski 1997.

[326] Kronlund 1990, 288—290; MA, DRArch, roll 2, folder 13, 1. part, 5. chapter, 73—74, 77, 79—81.

realize that the Soviet Union possessed almost infinite reserves of fighting units which could not be defeated decisively.[327]

An actual fully functional defense plan was not achieved until with the new mobilization system, the Regional System (*aluejärjestelmä*), in 1934. The Cadre System of the 1920s was centered around the idea that the peacetime armed forces were to assist in the mobilization in few key cities — thus they would have to travel to their mobilization location — which caused this system to be extremely slow and tie the peacetime forces to this process. The new Regional System was based on utilizing the Civic Guards in the regional mobilization, which enabled the peacetime forces to concentrate to their function as a protective force on the border.[328] The Jaeger high command returned in the 1930s to the defensive thinking and plans already created by Enckell in the 1920s.[329]

Yet, how were the threats to national security assessed by the military experts? What kind of threat scenarios were felt to be plausible? As we discovered in earlier chapters, the Finnish foreign policy relied —after the failure of the border states treaty — on the League of Nations in the 1920s, although a well-organized national defense was seen to be necessary. The military-geographical location of Finland placed it in the middle of a possible conflict in the Baltic Sea. The primary aggressor was seen to be, from the beginning of the independence, the Soviet Union. Also, the geography of the border suggested that the primary path of the enemy would be the Carelian Isthmus.[330] As the Jaeger-dominated high command became more cautious, also the threat assessment regarding the Soviet troops was re-evaluated. In the 1930s Soviet Union was estimated to be able to concentrate 15—17 divisions (14 000 men each) against Finland, whereas

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[327] MA, Document T 2861/27, 40; Document T 2861/34, 1—2. See also Kronlund 1990, 289—292; Arimo 1986/1987, part III, 374—375.

[328] Selén 1980, 31—34.

[329] See e.g. Mikola 1989, 233. For more details on the defense planning, see Arimo 1986/1987, part III.

[330] MA, DRArch, roll 2, folder 13, 1. part, 1—18; Tervasmäki 1964, 26—31; Soikkanen 1989, 32.

Finland would be able to gather nine divisions (instead of the thirteen suggested by the Defense Revision committee in the 1920s).[331] In the beginning of the Winter War (1939) the Soviets began their attack with 28 divisions against the nine Finnish divisions.[332]

As Toivo Nygård has pointed out, the Jaegers formed a coherent group or a society which influenced both the political and the military development of Finland during the interwar years. They pursued their own interests, for example the altering of the command structure, actively and were in general not satisfied with the political development within the country. The Jaegers were also closely connected to the right-wing radicalism, which gained strength especially at the end of the 1920s. Their foreign policy interests, as perhaps the change in the defense plans indicates, were related to the idea of a "Greater Finland" (*Suur-Suomi*), an expansion of the Finnish territory to the neighboring, kindred areas. The opposition, however, of the Jaegers towards the Soviet Union was not only based on the communist system but also on the bitter memories of the last decades of the Period of Autonomy.[333]

How do the Jaegers fit to the theoretical framework of Anthony Downs introduced earlier? The Jaegers are a typical example of how real persons rarely fit in with ideal types of any kind, although the analysis of a person or a group by using such tools is highly descriptive. Jaegers were both self-interested as well as possessed mixed motives for their actions. They were essentially climbers, since they actively sought a promotion and the prestige and power associated with the new status. Moreover, they were also zealots for wanting to aggressively promote certain key policies — such as a change in

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[331] Kronlund 1990, 398; Tervasmäki 1964.

[332] Manninen 1989, 88.

[333] Nygård 1982, 30—45. However, as Vesa Saarikoski has pointed out, the Jaegers were also divided within due to differences in language orientations, political affiliations etc. See Saarikoski 1997 for details. On right-wing radicalism, see also Jääskeläinen 1977; on military aspects, see Kronlund 1990. On group behavior, see Olson 1971 — the homogenous nature of the Jaegers was indeed a key aspect in their ascendancy to power.

the defense plans — in order to achieve change. Finally, they also saw themselves as the statesmen, which by Downs' definition are loyal to the society as a whole. Their ideological disposition strongly emphasized the "needs" of the nation; these needs were of course in their opinion met best by the changing of the structure of the officer corps' high command.[334]

This change in the high command had thus both positive and negative consequences for the Finnish "military preparedness". Even though the Jaegers brought with them new ideas and initiatives to the strategic thinking, the overall impact was perhaps negative afterall. The level of education and competence among the new officers was still quite poor, and the entire organization of the high command was compromised by the introduction of new disagreements on top of the old ones.[335] The absence of educated officers reinforced the internal division of the military establishment and the Ministry of Defense. The lack of planning also slowed down material acquisitions. The division of the civil-military profession made possible the strong influence of small groups within the military establishment (for example in the naval acquisitions) as well as the exertion of the interests of the private economic groups (for example in the allocation of acquisitions) in military policymaking.

How did the command structure of the Finnish military establishment develop in this time of turmoil? Even though the command structure of the armed forces was simplified 1924—1925 by first joining the Staff of the Commander-in-Chief with the General Staff in 1925 and subjugating the General Staff to the Staff of the Armed Forces in the law of 1927, the high command in the military resources matters was still dualistic by nature from the mid-1920s onwards. The chain of command between the commander-in-chief

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[334] For description of the types, see Downs 1967 for details.

[335] Grandell 1963, 55—56; Kronlund 1990, 288—289; Arimo 1986/1987, part III, 174—175. The view of some researchers that the impact of the ascendancy of the Jaegers was mainly positive is most likely positive for the late 1930s but not for confusion of the 1920s. See e.g. Turtola 1988, 103—104.

and the Ministry of Defense was continuously left unresolved. Cooperation in especially expenditure and acquisition issues was extremely difficult.[336] Thus, the laws of 1927 did not offer a solution to this dilemma. The Council of Defense (*puolustusneuvosto*), which had been founded in 1924 to complement the organization of the military establishment, was left without any meaningful tasks to perform in the 1920s.[337]

The demands to re-organize the command structure finally induced a major change in 1931, when Field Marshal C. G. E. Mannerheim — he had not participated in military decision-making ever since the first years of independence — returned to the top of the military establishment as the head of newly-organized Council of Defense. Mannerheim was also re-instated as the wartime commander-in-chief. Svinhufvud's Presidency (1931—1937) made it possible for the strong, self-assertive, and aristocratic Mannerheim to ascend to the top of military decision-making in Finland. Mannerheim's enormous influence among the right-wing circles increased the leverage of the military establishment in political decision-making as well.[338] The debate between the armed forces and the Ministry of Defense, however, continued throughout the 1930s. At the end of the decade, the disagreement culminated in a power struggle between the Council of Defense, led by Mannerheim, and the Ministry of Defense, led by Minister of Defense Juho Niukkanen.[339]

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[336] Arimo 1986/1987, part III, 174—175; Kronlund 1990, 308—310, 313—314; Grandell 1963, 63; Selén 1980.

[337] Selén 1980, 10—11, 14—16. The function of the Council of Defense in the 1920s was merely to underline the position of each of its chairmen (Minister of Defense). On Council of Defense, see more Selén 1980; Nummela 1984.

[338] Selén 1980, 17—23, 353—355; Jägerskiöld 1973, 50—55, 121—124, 153—154; Jokipii 1980, 373—374. See also Grandell 1963, 55. The military establishment lacked a person in the leadership, who had the authority to influence the economic resources required as well as obtain the political backing to increase military expenditures. Also, see Soikkanen 1984, 19, and Arimo 1986/1987, part I, 30—31.

[339] See e.g. Terä—Tervasmäki 1973, 164—171.

These disputes had significant consequences for the material status of the Finnish military establishment. The Finnish armed forces were created out of almost nothing on the basis of war booty material after the Civil War of 1918. Mostly this material was confiscated from the Russian occupying troops during and immediately after the Civil War. These materials consisted of solid defense barriers, forts and barracks, artillery, rifles, and other basic equipment. These materials were either adapted to use by the peacetime armed forces or stored in mobilization storage depots. The handling of the storage and issues relating to the worth of the war booty materials caused many disagreements between the Ministry of War and the Diet in the 1920s. Vilho Tervasmäki has estimated that these materials aged quite quickly and were less valuable than the contemporary politicians thought them to be.[340]

The Ministry of War, from 1922 onwards the Ministry of Defense, was created after the Civil War on the basis of German example in order to deal with the military establishment's funding needs as well as matters relating to the organization and means of supplying the armed forces. The organizational problems of the interwar armed forces reflected the fact that the high command structure was not defined strictly to begin with. This situation was similar to the organization of foreign trade during and after the Civil War. The official public machinery needed to undertake military decision-making and administrative tasks was relatively divided, which in turn left room for other organizational influences. For example, in the case of foreign trade such Civil War organizations as The Staff of Engineers created a natural continuum for private groups' involvement in decision-making.[341]

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[340] Terä-Tervasmäki 1973, 72—76; Hietanen 1989, 82; Tirronen-Huhtaniemi 1979, 238.

[341] Terä-Tervasmäki 1973; Kronlund 1990. On foreign trade organizations and continuity, see e.g. Hjerppe-Lamberg 1997.

Table 5. The Structural Development of the Finnish Military Expenditures, 1920—1938, Millions of Marks in Current Prices

Year	A.	B.	C.	D.	E.
1920—1924	1652	81,1%	386	18,9%	2038
1925—1929	2157	72,6%	815	27,4%	2972
1930—1934	2400	70,3%	1012	29,7%	3412
1935—1938	2454	58,3%	1757	41,7%	4211
Total/Average 1920—1938	8663	71,5%	3970	28,5%	12633

A = fixed military expenditures; B = percentage share of the fixed military expenditures of total military expenditures (ME); C = capital military expenditures; D = percentage share of the capital military expenditures of total ME; E = total ME

Source: Terä-Tervasmäki 1973, 202.

The Finnish military budget proposals were based on the requests by the specific units and departments, which in turn informed the Central Section of the Ministry of Defense of their needs. These requests by the specific parts of the military establishment needed to be quite detailed: For example, the different material acquisition proposals had to include precise quantities and estimated price levels in current prices as well as whether they would be purchased from Finnish producers or foreign suppliers. The different production facilities of the military establishment were required to issue their own budgets. The Ministry of Finances ultimately controlled, especially during the Great Depression, the funding requests of the armed forces by, for example in 1929, "urging economy in financial matters".[342]

[342] MA, Archive of the Ministry of Defense, The Central Section, General Letters 1929, F 107. 51. The compilation of the budget. See also MA, Archive of the Ministry of Defense, The Minister and Adjutancy 1918—1937. Documents relating to the budgets 1922—1923, 1934. Hc 4; MA, Archive of the Ministry

Finnish military expenditures during the interwar period consisted of roughly fixed expenditures and capital expenditures. Fixed expenditures included, among other things, the expenses from the maintenance of conscripts and the wage expenditures of the officers. Capital expenditures consisted mainly of basic acquisition expenditures. They also included the expenses for the construction and maintenance of barracks, fortification expenses, and the costs resulting from the business activities of the military establishment.[343]

The military establishment's fixed expenditures formed nearly three fourths of the total military expenditures in 1920—1938. For example, the aims of the Defense Revision committee, which performed detailed calculations on the personnel and material needs concerning national defense, for 1927—1936 were exceeded considerably. Fixed military expenditures were 1,4 times as large in 1936 as in 1927. The growth in capital military expenditures was even more rapid during 1927—1936: They were 2,2 times larger in 1936 compared to 1927. Thus, the growth in the capital military expenditures was both relatively and absolutely stronger than in fixed military expenditures: The growth in capital expenditures was 193 million marks whereas the growth in fixed expenditures was 164 million marks.[344]

Contemporary economic policy thinking had a significant impact on the development of Finnish interwar military expenditures. A common trend in the government economic policy was to minimize the role of the state in controlling the economy. However, as we have seen before, these aims were met only for the first years of the 1920s. Military expenditures grew simultaneously with the central government expenditures in the late

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of Defense, The Central Section, General Letters 1930, F 114. 51. The compilation of the budget; 52. The regular budget; 55. Special budgetary items; 56. Budget proposals to the Diet; 57. The issuing of funds.

[343] Tervasmäki 1964; Terä-Tervasmäki 1973, 140—142, 200—203.

[344] Eloranta 1996. The Defense Revision will be reviewed in more detail later in this chapter.

1930s. Also, the rapid economic growth made possible significantly higher defense outlays in the 1930s Finland.[345]

Several government defense factories, despite the reigning *laissez faire* ideology, were established in the 1920s and 1930s. The ordnance section of the Ministry of War estimated as early as 1918 that the most important supplies and materials for military readiness should be manufactured mainly domestically. The first plans to be realized concerned the idea of a gunpowder factory. The required machinery for the factory were acquired from Germany in 1920, but soon enough the costs were discovered to rise too high to receive the Diet's blessing. Private factories offered to establish the factory with the condition that the government would support the enterprise. The Cabinet issued a proposal to the Diet in order to establish a gunpowder factor on 21 March 1922. One important aspect of the proposal changed in the Diet: The military committee of the Diet supported the founding of the factory as a government venture. The Diet followed the advice of the committee and decided on 29 May 1922 to justify the State Council to proceed in the matter of establishing the State Gunpowder Factory. The factory commenced its production at Vihtavuori in 1926.[346]

The private cartridge factory, Oy Suomen Ampumatehdas Ab (SAT), established towards the end of 1918, ended up technical and financial difficulties in the beginning of the 1920s. Ministry of Defense proposed an entirely new and solely government-owned cartridge factory to be established at the end of 1922. The Cabinet issued a proposal on the matter on 9 February 1923. Within the Diet the majority of Social Democrats supported the founding of another government factory and funds were granted during

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[345] Ahvenainen-Vartiainen 1982; Pekkarinen-Vartiainen 1993.

[346] Terä-Tervasmäki 1973, 126—129; MA, The Archive of the Ministry of Defense, Minutes of the State Council, introduced by the Ministry of Defense, Ca 1—9; on these, see years 1919—1923, e.g. 21.3.1922. See also Parliamentary Documents III/1921:1; on the discussion, Parliamentary Minutes III/1921, 2288—2311.

1923—1925. Production of cartridges started in Lapua in 1924.[347] In the establishment of domestic governmental production the Social Democrats held the key position in the Diet. They favored domestic defense production to be initiated by the government, even though they were in general opposed to laws relating to military acquisitions.[348]

The next step in this rather spontaneous program of establishing government-owned military production came when the Cabinet proposed the founding a State Rifle Factory. The Diet granted the required funds in 1925. Bulk of the production in the factory consisted of the light machine guns designed by a Finnish gunsmith A.J. Lahti. Last of the interwar military production efforts by the government occurred in 1938, when the State Cannon Factory finally started its production in Jyväskylä. The cannon factory, in addition to private factories, was aimed at fulfilling the needs of the large basic acquisition programs of the 1930s.[349] These factories, as well as other business costs, actually caused quite a strain on the Finnish military establishment: 881 million marks were directed for this purpose in 1932—1939, which was over 25 percent of the capital military expenditures of these years. The founding of domestic, government-owned defense factories also caused most of the military acquisitions to be concentrated in these facilities. As the international tensions heightened towards the end of the 1930s, war materials were more and more difficult to come by in the international markets; thus some of the funds reserved for this purpose were actually not even spent before the Winter War.[350]

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[347] Terä-Tervasmäki 1973, 131—132; Tervasmäki 1964; MA, Archive of the Ministry of Defense, Minutes of the State Council, introduced by the Ministry of Defense, Ca 11. Minutes 1923, e.g. 25.1.1923, 9.1.1923; Parliamentary Documents I/1923.

[348] See e.g. Tervasmäki 1964; Tiihonen-Tiihonen 1984, 181. See also Mylly 1978.

[349] Kronlund 1990; Terä-Tervasmäki 1973, 192—193. Of the private production facilities especially Tampereen Pellava- ja Rautateollisuus Oy, Oy Sytytin, and Lokomo Oy need to be mentioned. The naval construction concentrated mainly on facilities of Crichton-Vulcan and Hietalahden Telakka ja Konepaja.

[350] Terä-Tervasmäki 1973, e.g. 200—203. See also Nummela 1993.

The depression of the early 1930s reflected on the funding of the Finnish military establishment as well. The material deficiencies in the armed forces were attempted to be compensated with the first of the so-called Emergency Programs (*hätäohjelma*) in 1930. The Diet appropriated only a portion of the funds that were asked — 75 million marks for 1931, and 125 million marks for the next five years. These aims were not even met in the following years. However, it must be noted that, as Minister of Defense Jalo Lahdensuo emphasized, two thirds of the acquisitions in 1931 were directed to domestic producers. Equally, a great deal of funding was directed to various private and public production facilities in the form of military acquisitions of the depression years in general.[351] The deficits in the first Emergency Program created by the more stringent budgets of the early 1930s were finally compensated in the additional budget of 1934, which was accepted by the Diet.[352]

The changed nature of international politics as well as the more favorable views of the Social Democrats were behind the compensational measure of 1934. The Diet even urged the Cabinet to construct a new basic acquisition program. This significant change in the political backing for military funding led to the appointment of a large basic acquisitions committee in 1935. The recommendations of this committee were largely adopted as basis for the military expenditures before 1938. The additional basic acquisition measures in 1936 and 1937 amounted to 210 million marks each year. In 1938 this sum was increased to 460 million marks annually. However, as Kari Selén has noted, "the acquisition funds could not be spent in the same increasing pace as they were

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[351] Terä-Tervasmäki 1973, 173—180; MA, Archive of the Ministry of Defense, The Central Section, General Letters 1930, F 114. 51. The compilation of the budget; 52. The regular budget; 56. Funding proposals to the Diet; MA, Archive of the Ministry of Defense, The Central Section, General Letters 1931, F 123. 51. The Compilation of the budget; MA, Archive of the Ministry of Defense, The Central Section, General Letters 1932, F 131. 52. The regular budget. See also Selén 1980.

[352] Terä-Tervasmäki 1973; Selén 1980, 119.

granted".[353] The comment of Einar W. Juva, in the biography of a Finnish General and businessman Rudolf Walden, is equally descriptive: "The long time of completion [in these acquisitions] was also influenced by the fact that everything that could be produced domestically had to be acquired from here. When there were no ready factories, they had to be established first".[354]

Table 6. The Structure of Finnish and Swedish Industry (%), by Branches, 1920—1940

Year	I	II	III	IV	V	VI	VII	VIII
1920 F	15,5	5,1	17,6	22,3	15,9	16,7	1,6	5,4
1920 S	24,7	5,1	12,3	14,5	12,6	23,3	5,1	2,5
1930 F	16,5	3,4	12,9	22,1	16,0	17,1	1,7	10,4
1930 S	31,2	5,8	9,3	12,5	13,3	19,6	3,3	5,0
1940 F	29,6	3,9	8,5	12,1	16,3	20,3	2,1	7,1
1940 S	40,4	3,9	7,1	8,4	11,4	19,0	3,9	5,9

F (=Finland): I = mining, metal, and other industry ; II = clay, glass, and rock refinement ; III = wood, furniture, and construction carp. industry; IV = paper and graphic industry ; V = foodstuffs industry ; VI = textile, footwear, clothing, leather, and rubber industry ; VII = chemical industry ; VIII = electricity, gas, and water main industry. **S** (=Sweden): I = mining and metal industry ; II = earth and rock industry ; III = wood industry; IV = paper and graphic industry; V = foodstuffs industry; VI = textile, clothing, leather, bristle, and rubber industry; VII = chemical industry; VIII = power, lighting, and water depts.

Sources: Hjerppe et. al 1976; Heikkinen et. al 1986; Schön, 1988. For details on methods, see Eloranta 1997b.

[353] Selén 1980, 119—131; Terä-Tervasmäki 1973, 185—200. See also Nummela 1993. On the changing views of Social Democrats, see e.g. Tervasmäki 1964; Soikkanen 1984; Mylly 1978; as well as Nevakivi 1992, 81—86, and Juva 1957, 431—434.

[354] Juva 1957, 434.

As Riitta Hjerppe, among others, has stressed, Finland was still largely an agriculturally dominated country during the interwar period, even though services became for the first time the largest productive sector at the end of the 1920s. This slow structural change was halted by the Great Depression. The 1930s was characterized by an increased dominance of the domestic markets, especially due to the tightening protectionism, as well as greater government involvement in, for example, military production.[355] The resulted increases in domestic demand also enabled strong growth in industrial production (see Figure 47). In Sweden the 1930s rearmament efforts represented no increases state ownership within the armaments industries. The plans of establishing a state monopoly in this production had briefly been discussed, yet rejected. Ulf Olsson has noted that "the rearmament of the Second World War period did not have a big or lasting influence on the industrial structure of those sectors that were producing armaments of the traditional kind". [356]

Did the different ownership structures yet similar tendencies to concentrate on domestic production affect the structure of their industrial production? In general, the performance of the Finnish industry was more than adequate during the interwar years. The textile, metal, and engineering industries, which had suffered from the loss of export markets in Russia (see Table 6), reoriented their production to the domestic markets in the beginning of the independence. For example, the metal industries in Finland grew strongly in the 1930s, especially due to the large acquisition programs and new production facilities. Also, as Riitta Hjerppe has pointed out, the 1930s was a time of concentration and growth (see Figure 47) in the Finnish industries, partly due to government acquisitions.[357] In Sweden, the situation was largely similar. Metal industries grew even faster than in Finland during the depression decade (see Table 6). However, if the top

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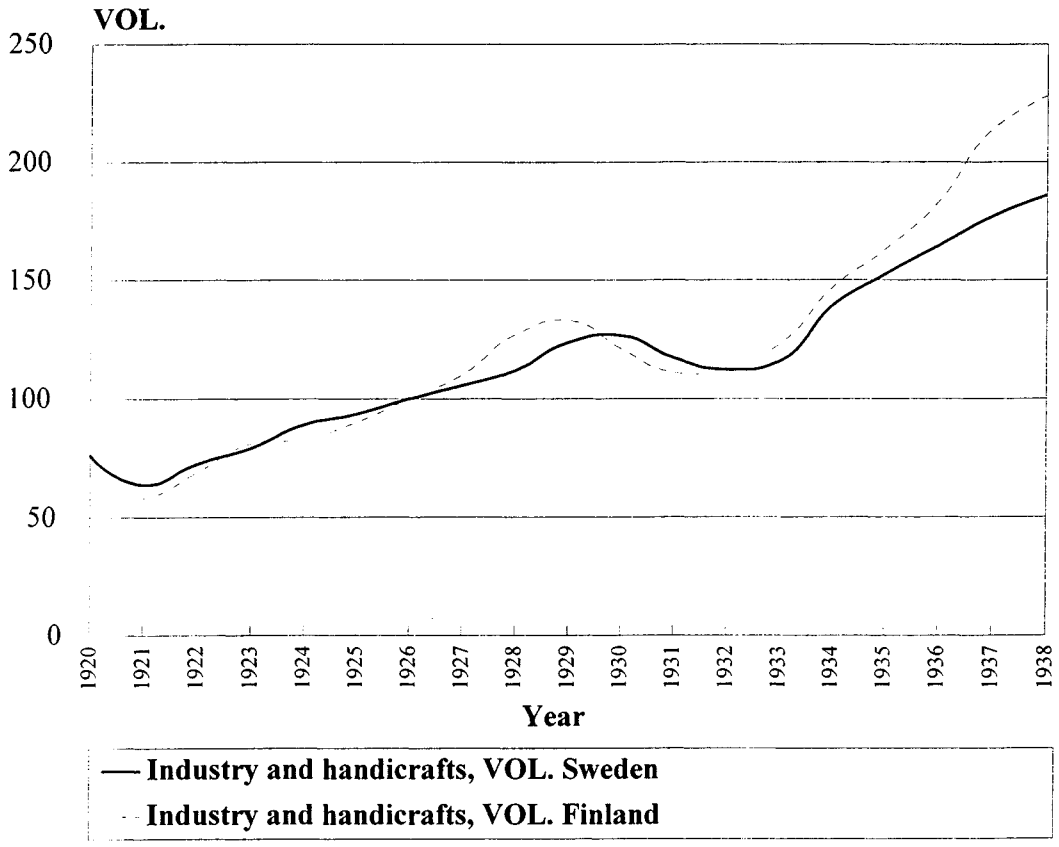
[355] Hjerppe 1989, 65—66; Korpela 1967. On domestic industries, see also Vehviläinen 1967.
[356] Olsson 1982, 61—63.
[357] Hjerppe 1979.

level of the political sphere in Finland was largely divided, especially in the 1920s, who primarily influenced the decisions to support domestic production?

Figure 47. The Value Added of Finnish and Swedish Industrial Production, 1920—1938 1926=100



Sources: see Eloranta 1997b and the sources in it.

5.3. In Search of Real Power: Committees and Interest Groups

As Douglass C. North has emphasized, organizations attempt to maximize their gains within the constraints of the institutional framework.. Profit-maximization can emerge

equally well in the form of influencing military acquisitions to be directed to the domestic producers or changing the leadership within the military establishment, for example in the case of the Jaeger officers. Organizations, large or small, have a central role, in addition to historical preconditions, in the development of path dependence. Mancur Olson has pointed out that small, homogenic groups are often the most effective ones in their profit-maximization. The reasons for this include the fact that in small groups the internal social pressure (*selective incentives*) as well as common goals and interests lead to greater efficiency than in large, internally divided groups.[358]

A historical situation in which the institutional factors make it possible for smaller groups to participate in political decision-making also explains the organizations' interests in investing in political action. In the case of interwar Finland both the division of the political field as well as the internal conflicts of the military establishment left room for smaller groups and powerful individuals to act out their own interests. In Finland the political and economic elite still consisted of the powerful families of the Period of Autonomy. Thus, the process of independence did not create an abrupt change in the Finnish leadership structure; at best we may refer to the slow process of change among the public servants towards the middle-class in the Finnish society.[359]

Committees were an integral part of the Finnish decision-making system, aside from the actual government agencies, in the 1920s and 1930s. Committees were reserved for preparing specific legal and political issues for a larger legislative or political body. Committees, sub-committees, and commissions were in abundance among the different fields of administration: In 1930 there were 72 committees, and in 1939 as many as 117. The committee system, which was disintegrated and spread around the different fields

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[358] See Olson 1971, e.g. 53—65. See also North 1994b; North 1996b; North 1997.

[359] Noponen 1964. On the development of public servants' ideologies etc., see Tiihonen-Ylikangas 1992. On historical review of Finnish interest group research, see e.g. Lamberg 1997.

of administration especially in the 1920s, served particularly the interests of the political elites and interest groups.[360]

The role of these different committees is sometimes quite difficult to assess. For example, as Ilkka Nummela has emphasized, the Economic Defense Council (*Taloudellinen Puolustusneuvosto*), which was established in 1929, was mainly aimed at planning for the functioning of national defense, civilian consumption, and economic life in crises situations. In 1930 the Council distinctly expressed that the planning of peacetime acquisitions was not part of their domain.[361] However, if we analyze the membership of the committee, we notice that all the key interest groups, for example the Federation of Finnish Industries, wanted to participate in its functions. Also, it is to be noted that at the same time the domestic producers were able to push through their ideas on favoring more expensive domestic production in the respective Economic Board (*Taloudellinen Neuvottelukunta*) on the issue of government acquisitions. Thus, the key interest groups on the one hand did not have raise the issue of the peacetime acquisitions in the Economic Defense Council, whereas on the other hand they wanted to make sure their interests continued to secured — as well as ensuring the functioning of war-time economy at the same time — in crises conditions.[362] The different committees possessed a great deal of influence in the still sporadic system of governance, particularly in determining how defense contracts were to be allocated.

In the following we will at first review the activities of the Defense Revision committee, which attempted to influence both the size of military expenditures as well as their allocation as we described earlier. The Defense Revision was an attempt to achieve very

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[360] Tiihonen-Tiihonen 1984, 172—182.

[361] Nummela 1984, 307—309.

[362] Nummela 1984; MA, Archive of the Ministry of Defense, Minutes of the State Council, introduced by the Ministry of Defense, Ca 16(1928) — Ca 24 (1936); Federation of Finnish Industries, Annual report 1930, Appendix 1.

large organizational changes within the military decision-making system as well as far-reaching plans for military spending needs of the nation. It is also an example of a temporary committee established to serve a certain function; additionally, it is an example of both the volatile nature of military expenditures in public discussion as well as the division of the political field. Additionally, we will analyze the actions of the Board of Acquisitions, which influenced military spending directly within the Ministry of Defense. This Board was a permanent part of the Ministry's organization throughout the interwar period. The Board of Acquisitions is also an example of the direct influence of the interest groups in governmental activities. As we will see later, these groups, especially the Federation of Finnish Industries, played a significant role in the development of certain key pieces of military legislation as well.

Defense Revision, the so-called Hornborg's committee, was initiated in a meeting of the Council of War on 5 — 6 November 1923, when a Defense Revision committee was decided upon to prepare for the contemplation on the "defense question". There had been other attempts to re-organize the military arrangements in the 1920s — such as the Coastal Defense committee (1922) and the so-called Wetzer's committee (1923) — although their results had been disappointing compared to the expectations. Officially the State Council appointed the Defense Revision on 26 November 1923 "to inspect the rationality of the defense arrangements in this country as well as to issue proposals to re-organize the military establishment, if such need should arise".[363]

There were several committees contemplating on the economic preparedness for a war — this concept included the securing of the consumption of both the armed forces and

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[363] MA, document T 2858/2, Minute of the Council of War 5 — 6.11.1923; Kronlund 1990, 286; MA, DRArch, roll 1, folder 11: *Puolustusrevisionin osamietintö "Maamme puolustuslaitoksen ylin johto" 1924*. See also MA, DRArch, roll 9, folder 26: *Määrävahvuuskomitean mietintö*, and DRArch, roll 8, folder 24: *Rannikkopuolustuskomitean mietintö v. 1922*. See also Elfvengren 1987, 34. The Defense Revision was inspired by similar efforts in Sweden, see Trönnberg 1985 for details.

the civilians as well as the continuation of production — working simultaneously with the Defense Revision. These committees, however, did not achieve such concrete results as the Cabinets hoped for. The Defense Revision was instructed to concentrate on actual military issues and solutions. The planning for an economic preparedness in a war were left on the shoulders of the so-called Holma's committee (1923) and War Economy committee I (1924—1925).[364]

The Defense Revision functioned during 1923—1926. It included both civilian members — among other, several members of parliament — and military personnel.[365] Jaeger officers and their military thinking dominated the work of the Defense Revision[366]. In the Jaegers opinion, for example, the mobilization and defense plans were too defensive and passive[367]. The Defense Revision assembled all in all thirteen times during 1923—1926. In between the joint meetings, the work was continued in the two sections: the military section and the cost estimation review section. The role of the military section and its members was central in the functions of the entire committee.[368] The Defense Revision also utilized both domestic and foreign experts on specific issues. The most

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[364] For details, see Nummela 1984, 302—306.

[365] MA, DRArch, roll 2, folder 13: *Puolustusrevisionin mietintö*, parts I and II, 2—3. Of the members of the committee many ascended to significant posts both within the civilian administration and military command during the interwar period. See e.g. Turtola 1988 (Erik Heinrichs' career), Nummela 1984 (Leonard Grandell's rise to the top of economic-military planning), and Niukkanen 1951 (on Juho Niukkanen's political career from the 1920s to the 1940s). See Appendices, Series C.

[366] Many of the committee's members had a Jaeger background, e.g. Eirik Hornborg and Niukkanen; see Kronlund 1990, 286 and Niukkanen 1951, 9—11. See also Appendices, Series C on the members of the committee. The only actual representative of the "old guard" in the committee was Major General Martin Wetzer, who was, however, in favor of the changes that the Jaegers proposed — the other Czar's officers felt in fact threatened by Wetzer's participation in the committee, see Turtola 1988, 102 and DRArch, roll 4, folder 16: *Lähetettyjä salaisia ja yleisiä kirjeitä*, (roll page number) 63.

[367] Turtola 1988, 92; Arimo 1986/1987, part II, 73—79.

[368] DRArch, roll 2, folder 13: *Puolustusrevisionin mietintö*, parts I and II, 4. The military section included in addition to the chairman (Hornborg) the military members of the committee (Wetzer, Lauri Malmberg, Harald Öhqvist, and Armas Martola; later, the military personnel that replaced them, see Appendices, Table 8 for details). The military section largely prepared the different parts of the Defense Revision's report. Kronlund 1990, 286.

important influence, cited by the committee itself, was the English expert commission, whose work concentrated mainly on improving sea and air defense systems[369].

The Defense Revision was unanimous on the question of size of the armed forces and the length of military service: The number of conscripts was not to be decreased and the length not to be less than one year. Of the annual number of conscripts (23 500), the share of the Army was overwhelmingly the greatest in the Defense Revision calculations.[370] All in all, the Defense Revision emphasized the importance of the needs of the Army in dividing the military funding: The available funds were recommended to be used in the right proportion between the different service branches[371]. The share of the Army of the recommended basic acquisition expenditures in the committee's report was over half of the funding, which in turn was aimed at improving the poor material status of this branch[372].

The Finnish Navy was based on the war booty confiscated from the Russians after the Civil War. This Navy consisted of six gunboats, three S-class torpedoboats, mineship M1, and two motorized torpedoboats.[373] Compared to other nations in the Baltic area, the Finnish Navy was modest at best: For example Sweden possessed three new coastal defense vessels[374] and three smaller ones, one armored cruiser, seven torpedoboats, 16—18 submarines, which made her one of the strongest naval nations in the Baltic area. The

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[369] DRArch, roll 2, folder 13, 5—7. Especially in the question of naval armaments, the Finnish naval officers attempted to influence the work of the committee succeeding however better in the Diet.

[370] MA, DRArch, roll 2, folder 13: *Puolustusrevisionin mietintö*, parts I and II, 9—11; DRArch, roll 2, folder 13, 1. part, 6. chapter, 122, 133—137; DRArch, roll 3, folder 13, 2. part, 13. chapter, 396, 430.

[371] MA, DRArch, roll 2, folder 13, 1. part, 4. chapter, 55—57.

[372] MA, DRArch, roll 2, folder 13, 1. part, 4. chapter, 56. See also Mustelin 1981, 42, 48—50; even though the Defense Revision included naval-minded persons, as we may conclude from Hornborg's writings, they was no overcompensation of Navy evident in the work of the committee. Hornborg 1959.

[373] Turtola 1972, 7; Niklander 1996, 15—17. Even though Niklander's book is not a historical study and there are several ahistorical attempts of applying hindsight, it is still a very comprehensive account of the process of building the Finnish Navy.

[374] Translation used by Niklander 1996 (in Finnish: *panssarilaiva*).

Finnish naval officers and shipbuilders were greatly influenced by the Nordic Navies, especially in their design.[375]

The question of establishing a Navy and the content of naval acquisitions were especially difficult for the Defense Revision. The committee was aided in this dilemma by the English expert commission led by W. Kirke, despite strenuous opposition from the Finnish General Staff.[376] The Defense Revision did not fully endorse the recommendations of the English commission yet approved the main points in their proposals. Finnish naval officers and experts in charge of naval defense matters in the Ministry of Defense also attempted to influence the views of the committee without achieving the results they hoped for. Their aim was to achieve a broader and differently allocated naval building program.[377]

Funding for establishing a Navy was one of the biggest sources of conflict in the 1920s Finnish politics. Funding for the naval building program was provided, in spite of the resistance of the Social Democrats, in the additional budgetary measures in mid-1920s. At the same time for example Tanner's Social Democratic minority Cabinet of 1927 was tied to the earlier acquisitions by the terms of the previous acquisition agreement: If the decision to continue naval acquisitions was not made quickly in the beginning of 1927, the prices would have multiplied for the future acquisitions. Needless to say, the Social Democrats were not enthusiastic about this arrangement. The Navy Act was fi-

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[375] Niklander 1996, 32—33, 42—47.

[376] MA, DRArch, roll 1, folder 7: *Pöytäkirjoja — Sotilasjaosto*, meetings 11.1.1924 and 12.1.1924. Turtola 1988, 120. Heinrichs' appointment as the Chief of Staff made it possible to carry out the request of the Jaeger-dominated committee.

[377] MA, DRArch, roll 1, folder 7, meetings 2.10.1924, 9.10. 1924, 31.10.1924, and 6.11.1924. MA, DRArch, roll 1, folder 6: *Pöytäkirjojen luonnoksia*, meeting 14.2.1925; this suggestion was largely based on the English experts' proposals. MA, DRArch, roll 1, folder 6, meeting 17.2.1925, the Ministry of Defense also presented its counter proposal to the committee. See also MA, DRArch, roll 2, folder 13, 5, and 1. part, 7. chapter, 156—158; also MA, document T 2857/1 — Ministry of Defense continued to disagree with the committee on the issue of Navy in the latter part of the 1920s.

nally approved in the Diet of 1927.[378] The 1924 Cabinet's proposal, 520 million marks, was trimmed significantly: The final amount was 215 million marks[379]. The Defense Revision had suggested a 591 million mark naval building program in its report, although the condition for such spending was the approval of the entire acquisition program recommended by the committee. The committee's proposals would have increased the Army's acquisition share over fifty percent.[380] The founding of a Navy was, however, the only part of this acquisition program that was realized at least in some form.

Reasons for the said form of naval building program to be approved included the strong naval propaganda in the Diet, the influence of the naval experts in the Ministry of Defense, and the shorter version of Defense Revision's report, which provided a distorted perspective on the needs of the armed forces. As a result the share of the Navy of the basic acquisitions increased above fifty percent during 1926—1930. Thus, the structure of the acquisitions changed exactly as the Defense Revision had *not* intended it to change.[381]

The issue of establishing a Navy developed in stages. The first stage (1919—1924) was characterized by more or less detailed plans made mostly by naval officers. The second stage (1924—1927) centered around the development of the designs for the ships, especially the coastal defense vessels. The domestic naval officers and the shipyards were very active in ensuring mostly domestically produced and as large as possible coastal defense vessels. The third stage, from 1927 onwards, was a continuance of the second stage: The Ministry of Defense and the shipyards were able to extend the limits of the

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[378] MA, Archive of the Ministry of Defense, Ca 15. The State Council's minutes, Introduced by the Ministry of Defense 1927, 27.1.1927; Turtola 1972; Jääskeläinen 1973, 139—140.

[379] Statute Collection 1927, 1015; Enkiö 1968, 147.

[380] Eloranta 1996.

[381] Niukkanen 1951, 29—30; Tervasmäki 1964, 241; Kronlund 1990, 315; Mannerheim 1952, 12; Tirronen-Huhtaniemi 1979, 239.

Navy Act of 1927 even further than originally intended. The final construction costs for one coastal defense vessel alone has been estimated to have been 210 million marks.[382]

The naval lobbying involved in the finalization of the Navy Act of 1927 deserves a closer look. The main lobbying organizations were the various Finnish naval associations (for example, the Finnish Naval Association), the Navy Magazine (*Laivastolehti*), and the Naval Officers' Association. In addition the naval officers in the Ministry of Defense were also very active promoters of the Navy Act. These persons and organizations issued active propaganda by "turning to influential persons and turning them favorable towards the cause" and directly handing out propaganda materials during the Diet proceedings as well as supporting these actions within the pages of the Navy Magazine (founded in 1926).[383] The criticism of the naval programs was centered around their too limited, in their opinion, size as well as the program's absolute necessity for national defense: "Why don't we directly proceed to create and acquire the kind of Navy that, without overburdening the solvency of our nation's inhabitants, we can build for ourselves and which by its very existence alone will make the invasion plans of our enemy uncertain and, above all, will provide ourselves the faith in the continuance of our independence."[384]

The ties of this propaganda to the economic and political elites in Finland were strong. For example V.M.J. Viljanen, the managing director of Federation of Finnish Industries and a member of Parliament, was also a member of the board of the Finnish Naval Federation: He even attempted to include a requirement in the Navy Act that the ships must be built in Finnish shipyards. In 1929 a "Navy Men's Club" was established to ensure

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[382] Niklander 1996; Turtola 1972. On the coastal defense vessels, see also a more unsatisfactory and biased account of Eino Penttilä (Penttilä 1986).

[383] Turtola 1972, 131—132; Ainamo 1948, 20—22; Eloranta 1997c.

[384] Laivastokysymyksemme 1926.

the preservation of naval interests in Finland; this club included key figures from both sciences and industrial circles.[385]

How did the Defense Revision committee's recommendations on the whole fare in the political debate? The committee's report in 1926 was naturally a continuation of the work undertaken in many sub-reports and preparatory proposals, which were almost solely the responsibility of the committee chairman Hornborg and the military section[386]. The 1926 report was an extensive, with the appendices almost 900 pages long, classified document on the status of the Finnish military establishment and its needs at the time[387].

The committee's work received some cautious criticism as early as the end of 1925, thus before the actual completion of the report on 21 January 1926, in for example the Progressive Party's organ Helsingin Sanomat. The criticism centered around the issues of ignoring the opinions of the former Chief of Staff Enckell, the suggested increases in military expenditures, and the idea that the forthcoming proposals could not be carried out in parts ("the proposal is a whole that breaks down, if one of its parts is taken apart").[388]

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[385] Turtola 1972, 132—133; Ainamo 1948; Suomen kansanedustajat 1982, 715. See also Appendices, Series C.

[386] Kronlund 1990, 286. E.g. MA, DRArch, roll 1, folder 7: *Pöytäkirjoja — Sotilasjaosto*, 4.2.1924 Hornborg was assigned to prepare a statement on the military-political position of Finland; DRArch, roll 1, folder 5: *Pöytäkirjoja 1923—1924*, 8.11.1924 the same statement was approved as part of the overall report. See also MA, DRArch, roll 1, folder 11: *Puolustusrevisionin osamietintö "Maamme puolustuslaitoksen ylin johto" 1924*, 3—4.

[387] MA, DRArch, roll 2, folder 13; DRArch, roll 4, folder 14: *Puolustusrevisionin mietintö*, parts III and IV, part IV — Appendices.

[388] MA, DRArch, roll 10, folder 29: *Sanomalehtileikkeitä — puolustusrevisionia koskevia 1925—1926*, see e.g. Helsingin Sanomat 6.10.1925 and 8.10.1925 as well as Uusi Suomi (the National Coalition's supporter) 4.10.1925 — Uusi Suomi acted as sort of a "organ" for the committee. See Salokangas 1987, 262, 278.

Overall, the right-wing newspapers were positively disposed towards issues of national defense[389]. The detailed writings of the chairman of the committee, Eirik Hornborg, at the time of the completion of the committee's work altered this situation drastically: Most newspapers actually demanded him to be indicted for treason. His motive perhaps was to emphasize the needs of the military establishment in public discussion. The failure of this approached became even more pronounced when Hornborg was at last actually indicted, by the order of the State Council, for disclosing classified information. Even though he was cleared of all charges in the trial, the damage to the "cause" was irreversible.[390] The public image of the Defense Revision's work became negative right from the beginning.

The shorter version of the Defense Revision's 1926 report was essentially prepared by the Ministry of Defense and the General Staff for the Diet. It did not, for example, contain the classified details of the mobilization plans as well as the extensive explanatory memorandums.[391] It was not, even though such claims have been made, too brief of an account rather than a structurally disproportionate representation of the national defense needs. Even though the key role of the Army is brought forth in a few sentences, the overall impression of the shorter version must be that it favors the Navy.[392] The highest political circles had been briefed on the entire report[393], yet the members of the parliament, combined with the active naval propaganda, were undoubtedly given a naval-dominated view of the Finnish defense needs. The negative publicity of the Defense

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[389] MA, DRArch, roll 10, folder 29, e.g. Uusi Suomi and Uusi Aura. On the general party ties of the newspapers, see Salokangas 1987 for details.

[390] MA, DRArch, roll 10, folder 29: *Sanomalehtileikkeitä — puolustusrevisionia koskevia 1925—1926*, see e.g. Turun Sanomat's, Lalli's, Tampereen Sanomat's, and Hämeen Sanomat's views on the matter — the entire Defense Revision was seen as receiving bad publicity in the case of Hornborg. Only some of the right-wing newspapers, e.g. Iltalehti, clearly defended Hornborg.. See also Jääskeläinen 1977, 413.

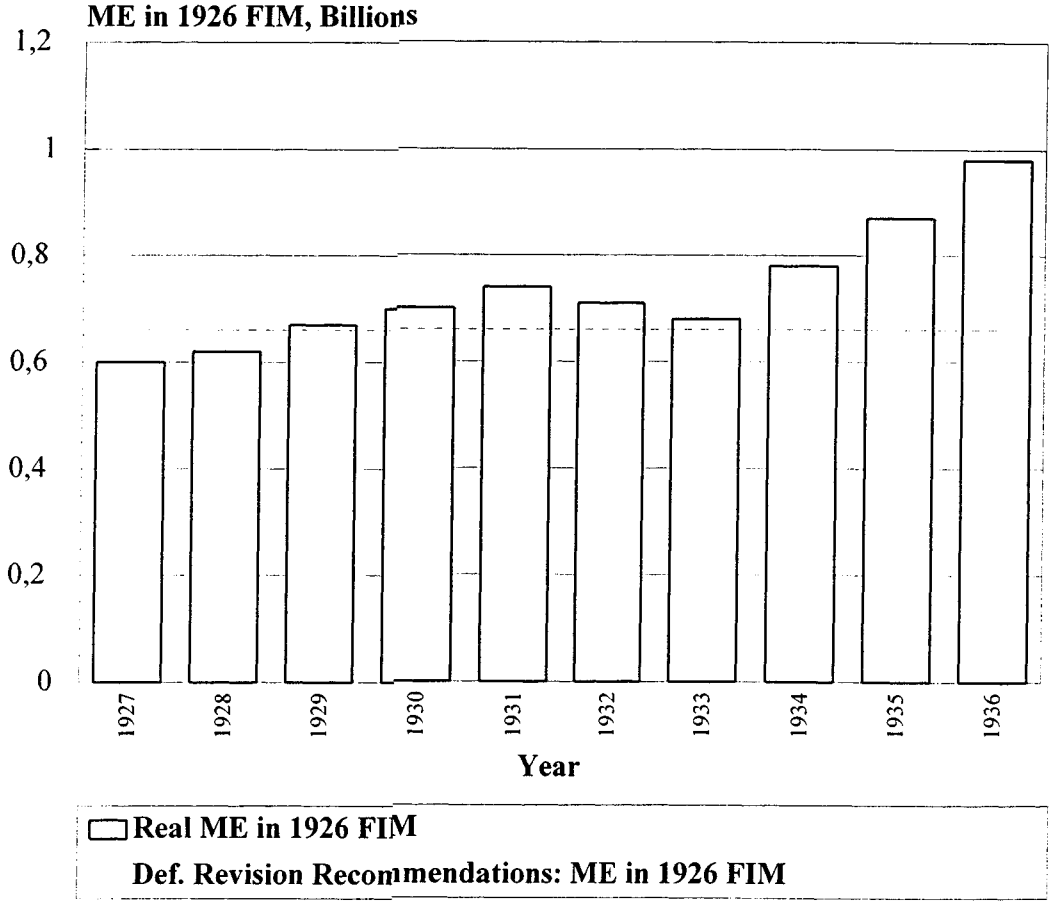
[391] Defense Revision 1926. Cf. MA, DRArch, rolls 2, 3, and 4 as well as folders 13 and 14.

[392] Defense Revision 1926, 8.; Arimo 1986/1987, part III, 81; Terä-Tervasmäki 1973, 124—125. Cf. also the table of contents in Defense Revision 1926 to MA, DRArch, roll 2, folder 13.

[393] Defense Revision 1926, 8.

Revision also had a significant impact on the opinions of the members of parliament as far as military funding was concerned in the 1920s. The committee's acquisition plans were never brought to the Diet in their entirety to be debated upon.

Figure 48. Finnish Military Expenditures (ME) in 1926 Finnish Marks and the Defense Revision Committee's Estimates, 1927—1936

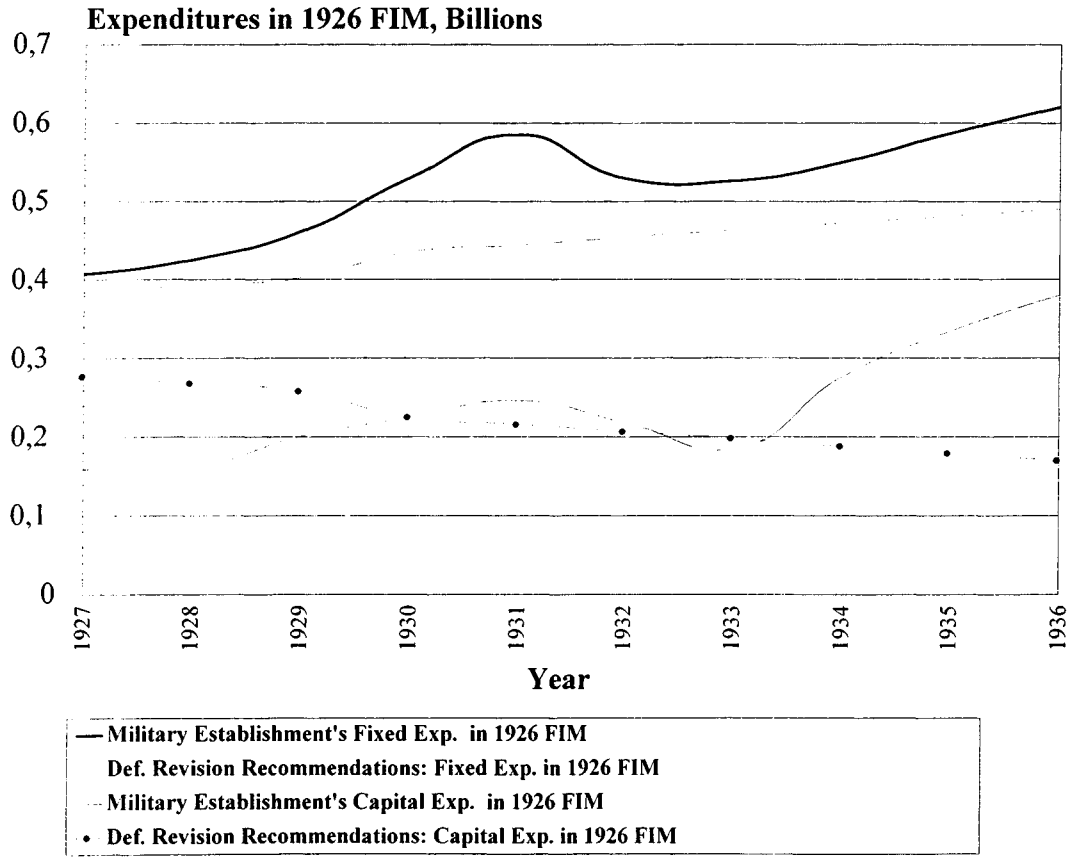


Source: see Appendices, Series A.

The Defense Revision Committee submitted relatively detailed estimates on the military establishment's overall needs on its report in 1926. Even though these estimates were considered too high at the time and previous research often claims that these goals were not reached, the actual annual military expenditure average of 795 million marks for

1927—1936 exceeded the committee's goal of 660 million marks per year by far. The same can be detected in the development of basic material acquisitions and fixed expenditures of the Finnish military establishment during this same period (see Figures 47 and 48).The goal of 2,5 billion marks to be spent on basic material acquisitions in 1927—1936 was reached also.[394]

Figure 49. The Finnish Military Establishment's Fixed and Capital Expenditures in 1926 Finnish Marks Compared to the Respective Defense Revision Recommendations, 1927—1936



Source: see Appendices, Series A.

[394] See Grandell 1963, 54—55; Kronlund 1990, 283, 285; Terä-Tervasmäki 1973, 141—142. See also Eloranta 1996.

Another interesting feature in these Defense Revision figures is that the annual average of 660 million marks was based on mid-1920s economic expectations. The economy had developed quite favorably during the first half of the decade, which must have been a significant factor in the formation of the committee's estimates. As the committee said in its 1926 report: "Providing that the nation's economy develops somewhat favorably, this amount (600 million marks) should not prove to be too much of a burden."[395] However, the committee's quite detailed plan was not adopted — one reason was the negative media attention due to the statements made by the committee's chairman Eirik Hornborg — and military solutions were left to be made on case-to-case basis in the Parliament, the Ministry of Defense, and the military establishment as a whole.[396]

Therefore, since these "high" goals were ultimately achieved, regardless of contemporary objections, the reasons for the weaknesses in material status of the Finnish soldier in the Winter War (1939—1940) must lie elsewhere. Part of the blame can be found in the inexperience and divided nature of the Finnish officer's corps. Another reason must be the political and military inability to embark on a definitive military development program, since the suggestions of the Defense Revision Committee were largely ignored. The unbalanced growth within the military establishment's different branches also set aside the Army's primary needs, as defined by the military experts of the 1920s, for example over the acquisition of new and costly coastal defense vessels in the 1930s.

The various committees were an essential part of the political life in Finland during the interwar period. An example of the influence of the smaller organizations, contrary to the case of Defense Revision, was the Board of Acquisitions appointed by the State Council on 22 May 1919 to make a statement on all the acquisitions of the military es-

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[395] Defense Revision 1926, 76—78.

[396] See for example MA, DRArch, roll 10, folder 29: *Sanomalehtileikkeitä — puolustusrevisionia koskevia 1925—1926.*

tablishment. Additionally, it had a right of initiative "in matters improving the economy of the military establishment". The aim to emphasize economy was an additional incentive in the creation of the Board. Appointments to the Board of Acquisitions consisted almost exclusively the representatives of the domestic economic elites and industries. Thus, this committee formed a natural continuum to for example the Staff of Engineers, which had functioned during the Civil War. In the Staff Engineers, as in the case of Board of Acquisitions, the representatives of private businesses took care of the economic needs of the armed forces. The role of the Board became decisive in the acquisitions of the Ministry of Defense: All acquisitions required the approval of the Board before their completion. The different departments of the Ministry of Defense followed this principle quite strictly.[397]

The Board of Acquisitions employed from the very beginning the principle of competition in the acceptance of contracts in order to enhance efficiency. In the first years of the 1920s this competition principle functioned quite efficiently, but during the course of the decade more and more orders were given to domestic producers. Competition became in many cases a mere formality. This was caused by the general improvement of economic conditions — the nation was not considered to be in peril — as well as the increased demands of the domestic industries. The regulations of the Board of Acquisitions in 1924 serve as a good example of this change: "...when the interests of the military establishment do not require otherwise, the order will be favored to be given to a domestic producer of a good or service." In 1925 the Board was divided into two sections: metal and engineering industry, and commissariat sections. Both were almost ex-

[397] MA, Archive of the Ministry of Defense, Ca 2. State Council's minutes, introduced by the Ministry of Defense 1919, 22.5.1919; MA, The Board of Acquisitions, minutes 1919—1926 ; the minutes of the Board are missing after the year 1926. The first meeting of the Board took place 2.12.1919. See also Hjerppe-Lamberg 1997; Eilola 1997. See also Series C, Appendices of this thesis.

clusively filled with the representatives of the respective industries in the Federation of Finnish Industries.[398]

In order to assess the structure and the significance of the Board of Acquisitions, we need to compare the Finnish system to, for example, the British equivalent. The organization that evolved in 1927 in Great Britain (see Table 7) was the result of intra-service struggles to reach a compromise on the matter after the First World War. The organization was headed by the Committee of Imperial Defense (CID) and supported by the Principal Supply Officers Committee (PSOC), which had been established in 1924 for the formidable task of coordinating inter-service acquisitions.[399] The Contracts Coordinating Committee (CCC), which had been founded as early as December 1920, is perhaps the best comparative reference as far as the Finnish Board of Acquisitions is concerned due to the confusion in the British acquisition organization in the early 1920s. The purpose of the CCC was: 1) to view comprehensively markets and sources of supply as well as maintain up-to-date data on national production capacities; 2) to prepare the productive resources of government-owned and private factories in case of crises; 3) to coordinate methods of purchase and contract policies; 4) to develop contract mobilization arrangements for a time of crises. In short, the CCC aimed at "securing by agreement economy on purchases".[400]

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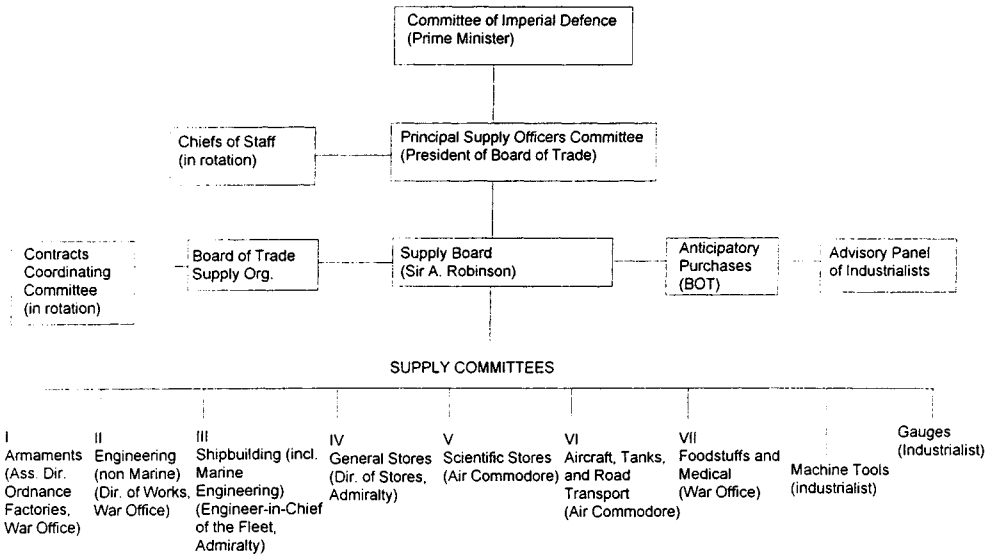
[398] MA, Board of Acquisitions, Minutes 1919—1926, minutes 1924 (SArk 2138/9), 28.5.1924; minutes 1925, (MA 2138/10), 3.6.1925. Appendices, Series C — even though only some of the members of the Board appear at first to be connected to the Federation of Finnish Industries (Feiring, Lavonius), a closer evaluation of the archive of the Federation of Finnish Industries reveals more connections (Hovilainen, O. Nikander, Niklander); ACFI, Minutes of the Federation of Finnish Industries 1920—1936. Additionally, the positions of the other members provided them with connections to the same circles. As Reino Arimo has described: "The members were known leaders of economic life"; Arimo 1981, 46.

[399] Gordon 1988, e.g. 19—47, 61—64.

[400] PRO, War Office, WO 221/1: Proceedings of the Contracts Coordinating Committee, Meetings 1—9, 1921.

The most significant difference compared to the Finnish case was the absence of significant domestic industries' involvement in acquisition matters, for example directly in the CCC, in the 1920s and early 1930s. The Federation of British Industries (FBI) and the CCC had several disagreements over acquisition issues. Of course the British producers' position in the British society was already well established by this time, which differed noticeably from the Finnish case.[401] However, the continuance of contracts and connections established already earlier was secured in the CCC. Especially after the mid-1920s

Table 7. The Organization of the British Supply Decision-making in 1927



Note! Committee Chairmen in Brackets.

Source: Gordon 1988.

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[401] PRO, War Office, WO 221/1: Proceedings of the Contracts Coordinating Committee, Meetings 1—9, 1921: 2.5.1921, 14.7.1921, 20.2.1921; WO 221/3: Proceedings of the Contracts Coordinating Committee, Meetings 16—22, 1923: 22.1.1923; WO 221/4: Proceedings of the Contracts Coordinating Committee, Meetings 23—28, 1924: 10.7.1924, 6.10.1924. FBI was actually against protective tariffs in order to protect domestic production in the 1920s, which in turn made the domestic production interests somewhat weaker in e.g. military acquisitions. The situation was not altered until the onset of the Great Depression. See Rooth 1997, e.g. 192—195.

the committee even took a tighter attitude towards domestically produced, yet based on foreign materials, goods. The only noticeable, clear opposition emerged in the issue on monopolies, or "rings", which also displays the high level of organization among the British military supply producers.[402]

Was the involvement of domestic producer's interests in the Board of Acquisitions in Finland a case of profit-maximization or are there other factors to be found behind the phenomenon? The Board's favorable disposition towards domestic production became more pronounced in the mid-1920s. However, the members were in general against government-owned armaments production and monopolizing the military acquisitions. For example, in the case of the gunpowder factory the Board made specific remarks that "the state should not itself start to establish a gunpowder factory rather than leave it to a private company".[403] However, the support of the Social Democrats enabled the creation of government armaments factories in the 1920s and 1930s.[404] On this issue the domestic production interests represented in Board clearly failed to have an impact. The attitude of the Board on acquisitions changed significantly after the first years of independence. Some of the aspects of this change included a more lenient opinion of Ministry of Defense's acquisition in its own right as well as providing more long-term contracts for Finnish producers.[405] A key issue in this change was the fact that Finland was not actively threatened anymore after the First World War and its immediate aftermath. It is

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[402] PRO, War Office, WO 221/5: Proceedings of the Contracts Coordinating Committee, Meetings 29—33, 1925: 11.2.1925, 22.6.1925; WO 221/6: Proceedings of the Contracts Coordinating Committee, Meetings 34—38, 1926: 22.2.1926, 18.10.1926; WO 221/7: Proceedings of the Contracts Coordinating Committee, Meetings 39—43, 1927: 24.1.1927, 19.7.1927.

[403] MA, Board of Acquisitions, Minutes 1919—1926, minutes 1919 (Sark 2137/8), 18.6, 11.9.1919; minutes 1920 (Sark 2137/9), 23.4.1920; minutes 1921 (Sark 2137/10), 31.5.1921; minutes 1921 (Sark 2137/11), 16.12.1921, 20.12.1921; minutes 1924 (Sark 2138/9), 13.8.1924, 24.9.1924. On the Board's stance on fortifications, see also Arimo 1981.

[404] E.g. Tervasmäki 1964; Mylly 1978.

[405] MA, Board of Acquisitions, Minutes 1919—1926.

also significant that the interests of the Finnish domestic producers were already secure by the mid-1920s. This situation was not altered until the rising threats of the 1930s.

The Federation of Finnish Import Industries, later the Central Association of Finnish Import Industries, and from 1924 onwards the Federation of Finnish Industries (FFI), was established on 28 January 1921 to protect the interests of the domestic industries. Some of the central principles in the activities of the Federation were, in addition to duty issues, influencing trade agreements and protecting the functioning of domestic industries in Finland. Thus, the interests of the FFI were intricately linked to the allocation of defense contracts. The State Council had appointed in 1921 a separate Board of Experts in Government Acquisitions. The Federation was able to push through a principle in the Board, which naturally effected the Board of Acquisitions in the Ministry of Defense as well, that even twenty percent more expensive domestic products were to be favored in government acquisitions compared to foreign products. The Federation attempted to push through this principle as early a 1921 but failed at first. This principle was adopted a few years later. The Federation's grip on government contracts was temporarily lost at the end of the 1920s, but with the coming depression the same principle was adopted again. During the depression years the more lenient attitude of the State Council and the Ministry of Finances solidified the practice of favoring domestic producers. In the 1930s the interests of the FFI emerged not only through the Board of Acquisitions but through the Economic Defense Council as well.[406]

The influence of the Federation was thus extended to the actual decision-making on the military acquisitions. The members of the Board of Acquisitions, which continued to function throughout the interwar period, consisted of the representatives of the different

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[406] ACFI, minutes of the Federation of Finnish Industries 1920—1925, 11.12.1920, 28.1.1921, 28.5.1921, 9.11.1921; minutes 1926—1929, 7.2.1928; minutes 1934, 2.11.1934; Federation of Finnish Industries, annual report 1930; Pesonen 1992, 9—10, 14; Finlands industriförbund 1946, 85—88; Lamberg 1997. On the Economic Defense Council, see Nummela 1984 for details.

industries within the Federation of Finnish Industries. Of, for example, the chairmen of the Federation Finn Feiring and Robert Lavonius acted as the chairmen of the Board of Acquisitions as well in the 1920s and 1930s. The FFI was also engaged in an active propaganda campaign, in the newspapers for example, in order to achieve its goals during the interwar period.[407] The Federation's activities were characterized by a very right-wing ideological base in their actions, which fit well with the idea of emphasizing domestic self-sufficiency in the development of military resources. Thus, this was a case of ambivalence of sorts in dealing with the military establishment: on the one hand the Federation tried maximize the profits of its members; on the other hand they wanted to secure the self-sufficiency of the defense industries for a possible crises. The latter dimension of the actions of the Federation became more pronounced in the 1930s.[408]

The person who acted as a liaison between the members of the parliament and the Federation was the Managing Director of the Federation, V.M.J. Viljanen. Viljanen himself was a member of parliament, representing the Progressive Party, during 1924—1926. He also held many distinguished positions in other organizations, for example in the Finnish Navy Federation. The Federation of Finnish Industries was also, similar to the Board of Acquisitions, against government-owned military production. Another issue that the Federation dealt with in the 1920s was the support of the Finnish shipyards in obtaining the new Navy contracts. Three Finnish shipyards — Maskin & Brobyggnads AB, AB Crichton-Vulcan OY, and AB Sandvikens Skeppsdocka & Mek. Verkst — contacted the Federation in 1926 in fear of "intentions to give the orders out of the country". The Federation decided to pressure the Cabinet in order to obtain the orders to domestic producers, which subsequently did occur.[409]

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[407] MA, Board of Acquisitions, Minutes 1919—1926; Pesonen 1992, 14—15.

[408] See Lamberg 1997 for further details.

[409] ACFI, Minutes of the Federation of Finnish Industries, 1920—1925, 8.2.1923, 20.9.1924, 19.10.1925; Minutes of the Federation of Finnish Industries, 1926—1929, 1.7.1926, cf. 28.2.1926; 7.8.1928; Suomen kansanedustajat 1982, 715.

The position of Viljanen and the entire FFI was not, however, stable as the 1930s were to prove. The issue of the Federation's own propaganda company (*Suomen Ilmoituskeskus*), headed by Viljanen, and the resulting deficits led to demands among the representatives of the metal industries that Viljanen's tenure as a managing director must be terminated. Viljanen and his friends in the Board of the Federation barely managed to secure his continuation in this post.[410] Another difficulty in the Federation's activities was the division between the agrarian producers, the export industries, and the domestic industries (represented by the Federation). The Federation tried actively to achieve cooperation with the export industries in the 1920s, but without any concrete results at first. These efforts were repeated in the aftermath of the Great Depression.[411]

The efforts of reconciliation between the Central Federation of Agricultural Producers (CFAP) and the Federation of Finnish Industries started bear fruit before the mid-1930s. The cooperation began in a concrete form in 1934 with a joint committee. These two organizations were both aimed at protecting the domestic production from foreign competition. The issues they shared in interests were tariffs, supporting domestic production, and government acquisitions. As Juha-Antti Lamberg has pointed out, in 1935 the joining of forces led to, for example, supporting the same candidates in the elections with the export industries (represented by the Central Federation of Finnish Woodworking Industries, CFFWI) as well as continued support of the Agrarian Union, the main platform of the agrarian producers, CFAP. The official cooperation of CFFWI and the Federation of Finnish Industries began also in 1935. The industrialists and the agrarian producers were both concerned for the tightening of international tensions and

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[410] ACFI, Minutes of the Federation of Finnish Industries, 1932, 20.1.1932, 27.1.1932, 19.4.1932, 9.5.1932, 16.6.1932 — this issue caused great division among the members of the Federation; Lamberg 1997. On metal industries, see e.g. Olin 1938.

[411] ACFI, Minutes of the Federation of Finnish Industries, 1920—1925, e.g. 10.5.1922, 5.12.1924; Minutes of the Federation of Finnish Industries, 1935, 23.1.1935.

the "growing influence" of socialism. Thus, their actions can not be accurately be described as pure profit-maximization.[412]

5.4. Path Dependent or Not? Finnish Military Expenditures in Retrospective

Path dependence, as we have defined the concept in this thesis, refers to a limited institutional causality, in which the historical constraints formed by institutional structures and the actions of organizations in profit-maximization, whatever those profits may be. In a certain observation year the increasing returns and imperfect markets, as proclaimed in the NIE theorists writings, create the required preconditions for path dependence. However, can the development of Finnish military acquisitions actually be defined as path dependent? What kind of factors create such an institutional framework that the actions of organizations become the decisive element in a process?

Most of the researchers agree, at least to a degree, that there were some material deficiencies evident in the Finnish armed forces before the Winter War. The explanations for this have thus far almost without exception referred to the insufficient military expenditures. There have often been references to the "shortsightedness" of the politicians in denying larger appropriations.[413] However, if we compare the Finnish military expenditures to the developments within other, small or large, democracies, we find that the Finnish military expenditures, to say the least, developed quite favorably during the interwar period. The percentage share of military expenditures of the total central government expenditures remained for most of the years above twenty percent in interwar Finland. On the other hand, we must take into account the development of central gov-

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[412] ACFI, Minutes of the Federation of Finnish Industries, 1934, e.g. separate minute 1.2.1934, 26.4.1934; Minutes of the Federation of Finnish Industries, 1935, 6.2.1935, 4.12.1935, 18.12.1935; Lamberg 1995, 34—39; Lamberg 1997; Juva 1957, 420—423.

[413] See e.g. Juottonen 1997.

ernment spending as well. The percentage share of military expenditures of GDP remained quite high in Finland, over two percent, compared to the other nations in these comparisons. This level equaled and even exceeded the military spending in Great Britain. Respectively, Belgium's share, whose threat scenarios next to Great Powers somewhat resembled the Finnish, was considerably lower. If we measure military outlays in a common currency per capita, Finland seems to have followed approximately the average military spending among the nations. Thus, we may conclude that the military spending in a small and continuously threatened Finland was high especially compared to the smaller nations and that they increased steadily from the 1920s to the 1930s.

If the military spending in Finland was comparatively quite high, why were there material deficiencies to be found before the Winter War? The path dependence defined earlier developed as combination of several factors. Firstly, the Finnish military establishment was not able to apply comprehensive planning in its military acquisitions (for example, the plans prepared by the Defense Revision). This was caused by the division of the officer corps and their inexperience in the 1920s as well as political considerations. Secondly, the Finnish military establishment had to be created almost out of nothing on the basis of war booty materials. Thirdly, the military acquisitions in Finland were largely, due to the influence of domestic industrial interests, based on domestic production, which also led to the founding of public defense material production. What was the role of the smaller organizations in these acquisitions?

The role played by the smaller organizations, such as committees and interest groups, in the allocation of military funding was central in interwar Finland. The organizational activities of these groups were made possible by the internal power struggles within the larger political entities as well as in the military establishment. For example, the Board of Acquisitions in the Ministry of Defense, which maintained a tight control of military acquisitions, consisted of members of economic elites and interest groups, such as the

Federation of Finnish Industries. The influence of the domestic interests in the decision-making led to an emphasis on domestic military production, which "path" was further strengthened by the establishment of government-owned military production facilities supported by the Social Democrats, otherwise averse to military spending.

The fourth important point as far as the development path of military spending in Finland is concerned relates to the fact that Finland upheld comparatively quite large armed forces during the interwar period. The armed forces, however, were divided internally in the high command due to the power struggles between the Czar's officers and the Jaeger officers. Additionally, the naval officers both working in the Ministry of Defense and in the various pressure organizations were able to push through a large naval building program in the late 1920s. The acquisition plans of the other branches were largely ignored. Still, the military spending in Finland during 1927—1936 was hardly insufficient as such: The Defense Revision Committee's estimates, considered to be expensive at the time of their completion, were exceeded clearly, especially during the depression years.

The most decisive factor in the military spending in Finland was the allocation of defense contracts to the domestic, private and public, industries, which often had to be created out of nothing. These facilities were also awarded significant price advantages compared to the foreign producers. Also, the lack of planning in acquisitions made it difficult to monitor the development of the material status of the armed forces. We can, however, hardly talk about the "shortsightedness of the politicians", as some researchers have done.

There are distinctly path dependent features in the development of military spending in interwar Finland. However, it would be perhaps too ahistorical to make a value judgment whether it was first, second, or third degree path dependence, as technological research sometimes attempts to do. It is difficult to assess if the actors — in this case,

the members of elites and interest groups — were aware of the "inefficiency" of the choice that they made. Their interests were also often so intertwined — for example, the members of the Federation of Industries wanted to both further their own economic interests as well as maintain Finland's preparedness during a time of crises, i.e. with domestic production. Thus, it is questionable whether these choices were clearly inefficient inasmuch the survival in the Second World War is concerned. Also, it is impossible to separate the right-wing ideological thinking, mostly the fear of the spread of Socialism, from the profit-maximization of the actors. Thus, the concept of path dependence should here be considered merely a tool in providing a more comprehensive explanation, not a breakthrough in economic theory in itself.

EPILOGUE

The hegemonic paradigm advocated by Paul Kennedy and Robert Gilpin has undoubtedly some important contributions to offer for the study of crises and world economic order. It has definite merit in its attempt to understand the impact of military spending and competition for economic and political leadership in explaining economic development. However, it should not be offered as a comprehensive theory any more than path dependence. A good explanation of military spending in any time period should include a comprehensive coverage of both internal and external factors, as cited by for example Juhani Mylly.[414] Any other approach is essentially lacking in some respect. However, the "final" truth is as elusive for a researcher to achieve as a total theory explaining historical development.

Studying periods of peace is now considered equally important in order to understand the years of war, as the interwar experience analysis clearly proves. The perspectives of military experience versus society or the Kennedy-Gilpin hegemony paradigm will also be beneficial in trying to understand different time periods. Military expenditures reflect greatly the values of the societies in question. This type of analysis should also prove helpful in finding hidden structures and trends in the societies as a whole. The entire field of military history still, however, lacks a great deal more discussion on methods and approaches available. In these efforts interdisciplinary research, especially economics and social sciences, has formed the key in finding new ways and ideas for keeping this field of interest alive in historical research. A careful analysis of a time period benefits greatly from the understanding of its military or non-military character, be it economics or history.

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[414] See Table 2 (chapter 5.1) of this thesis.

The remarks of the 19th century Prussian General Carl von Clausewitz perhaps outline the point even better:[415]

> "In order to ascertain the real scale of the means which we must put forth for War, we must think over the political object both on our own side and on the enemy's side; we must consider the power and position of the enemy's State as well as of our own, the character of his Government and of his people, and the capacities of both, and all that again on our own side, and the political connexions of other States, and the effect which the War will produce on those States. That the determination of these diverse circumstances and their diverse connexions with each other is an immense problem, that it is the true flash of genius which discovers here in a moment what is right, and that it would be quite out of the question to become master of the complexity merely by a methodical study, it is easy to conceive."

Clausewitz lists as the essentials in analysis of the precedents of war the politics of the states in question — both domestic and foreign policy — as well as the power of the states and their people in general. Indeed, it is a difficult task to analyze all the possible aspects of the causes and effects of military spending, but it seems clear that any such analysis should be as broad in scope as possible, taking into account both the external power relations between states as well as their domestic political situation and economic development.

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[415] Clausewitz 1982 (reprint), 375.

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APPENDICES:

Sources and Solutions Relating to the Data Tables:

Series A and B:

Belgium. The GDP figures were obtained from Buyst 1997; military expenditure, and central government expenditure figures for Belgium were obtained from Clement 1995, which are both part of the results of the growth study group's work in Belgium (see Buyst et al. 1995 for details). Military expenditures in Clement's study, which follow the definition set for military expenditures in the introduction of this thesis, consist of salaries and wages of military personnel, excluding pensions (Ministry of Defense administration and Army, Army food and clothing, and military police), current purchases of non-durable goods and services in the military sector (such as expenditures for heating and light, fuel, ammunition, offices etc.), and purchases of durable military goods (military buildings, military equipment, extraordinary credits, receipts from sales).[1] Thus, fixed military expenditures consist of salaries and wages and current purchases of non-durable goods, whereas capital expenditures refer to purchases of durable military goods in the tables. GDP per capita in 1990 Geary-Khamis dollars were obtained from Maddison 1995. The deflator used was the consumer price index (Clement 1995), which was applied to all the conversions to real values. Population figures come from Maddison 1995, except for the colonial populations. The figures inclusive of colonial areas are available in Statistisk Årsbok för Sverige (1924 and 1939 respectively) for years 1922 and 1938. The colonial population for the interwar years was derived from by first obtaining the growth percentage between the base years as represented by the formula:

1. $p=\sqrt[16]{(\frac{y}{x})}$, in which p represents the percentage, y the amount of population in 1938, and x the amount of population in 1922.

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[1] See Clement 1995, 171, 177, 179.

This growth percentage was then applied to interpolating the growth of population in Belgium and its colonial possessions. The areas, the country proper and colonial possessions, were taken from the Statistisk Årsbok för Sverige (1923). There are some discrepancies between the different years' values, both in population figures and areas, which weaken the representative value of these figures for the calculations. Exhange rates used in the conversions to 1926 and 1927 Finnish marks can be found in Autio 1992. Values used in the conversions were annual average exchange rates for the currencies (e.g. in this case to be found on page 201 in Autio's study). Military personnel data was taken from Flora 1983 (with the limitation to be noted on page 245; these limitations will be covered in more detail in connection with the tables). Data on the voting developments comes from Mackie-Rose 1991.

Denmark. The GDP, military expenditure, and central government figures for Denmark came from Johansen 1985. Military expenditures are not specifically defined or classified in Johansen's statistics; he merely notes that they include "expenditure on the Ministries of War and Naval Affairs".[2] This naturally weakens the representative value of these figures in these comparisons. The deflator used in all of the conversions to real values was the wholesale price index (Johansen 1985). GDP per capita in 1990 Geary-Khamis dollars were obtained from Maddison 1995. Population figures were taken from Maddison 1995, except the figures for the impact of the Far Islands and Greenland were calculated from Statistik Årsbok för Sverige 1924 and 1939 (see Belgium above for details). Area data, for the country proper and the other possessions, came from Statistik Årsbok för Sverige (1923). Exchange rates were obtained from Autio 1992 (see Belgium above for details). Military personnel data was taken from Flora 1983. Data on election results comes from Mackie-Rose 1991. Data on public consumption was calculated from Hansen 1974 and Johansen 1985. The figures on industrial production can be found in Hansen 1970. See also Eloranta 1997b for details on the sources and calculation techniques.

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[2] Johansen 1985, 353 — this definition is given for the period preceding the First World War but presumably applies also for the following interwar years as well.

Finland. The GDP figures for Finland were obtained from Hjerppe 1988. GDP per capita in 1990 Geary-Khamis dollars were obtained from Maddison 1995. Military expenditure figures came from Tervasmäki 1964, except in the case of Table 5 found in chapter 5 (Tervasmäki 1973). Military expenditures in the Finnish case included the following: expenditures for border- and sea patrols, wages and salaries of military personnel (Ministry of Defense and General Staff, wage expenditures, other expenditures, expenditures on the Civic Guards, and other fixed expenditures), and capital expenditures (defense industries, business costs, basic acquisitions costs, and military buildings).[3] Thus, fixed expenditures included the first of the two mentioned above in the tables. Central government figures used in the tables and charts were obtained from Taimio 1986. Population figures came from Maddison 1995. The deflator used in conversions to real terms was the wholesale price index (Hjerppe 1996). Military personnel figures were attained from Flora 1983, and they were compared with Kronlund 1990 for reliability (the figures were found to be quite close except for the first years after the Civil War of 1918). Voting data was obtained from Mackie-Rose 1991. Public consumption data was taken from Eloranta 1997a and the sources used in it. The same applies to the data on industrial production and individual branches of production (see Eloranta 1997b for details).

France. The GDP figures as well as the data on central government expenditure were obtained from Mitchell 1992. GDP per capita in 1990 Geary-Khamis dollars were obtained from Maddison 1995. The figures on military expenditures were collected from the Annuaire Statistique (1920—1939); they are partially budget figures (which weakens their representativeness). These expenditures were divided into ordinary and extraordinary receipts in the Annuaire Statistique. The data on military expenditures was not available for years 1920 and 1921. An alternative set of military expenditure figures (which was used to check the reliability of the figures mentioned above), though only for 1928—1938, can be found in Tiffen 1938. It was found that the figures of Tiffen were higher than the ones found in Annuaire Statistique. However, a comparison with

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[3] See Tervasmäki 1964, 284—285.

the Armaments Year-Book 1929 reveals that the figures in the Annuaire Statistique seem to be almost identical to the ones in the Armaments Year-Book.[4] Thus, the figures from the Annuaire Statistique were used. Population figures for France proper were obtained from Maddison 1995 — for colonial population a similar approach was adopted as in the case of Belgium (see above). The area data was obtained from Statistisk Årsbok för Sverige. Conversion to real values were performed with the wholesale price index found in Mitchell 1992. Exchange rate data came from Autio 1992. Military personnel figures were taken from Flora 1983. Voting data was obtained from Mackie-Rose 1991.

Norway. The nominal GDP figures for Norway were taken from NOS XII 1969 as well as the data on military consumption (on the development of Norwegian national accounting, see Hodne-Grytten 1997). Military expenditure data came from Historisk Statistikk 1978. These figures, however, are not actually defined rather than listed as "military and civil defence"[5], which makes them less representative for comparative purposes. Thus, these figures are augmented with the figures on military consumption mentioned above. GDP per capita in 1990 Geary-Khamis dollars were obtained from Maddison 1995. Central government expenditure data was obtained from Historisk Statistikk 1978. Real term conversions were performed by using the wholesale price index found in Mitchell 1992. Exchange rates can be found in Autio 1992 (see Belgium above for details). Population figures came from Maddison 1995. Area data can be found in Statistisk Årsbok för Sverige (1923). Military personnel data was attained from Flora 1983. Data on the election results were taken from Mackie-Rose 1991. Public consumption figures came from NOS XII 1969.

Sweden. The GDP data for Sweden came from Krantz 1995, which are the latest figures resulting from the extensive growth study project in Sweden (see Christensen et al. 1995 for details). GDP per capita in 1990 Geary-Khamis dollars were obtained from Maddison 1995. Military expenditures were calculated from Statistisk Årsbok för

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[4] See League of Nations 1928, 434.

Sverige (1920—1941). Military expenditures thus included: Ministry of Defense spending, Army (i.e. wages, conscripts' pay, education, materials etc.), Navy (i.e. wages, conscripts' pay, eduation, materials etc.), Air Force, and other spending.[6] An alternative set of figures on military expenditures, for every other year, can be found in Höök 1962 (which are slightly higher than the figures in the Statistisk Årsbok but develop quite similarly). Central government expenditures were also obtained from Statistisk Årsbok för Sverige (1920—1941). The deflator used in the conversions to real terms was the wholesale price index found in Mitchell 1992. Exchange rates were taken from Autio 1992 (see Belgium above for details). Population figures came from Maddison 1995. Area data was obtained from Statistisk Årsbok för Sverige (1923). Military personnel data was taken from Flora 1983. Voting data came from Mackie-Rose 1991. Public consumption figures, calculated to be comparable with the Finnish figures (see Eloranta 1997a for details), were obtained from Eloranta 1997a and the sources listed in it. The same applies for the figures on the composition of industrial production as well as the volume development (Eloranta 1997b).

United Kingdom. The GNP figures for UK were obtained from Sefton-Weale 1995 (in which some statistical corrections were made to Feinstein's 1972 figures) as well as the figures on military expenditure (originally they are found in Feinstein 1972, T78). Feinstein defined military and civil defense expenditures in the following manner: "Total expenditure at home and abroad by the service the service departments together with the Ministry of Munitions and other special items arising from World War I (including sales of surplus stores etc.). Civil defence consists mainly of expenditure on air raid precautions at the very end of the period."[7]. At first this definition may seem problematic as far as the definition of military expenditures in the thesis' introduction is concerned. However, colonial military spending falls mainly under the definition of General Administration in Feinstein's study (under Colonial Service). Also, civil defense spending forms only a very small portion in his figures. An alternative set of

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[5] Historisk Statistikk 1978, 449.

[6] See e.g. Statistisk Årsbok 1933, 284—285.

[7] Feinstein 1972, T 78, Table 33.

military expenditure figures can be obtained from Mitchell 1988, yet they are considerably higher for especially the beginning of the 1920s. The figures found e.g. in League of Nations 1923, after subtracting the colonial spending and estimating some impact for pensions being included, support the use of Feinstein's figures (as corrected in Sefton-Weale 1995).[8] In addition, Mitchell's figures lack a clear definition of military expenditures. GDP per capita in 1990 Geary-Khamis dollars were obtained from Maddison 1995. Central government expenditures were found in Mitchell 1992 (cf. Mitchell 1988; there is a discrepancy in the figures compared to the 1992 figures: the figures, all of them for the interwar period, have a year's difference between them — thus the solution adopted here has been to use the 1992 figures). Deflator used in conversions to real terms was the wholesale price index (Mitchell 1992). Exchange rates were obtained from Autio 1992 (see Belgium above for details). Population figures were taken from Maddison 1995, except inclusive of colonial areas from Statistisk Årsbok för Sverige 1924 and 1939 (see Belgium above for details). Area, excluding Ireland, data was taken from Statistisk Årsbok för Sverige (1923). The number of military personnel came from Flora 1983. Voting data can be found in Mackie-Rose 1991.

United States. The GNP figures for the United States were obtained from the Historical Statistics 1960 as well as the figures for military expenditures, central government expenditures, and military personnel. These GNP figures were very close to the ones provided in The National Income and Product Accounts 1981. Alternate GNP figures for 1920—1928 were taken from Romer 1988. Military expenditures consisted of spending by the Department of the Army and the Department of the Navy (Air Force was part of the two at the time in question). Thus, military expenditures excluded such items as interest on public debt and veterans compensation and pensions (which are listed separately in the statistics). The division between the two service spending was obtained from Historical Statistics 1975. The deflator used was the wholesale price index taken from Mitchell 1993. GDP per capita in 1990 Geary-Khamis dollars were obtained from Maddison 1995. Exchange rates came from Autio 1992 (see Belgium

[8] League of Nations 1923a, 97. Mitchell's 1988 figures were only used to compare spending division

above for details). Population figures were taken from Maddison 1995, except inclusive of other areas (in this case Alaska, the Panama Canal, Puerto Rico, the Virgin Islands, Philippines, Hawaii, and Samoa) from Statistisk Årsbok för Sverige 1924 and 1939 (see Belgium above for details). Area data, for US proper and areas outside of mainland, came from Statistisk Årsbok för Sverige (1923). Voting data was obtained from Mackie-Rose 1991.

Series C::

The data on the members of the Defense Revision Committee came from Defense Revision 1926. Information on the actual members of the Board of Acquisitions, only for 1919—1926 however, were collected from MA, The Board of Acquisitions 1919—1926, minutes 1919—1926. Data on the *listed* members of the Finnish Federation of Industries 1921—1946 came from Finlands industriförbund 1946. Data on the party affiliations, personal lives, and posts held was taken from: Suomen kansanedustajat 1982; MA, Board of Acquisitions 1919—1926, minutes 1919—1926; ACFI, minutes of the Finnish Federation of Industries, 1920—1936; Heikinheimo 1955.

Organization of the Data Tables:

The data tables are divided into Series A, B, and C. Series A includes figures on a country basis on GDP, central government expenditures, military expenditures etc. Series B consists of comparative data tables on, for example, military expenditures per capita in these eight countries. Series C lists the members of select small organizations involved in military decision-making in interwar Finland. More detailed order of the data tables can be found in the Table of Contents of this thesis.

NOTE! All percentage comparisons were performed with nominal values.

Symbols:
.. = data not available
- = value is zero

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within the military establishment.

DATA TABLES:

SERIES A. NATIONAL FINANCES AND MILITARY OUTLAYS BY COUNTRY

Series A. Table 1. Economic Development and Military Spending in Belgium, 1920—1938

Year	A.	B.	C.	D.	E.	F.	G.
1920	28,441	3878	38,810	49,366	10,268	13,951	89,5
1921	27,048	3970	41,947	53,357	8,310	12,864	82,5
1922	26,629	4320	44,169	56,183	8,428	13,954	89,5
1923	32,917	4437	47,553	60,487	8,701	12,556	80,6
1924	39,662	4539	48,963	62,281	9,666	11,919	76,5
1925	41,332	4567	49,319	62,734	13,669	16,292	104,5
1926	49,893	4682	49,859	63,421	15,585	15,585	100,0
1927	63,342	4819	49,709	63,230	9,270	7,288	46,8
1928	73,037	5030	54,887	69,816	10,801	8,139	52,2
1929	83,504	4947	58,925	74,953	12,278	8,671	55,6
1930	87,163	4873	61,535	78,273	13,857	9,800	62,9
1931	79,992	4757	61,787	78,593	12,078	9,348	60,0
1932	69,898	4510	60,048	76,381	11,653	10,003	64,2
1933	68,802	4581	60,365	76,784	11,187	9,805	62,9
1934	64,714	4526	60,026	76,353	11,272	10,456	67,1
1935	65,946	4790	62,137	79,038	13,568	12,812	82,2
1936	70,473	4809	63,466	80,728	13,846	12,496	80,2
1937	80,131	4856	67,273	85,572	14,175	11,922	76,5
1938	81,629	4730	66,165	84,162	14,482	11,755	75,4

A = nominal GDP; B = GDP per capita in thousands of 1990 Geary-Khamis dollars by Maddison (1995); C = real GDP (deflated with the consumer price index, 1926=100); D = real GDP (deflated with the consumer price index, 1927=100); E = nominal central government expenditures (CGE); F = real CGE (deflated with the consumer price index, 1926=100)

NOTE! Monetary figures in billions of Belgian francs unless otherwise noted.

(Series A. Table 1 cont.)

Year	H.	I.	J.	K.	L.	M.	N.
1920	0,711	0,966	158,7	1,229	35,9 %	6,9 %	2,5 %
1921	0,618	0,956	154,3	1,216	30,7 %	7,4 %	2,3 %
1922	0,731	1,211	192,8	1,540	31,6 %	8,7 %	2,7 %
1923	0,867	1,251	178,5	1,591	26,4 %	10,0 %	2,6 %
1924	0,570	0,703	117,9	0,894	24,3 %	5,9 %	1,4 %
1925	0,722	0,861	141,9	1,095	33,0 %	5,3 %	1,7 %
1926	0,590	0,590	100,0	0,750	31,3 %	3,8 %	1,2 %
1927	0,717	0,564	96,9	0,717	14,7 %	7,7 %	1,1 %
1928	0,863	0,651	119,5	0,828	14,8 %	8,0 %	1,2 %
1929	1,035	0,731	131,6	0,930	14,7 %	8,4 %	1,2 %
1930	1,258	0,890	157,1	1,132	15,9 %	9,1 %	1,4 %
1931	1,234	0,955	173,6	1,215	15,1 %	10,2 %	1,5 %
1932	1,063	0,912	169,3	1,160	16,7 %	9,1 %	1,5 %
1933	0,968	0,848	158,5	1,079	16,2 %	8,7 %	1,4 %
1934	1,324	1,228	216,8	1,563	17,4 %	11,7 %	2,0 %
1935	1,166	1,101	199,4	1,401	20,6 %	8,6 %	1,8 %
1936	1,309	1,182	212,8	1,503	19,7 %	9,5 %	1,9 %
1937	1,561	1,313	240,2	1,670	17,7 %	11,0 %	1,9 %
1938	1,622	1,316	241,5	1,674	17,8 %	11,2 %	2,0 %

H = nominal military expenditures (ME) (columns O, P, and Q combined); I = real ME (deflated with the consumer price index, 1926=100); J = volume of real (1926=100) ME in 1926 prices; K = real ME (deflated with the consumer price index, 1927=100); L = % central government expenditures (CGE) of GDP; M = % ME of CGE; N = % of ME of GDP

NOTE! Monetary figures in billions of Belgian francs unless otherwise noted.

(Series A. Table 1 cont.)

Year	O.	P.	Q.	R.	S.
1920	0,436	0,172	0,103	0,608	0,103
1921	0,376	0,151	0,091	0,527	0,091
1922	0,496	0,133	0,102	0,630	0,102
1923	0,599	0,168	0,100	0,767	0,100
1924	0,378	0,127	0,066	0,504	0,066
1925	0,421	0,196	0,105	0,617	0,105
1926	0,435	0,111	0,043	0,547	0,043
1927	0,559	0,125	0,033	0,684	0,033
1928	0,661	0,130	0,072	0,792	0,072
1929	0,689	0,179	0,167	0,868	0,167
1930	0,815	0,204	0,240	1,018	0,240
1931	0,829	0,197	0,208	1,026	0,208
1932	0,745	0,175	0,143	0,920	0,143
1933	0,681	0,142	0,146	0,822	0,146
1934	0,703	0,146	0,475	0,849	0,475
1935	0,645	0,145	0,376	0,790	0,376
1936	0,760	0,158	0,392	0,918	0,392
1937	0,819	0,162	0,580	0,981	0,580
1938	0,936	0,179	0,507	1,115	0,507

O = salaries and wages of Military Personnel (for definitions, see Sources and Solutions at the beginning of the Appendices); P = purchases of non-durable military goods and services; Q = purchases of durable military goods; R = military establishment's fixed expenditures (columns O and P combined); S = military establishment's capital expenditures (same as column Q)

Series A. Table 2. Percentage of Votes by Parties in Belgian Parliamentary Elections, 1919—1939

PARTIES	1919	1921	1925	1929	1932	1936	1939
Catholic Party	36,6%	37,0%	36,1%	35,4%	38,5%	27,7%	32,7%
Dissident Catholic Lists	2,1%	4,3%	2,5%	3,1%	0,2%	1,1%	-
Liberal Party	17,6%	17,8%	14,6%	16,6%	14,3%	12,4%	17,2%
Workers Party	36,6%	34,8%	39,4%	36,0%	37,1%	32,1%	30,2%
Ex-Servicemen	1,1%	1,1%	-	-	-	-	-
Flemish Nationalists	2,6%	3,0%	3,9%	6,3%	5,9%	7,1%	8,3%
Middle Class Party	1,0%	0,5%	0,5%	0,2%	-	-	-
Communist Party	-	-	1,6%	1,9%	2,8%	6,1%	5,4%
Rexists	-	-	-	-	-	11,5%	4,4%
Others	2,3%	1,4%	1,3%	0,6%	1,1%	2,0%	1,8%

Series A. Table 3. Economic Development and Military Spending in Denmark, 1920—1938

Year	A.	B.	C.	D.	E.	F.	G.
1920	7,396	3840	2,406	2,252	0,555	0,181	0,075
1921	6,057	3681	3,439	3,218	0,499	0,284	0,073
1922	5,406	4008	4,009	3,751	0,424	0,314	0,062
1923	6,03	4386	4,108	3,844	0,402	0,274	0,056
1924	6,566	4356	5,635	5,273	0,417	0,358	0,057
1925	6,153	4212	4,757	4,451	0,382	0,295	0,067
1926	5,529	4423	5,529	5,174	0,362	0,362	0,062
1927	5,318	4481	5,683	5,318	0,332	0,355	0,055
1928	5,437	4604	5,810	5,437	0,323	0,345	0,060
1929	5,802	4883	6,324	5,918	0,324	0,353	0,062
1930	5,705	5138	7,148	6,689	0,317	0,397	0,058
1931	5,369	5156	7,700	7,206	0,333	0,478	0,057
1932	5,112	4973	7,144	6,685	0,328	0,458	0,058
1933	5,506	5090	7,231	6,766	0,393	0,516	0,059
1934	5,967	5197	7,391	6,916	0,393	0,487	0,061
1935	6,38	5272	7,169	6,709	0,405	0,455	0,055
1936	6,69	5363	7,518	7,035	0,442	0,497	0,057
1937	7,141	5453	7,076	6,622	0,497	0,492	0,069
1938	7,514	5544	7,875	7,370	0,523	0,548	0,072

A = nominal GDP at factor cost; B = GDP per capita in thousands of 1990 Geary-Khamis dollars by Maddison (1995); C = real GDP (deflated with the wholesale price index, 1926=100); D = real GDP (deflated with the wholesale price index, 1927=100); E = nominal central government expenditures (CGE); F = real CGE (deflated with the wholesale price index, 1926=100); G = nominal military expenditures (ME)

NOTE! Monetary figures in billions of Danish kroner unless otherwise noted.

(Series A. Table 3 cont.)

Year	H.	I.	J.	K.	L.	M.	N.
1920	0,024	39,5	0,023	7,5 %	13,6 %	1,0 %	0,409
1921	0,041	66,6	0,039	8,2 %	14,6 %	1,2 %	0,376
1922	0,046	74,6	0,043	7,8 %	14,7 %	1,2 %	0,428
1923	0,038	61,8	0,036	6,7 %	14,0 %	0,9 %	0,392
1924	0,049	79,3	0,046	6,3 %	13,7 %	0,9 %	0,371
1925	0,052	83,5	0,048	6,2 %	17,5 %	1,1 %	0,405
1926	0,062	100,0	0,058	6,5 %	17,1 %	1,1 %	0,441
1927	0,059	94,8	0,055	6,2 %	16,6 %	1,0 %	0,391
1928	0,064	103,4	0,060	5,9 %	18,6 %	1,1 %	0,367
1929	0,068	109,0	0,063	5,6 %	19,1 %	1,1 %	0,367
1930	0,073	117,2	0,068	5,6 %	18,3 %	1,0 %	0,352
1931	0,082	131,9	0,077	6,2 %	17,1 %	1,1 %	0,359
1932	0,081	130,7	0,076	6,4 %	17,7 %	1,1 %	0,355
1933	0,077	125,0	0,073	7,1 %	15,0 %	1,1 %	0,365
1934	0,076	121,9	0,071	6,6 %	15,5 %	1,0 %	0,378
1935	0,062	99,7	0,058	6,3 %	13,6 %	0,9 %	0,411
1936	0,064	103,3	0,060	6,6 %	12,9 %	0,9 %	0,429
1937	0,068	110,3	0,064	7,0 %	13,9 %	1,0 %	0,456
1938	0,075	121,7	0,071	7,0 %	13,8 %	1,0 %	0,488

H = real military expenditures (ME) (deflated with the wholesale price index, 1926=100); I = volume of real (1926=100) ME in 1926 prices; J = real ME (deflated with the wholesale price index, 1927=100); K = % of central government expenditures (CGE) of GDP; L = % ME of CGE; M = % of ME of GDP; N = nominal public services

NOTE! Monetary figures in billions of Danish kroner unless otherwise noted.

(Series A. Table 3 cont.)

Year	O.	P.	Q.
1920	0,278	68,5	5,5 %
1921	0,259	63,8	6,2 %
1922	0,360	88,7	7,9 %
1923	0,337	83,0	6,5 %
1924	0,304	74,9	5,7 %
1925	0,320	78,8	6,6 %
1926	0,406	100,0	8,0 %
1927	0,379	93,3	7,4 %
1928	0,363	89,4	6,8 %
1929	0,367	90,4	6,3 %
1930	0,366	90,1	6,2 %
1931	0,398	98,0	6,7 %
1932	0,394	97,0	6,9 %
1933	0,402	99,0	6,6 %
1934	0,397	97,8	6,3 %
1935	0,415	102,2	6,4 %
1936	0,425	104,7	6,4 %
1937	0,442	108,9	6,4 %
1938	0,459	113,1	6,5 %

O = real public services (in 1970 prices; see Hansen 1974); P = volume of real (1926=100) public services in 1970 prices; Q = % of public services of GDP

NOTE! Monetary figures in billions of Danish kroner unless otherwise noted.

Series A. Table 4. Percentage of Votes by Parties in Danish Parliamentary Elections, 1918—1939

Parties	1918	1920	1920	1920	1924	1926	1929	1932	1935	1939
Conservatives	18,3%	19,7%	18,9%	17,9%	18,9%	20,6%	16,5%	18,7%	17,8%	17,7%
Liberals	29,4%	34,2%	36,1%	34,0%	28,3%	28,3%	28,3%	24,7%	17,8%	18,2%
Social Democrats	28,7%	29,3%	29,9%	32,2%	36,6%	37,2%	41,8%	42,7%	46,1%	42,9%
Radicals	20,7%	11,9%	11,5%	12,1%	13,0%	11,3%	10,7%	9,4%	9,2%	9,5%
Industry Party	1,3%	2,9%	2,7%	2,3%	0,2%	-	-	-	-	-
Schleswig Party	-	-	-	0,6%	0,6%	0,8%	0,7%	0,6%	0,8%	0,9%
Communist Party	-	0,4%	0,3%	0,4%	0,5%	0,4%	0,3%	1,1%	1,6%	2,4%
Justice Party	-	-	-	-	1,0%	1,3%	1,8%	2,7%	2,5%	2,0%
Farmers Party	-	-	-	-	-	-	-	-	3,2%	3,0%
National Socialists	-	-	-	-	-	-	-	-	1,0%	1,8%
Danish Union	-	-	-	-	-	-	-	-	-	0,5%
National Cooperation	-	-	-	-	-	-	-	-	-	1,0%
Others	1,7%	1,6%	0,7%	0,5%	1,0%	0,2%	-	-	-	-

Series A. Table 5. Economic Development and Military Spending in Finland, 1920—1938

Year	A.	B.	C.	D.	E.	F.	G.
1920	13,666	1792	12,642	12,756	1,754	1,623	2,090
1921	16,105	1830	13,859	13,984	2,128	1,831	2,698
1922	17,690	1999	15,837	15,979	1,936	1,733	2,551
1923	18,991	2124	19,944	20,123	2,775	2,750	3,497
1924	20,123	2160	21,503	21,697	2,308	2,287	3,149
1925	21,697	2261	21,846	22,043	3,061	2,955	3,953
1926	22,633	2323	22,633	22,836	3,080	3,080	4,077
1927	25,328	2483	25,102	25,328	2,917	2,891	3,908
1928	27,341	2629	26,857	27,099	3,818	3,750	5,042
1929	26,521	2639	27,256	27,502	3,231	3,321	4,508
1930	24,011	2589	26,918	27,161	3,526	3,953	4,739
1931	21,315	2506	25,435	25,664	3,128	3,733	4,246
1932	21,490	2476	23,851	24,065	3,058	3,394	3,002
1933	23,054	2624	25,846	26,078	3,320	3,722	3,247
1934	26,127	2902	29,291	29,554	4,140	4,641	4,101
1935	27,496	3004	30,518	30,792	4,578	5,081	4,533
1936	30,291	3184	32,641	32,934	4,906	5,287	4,862
1937	35,663	3342	32,450	32,742	5,947	5,411	5,898
1938	38,466	3486	37,454	37,791	5,105	4,971	5,433

A = nominal GDP; B = GDP per capita in thousands of 1990 Geary-Khamis dollars by Maddison (1995); C = real GDP (deflated with the wholesale price index, 1926=100); D = real GDP (deflated with the wholesale price index, 1927=100); E = nominal central government expenditures (CGE) found in Taimio 1986; F = real Taimio (1986) CGE (deflated with the wholesale price index, 1926=100); G = nominal "old" CGE found e.g. in Suomen taloushistoria 3 (1986)

NOTE! Monetary figures in billions of pre-1963 Finnish marks unless otherwise noted.

(Series A. Table 5 cont.)

Year	H.	I.	J.	K.	L.	M.	N.
1920	1,933	0,405	0,375	61,7	0,378	12,8 %	15,3 %
1921	2,322	0,394	0,339	55,9	0,342	13,2 %	16,8 %
1922	2,284	0,409	0,366	60,3	0,369	10,9 %	14,4 %
1923	3,466	0,462	0,458	75,4	0,462	14,6 %	18,4 %
1924	3,121	0,505	0,500	82,5	0,505	11,5 %	15,6 %
1925	3,816	0,611	0,590	97,2	0,595	14,1 %	18,2 %
1926	4,077	0,607	0,607	100,0	0,612	13,6 %	18,0 %
1927	3,873	0,598	0,593	97,6	0,598	11,5 %	15,4 %
1928	4,953	0,623	0,612	100,8	0,617	14,0 %	18,4 %
1929	4,633	0,671	0,690	113,6	0,696	12,2 %	17,0 %
1930	5,313	0,701	0,786	129,5	0,793	14,7 %	19,7 %
1931	5,067	0,740	0,883	145,5	0,891	14,7 %	19,9 %
1932	3,332	0,714	0,792	130,6	0,800	14,2 %	14,0 %
1933	3,640	0,676	0,758	124,9	0,765	14,4 %	14,1 %
1934	4,598	0,780	0,874	144,1	0,882	15,8 %	15,7 %
1935	5,031	0,874	0,970	159,8	0,979	16,6 %	16,5 %
1936	5,239	0,975	1,051	173,1	1,060	16,2 %	16,1 %
1937	5,367	1,109	1,009	166,2	1,018	16,7 %	16,5 %
1938	5,290	1,450	1,412	232,6	1,425	13,3 %	14,1 %

H = real central government expenditures (CGE) (deflated with the wholesale price index, 1926=100), taken from Suomen taloushistoria 3 (1983); I = nominal military expenditures (ME); J = real ME (deflated with the wholesale price index, 1926=100); K = volume of real (1926=100) ME in 1926 prices; L = real ME (deflated with the wholesale price index, 1927=100); M = % of Taimio (1986) CGE of GDP; N = % of Suomen taloushistoria 3 (1983) CGE of GDP

NOTE! Monetary figures in billions of pre-1963 Finnish marks unless otherwise noted.

(Series A. Table 5 cont.)

Year	O.	P.	Q.	R.	S.	T.	U.
1920	23,1 %	19,4 %	3,0 %	0,578	0,815	90,4	4,5 %
1921	18,5 %	14,6 %	2,4 %	0,627	0,948	82,8	4,1 %
1922	21,1 %	16,0 %	2,3 %	0,680	1,037	85,0	4,1 %
1923	16,6 %	13,2 %	2,4 %	0,790	1,227	90,4	4,5 %
1924	21,9 %	16,0 %	2,5 %	0,882	1,394	94,5	4,7 %
1925	20,0 %	15,5 %	2,8 %	0,876	1,406	95,4	4,4 %
1926	19,7 %	14,9 %	2,7 %	0,903	1,477	100,0	4,3 %
1927	20,5 %	15,3 %	2,4 %	0,841	1,483	94,9	3,6 %
1928	16,3 %	12,4 %	2,3 %	0,991	1,690	106,6	3,9 %
1929	20,8 %	14,9 %	2,5 %	1,090	1,868	115,0	4,4 %
1930	19,9 %	14,8 %	2,9 %	1,069	1,875	117,7	4,8 %
1931	23,7 %	17,4 %	3,5 %	1,065	1,896	124,6	5,4 %
1932	23,3 %	23,8 %	3,3 %	1,033	1,859	129,8	5,2 %
1933	20,4 %	20,8 %	2,9 %	1,077	1,926	135,2	5,1 %
1934	18,8 %	19,0 %	3,0 %	1,137	2,016	136,9	4,8 %
1935	19,1 %	19,3 %	3,2 %	1,177	2,092	136,1	4,7 %
1936	19,9 %	20,1 %	3,2 %	1,199	2,146	137,7	4,4 %
1937	18,6 %	18,8 %	3,1 %	1,259	2,248	137,1	3,9 %
1938	28,4 %	26,7 %	3,8 %	1,546	2,597	152,7	4,4 %

O = % of ME of Taimio (1986) CGE; P = % of ME of Suomen taloushistoria 3 (1983) CGE; Q = % of ME of GDP; R = nominal central government services; S = nominal public services; T = volume of real (1926=100) public services in 1926 prices, see Eloranta 1997a for details; U = % of central government services of GDP

NOTE! Monetary figures in billions of pre-1963 Finnish marks unless otherwise noted.

(Series A. Table 5 cont.)

Year	V.	W.	X.	Y.	Z.	AA.	AB.	AC.
1920	6,3 %	6,0 %	0,614	1,057	76,6	70,0 %	0,07 %	0,05 %
1921	6,2 %	5,9 %	0,862	1,467	81,2	62,8 %	0,05 %	0,04 %
1922	6,3 %	5,9 %	0,910	1,606	86,2	60,1 %	0,04 %	0,04 %
1923	7,0 %	6,5 %	0,938	1,729	89,9	58,5 %	0,05 %	0,04 %
1924	7,5 %	6,9 %	1,011	1,879	90,5	57,3 %	0,05 %	0,04 %
1925	7,0 %	6,5 %	1,138	2,076	98,3	69,7 %	0,05 %	0,04 %
1926	7,0 %	6,5 %	1,146	2,099	100,0	67,2 %	0,05 %	0,04 %
1927	6,3 %	5,9 %	1,230	2,201	105,5	71,1 %	0,05 %	0,04 %
1928	6,7 %	6,2 %	1,349	2,461	110,6	62,9 %	0,05 %	0,04 %
1929	7,6 %	7,0 %	1,539	2,778	124,2	61,6 %	0,04 %	0,04 %
1930	8,5 %	7,8 %	1,586	2,942	138,0	65,6 %	0,04 %	0,04 %
1931	9,6 %	8,9 %	1,527	2,892	143,0	69,5 %	0,05 %	0,04 %
1932	9,3 %	8,6 %	1,646	2,969	150,6	69,1 %	0,04 %	0,04 %
1933	9,1 %	8,4 %	1,465	2,831	145,4	62,7 %	0,05 %	0,04 %
1934	8,5 %	7,7 %	1,564	2,938	148,4	68,6 %	0,05 %	0,04 %
1935	8,4 %	7,6 %	1,603	3,071	149,6	74,3 %	0,05 %	0,04 %
1936	7,8 %	7,1 %	1,729	3,282	158,1	81,3 %	0,06 %	0,05 %
1937	6,9 %	6,3 %	2,507	4,155	184,4	88,1 %	0,04 %	0,05 %
1938	7,4 %	6,8 %	2,287	4,038	178,6	93,8 %	0,06 %	0,06 %

V = % of public consumption of GDP; W = % of public services of GDP; X = nominal central government consumption; Y = nominal public consumption; Z = volume of real (1926=100) public consumption in 1926 prices, see Eloranta 1997a for details; AA = % of military expenditures (ME) of central government services; AB = % of ME of central government consumption; AC = % of ME of public services

NOTE! Monetary figures in billions of pre-1963 Finnish marks unless otherwise noted.

(Series A. Table 5 cont.)

Year	AD.	AE.	AF.	AG.	AH.	AI.	AJ.	AK.
1920	0,04 %	0,317	0,293	0,088	0,081	..	..	..
1921	0,03 %	0,323	0,278	0,071	0,061	..	..	..
1922	0,03 %	0,350	0,313	0,059	0,053	..	..	..
1923	0,03 %	0,390	0,387	0,072	0,071	..	..	..
1924	0,03 %	0,409	0,405	0,096	0,095	..	..	..
1925	0,03 %	0,472	0,456	0,139	0,134	..	..	..
1926	0,03 %	0,449	0,449	0,158	0,158	..	..	0,146
1927	0,03 %	0,438	0,434	0,160	0,159	0,660	0,384	0,277
1928	0,03 %	0,460	0,452	0,163	0,160	0,660	0,393	0,268
1929	0,02 %	0,476	0,489	0,195	0,200	0,660	0,402	0,258
1930	0,02 %	0,501	0,562	0,200	0,224	0,660	0,435	0,225
1931	0,03 %	0,534	0,637	0,206	0,246	0,660	0,444	0,216
1932	0,02 %	0,518	0,575	0,196	0,218	0,660	0,454	0,207
1933	0,02 %	0,512	0,574	0,164	0,184	0,660	0,463	0,198
1934	0,03 %	0,534	0,599	0,246	0,276	0,660	0,472	0,188
1935	0,03 %	0,573	0,636	0,301	0,334	0,660	0,481	0,179
1936	0,03 %	0,622	0,670	0,353	0,380	0,660	0,490	0,170
1937	0,03 %	0,685	0,623	0,424	0,386	..	..	..
1938	0,04 %	0,771	0,751	0,679	0,661	..	..	..

AD = % of ME of public consumption; AE = military establishment's fixed expenditures, nominal (Tervasmäki 1964); AF = military establishment's fixed expenditures, real (deflated with the wholesale price index, 1926=100); AG = military establishment's capital expenditures, nominal (Tervasmäki 1964); AH = military establishment's capital expenditures, real (deflated with the wholesale price index, 1926=100); AI = Defense Revision committee's yearly recommendations for military expenditures, in 1926 prices; AJ = Defense Revision committee's yearly recommendations for fixed expenditures, in 1926 prices; AK = Defense Revision committee's yearly recommendations for capital expenditures, in 1926 prices

NOTE! Monetary figures in billions of pre-1963 Finnish marks unless otherwise noted.

Series A. Table 6. Percentage of Votes by Parties in Finnish Parliamentary Elections, 1919—1939

Parties	1919	1922	1924	1927	1929	1930	1933	1936	1939
Agrarian Union	19,7%	20,3%	20,2%	22,6%	26,2%	27,3%	22,5%	22,4%	22,9%
Christian Labour Union	1,5%	-	-	-	-	-	-	-	-
Social Democrats	30,0%	25,1%	29,0%	28,3%	27,4%	34,2%	37,3%	38,6%	39,8%
Swedish Peoples Party	12,1%	12,4%	12,0%	12,2%	11,4%	10,0%	10,4%	11,2%	9,6%
National Coalition	15,7%	18,2%	19,0%	17,7%	14,5%	18,0%	16,9%	10,4%	13,6%
Patriotic Peoples Movement	-	-	-	-	-	-	-	8,3%	6,6%
Progressive Party	12,8%	9,2%	9,1%	6,8%	5,6%	5,8%	7,4%	6,3%	4,8%
Socialist Workers Party	-	14,8%	10,4%	12,1%	13,5%	1,0%	-	-	-
Small Farmers Party	-	-	-	-	1,1%	1,8%	3,4%	2,0%	2,1%
Swedish Left Wing	-	-	-	-	-	0,8%	-	-	0,5%
Others	0,1%	0,1%	0,2%	0,4%	0,4%	1,0%	2,0%	0,8%	0,1%

Series A. Table 7. Economic Development and Military Spending in France, 1920—1938

Year	A.	B.	C.	D.	E.	F.	G.
1920	175,371	3196	242,984	213,403	39,644	54,928	..
1921	133,729	3046	269,804	236,958	32,845	66,266	..
1922	155,636	3576	331,447	291,097	45,188	96,234	5,977
1923	188,961	3718	314,935	276,595	38,293	63,822	5,413
1924	217,288	4140	312,352	274,326	42,511	61,110	5,562
1925	247,945	4127	316,819	278,249	36,275	46,351	5,656
1926	323,766	4209	323,766	284,351	41,976	41,976	6,672
1927	304,506	4115	346,715	304,506	45,869	52,227	10,266
1928	330,369	4390	372,475	327,130	44,248	49,887	8,733
1929	346,426	4666	398,390	349,890	59,335	68,235	11,301
1930	334,083	4489	441,604	387,843	55,712	73,642	13,210
1931	298,785	4195	464,328	407,801	53,428	83,030	11,466
1932	266,224	3922	471,012	413,671	40,666	71,948	9,456
1933	248,740	4199	461,373	405,205	54,945	101,914	10,788
1934	229,990	4152	448,286	393,712	49,883	97,230	8,890
1935	204,412	4047	419,775	368,672	49,868	102,408	8,559
1936	246,318	4204	435,793	382,740	55,789	98,704	9,573
1937	346,764	4444	443,087	389,146	72,759	92,970	14,539
1938	413,952	4424	462,179	405,914	82,345	91,939	20,042

A = nominal GDP at factor cost; B = GDP per capita in thousands of 1990 Geary-Khamis dollars by Maddison (1995); C = real GDP (deflated with the wholesale price index, 1926=100); D = real GDP (deflated with the wholesale price index, 1927=100); E = nominal central government expenditures (CGE); F = real CGE (deflated with the wholesale price index, 1926=100); G = nominal military expenditures (ME)

NOTE! Monetary figures in billions of French francs unless otherwise noted.

(Series A. Table 7 cont.)

Year	H.	I.	J.	K.	L.	M.	N.
1920	..	..	..	..	22,6 %	..	..
1921	..	..	..	..	24,6 %	..	..
1922	..	12,730	190,8	11,180	29,0 %	13,2 %	3,8 %
1923	..	9,021	135,2	7,923	20,3 %	14,1 %	2,9 %
1924	..	7,995	119,8	7,022	19,6 %	13,1 %	2,6 %
1925	..	7,227	108,3	6,347	14,6 %	15,6 %	2,3 %
1926	..	6,672	100,0	5,859	13,0 %	15,9 %	2,1 %
1927	..	11,689	175,2	10,266	15,1 %	22,4 %	3,4 %
1928	10,609	9,846	147,6	8,647	13,4 %	19,7 %	2,6 %
1929	15,995	12,996	194,8	11,414	17,1 %	19,0 %	3,3 %
1930	17,272	17,461	261,7	15,336	16,7 %	23,7 %	4,0 %
1931	16,064	17,819	267,1	15,650	17,9 %	21,5 %	3,8 %
1932	12,152	16,730	250,8	14,693	15,3 %	23,3 %	3,6 %
1933	18,083	20,010	299,9	17,574	22,1 %	19,6 %	4,3 %
1934	14,254	17,328	259,7	15,218	21,7 %	17,8 %	3,9 %
1935	16,687	17,577	263,5	15,437	24,4 %	17,2 %	4,2 %
1936	17,220	16,937	253,9	14,875	22,6 %	17,2 %	3,9 %
1937	22,109	18,578	278,5	16,316	21,0 %	20,0 %	4,2 %
1938	25,216	22,377	335,4	19,653	19,9 %	24,3 %	4,8 %

H = nominal military expenditures by Tiffen (1938); I = real military expenditures (ME) (deflated with the wholesale price index, 1926=100); J = volume of real (1926=100) ME in 1926 prices; K = real ME (deflated with the wholesale price index, 1927=100); L = % of central government expenditures (CGE) of GDP; M = % of ME of CGE; N = % of ME of GDP

NOTE! Monetary figures in billions of French francs unless otherwise noted.

Series A. Table 8. Percentage of Votes by Parties in French Parliamentary Elections, 1914—1936

Parties	1914	1919	1924	1928	1932	1936
Radical Socialist Party	18,1%	17,4%	-	17,8%	19,2%	14,4%
Socialist Republicans	3,9%	3,5%	38,0%	4,6%	5,4%	7,6%
Socialist Party	16,8%	21,2%	-	18,0%	20,5%	19,9%
Independent Socialists	-	1,8%	-	-	-	-
Communist Party	-	-	9,8%	11,3%	8,3%	15,3%
Conservatives I	15,4%	14,0%	4,2%	2,3%	6,1%	-
Left Republicans	9,7%	10,9%	11,7%	23,2%	13,6%	-
Independent Radicals	16,6%	6,2%	-	-	10,0%	42,7%
Republican Union	18,8%	22,3%	35,3%	22,0%	12,9%	-
Popular Democratic Party	-	-	-	-	3,2%	-
Others	0,7%	2,7%	1,0%	0,9%	0,9%	0,2%

Series A. Table 9. Economic Development and Military Spending in Norway, 1920—1938

Year	A.	B.	C.	D.	E.	F.	G.
1920	7,500	2529	3,926	3,311	0,648	0,339	0,066
1921	5,448	2291	3,650	3,078	0,746	0,500	0,063
1922	4,980	2532	4,278	3,607	0,585	0,503	0,062
1923	4,997	2571	4,292	3,620	0,550	0,472	0,054
1924	5,576	2543	4,198	3,540	0,478	0,360	0,050
1925	5,633	2683	4,389	3,701	0,486	0,379	0,048
1926	4,646	2726	4,646	3,918	0,445	0,445	0,048
1927	4,218	2818	5,002	4,218	0,395	0,468	0,043
1928	4,221	2900	5,336	4,500	0,397	0,502	0,045
1929	4,345	3158	5,822	4,910	0,387	0,519	0,040
1930	4,377	3377	6,240	5,262	0,376	0,536	0,039
1931	3,842	3096	6,129	5,168	0,374	0,597	0,039
1932	3,862	3283	6,161	5,195	0,361	0,576	0,039
1933	3,866	3342	6,167	5,201	0,309	0,493	0,037
1934	4,068	3430	6,489	5,472	0,302	0,482	0,037
1935	4,362	3559	6,642	5,601	0,341	0,519	0,038
1936	4,850	3757	6,914	5,830	0,384	0,547	0,040
1937	5,581	3871	7,055	5,950	0,422	0,533	0,046
1938	5,827	3945	7,581	6,393	0,472	0,614	0,053

A = nominal GDP; B = GDP per capita in thousands of 1990 Geary-Khamis dollars by Maddison (1995); C = real GDP (deflated with the wholesale price index, 1926=100); D = real GDP (deflated with the wholesale price index, 1927=100); E = nominal central government expenditures (CGE); F = real CGE (deflated with the wholesale price index, 1926=100); G = nominal military expenditures (ME)

NOTE! Monetary figures in billions of Norwegian kroner unless otherwise noted.

(Series A. Table 9 cont.)

Year	H.	I.	J.	K.	L.	M.	N.
1920	0,034	70,9	0,029	8,6 %	10,1 %	0,9 %	..
1921	0,042	87,5	0,036	13,7 %	8,5 %	1,2 %	..
1922	0,053	109,3	0,045	11,7 %	10,5 %	1,2 %	..
1923	0,046	95,5	0,039	11,0 %	9,8 %	1,1 %	..
1924	0,037	77,0	0,031	8,6 %	10,4 %	0,9 %	..
1925	0,038	77,9	0,032	8,6 %	10,0 %	0,9 %	..
1926	0,048	100,0	0,041	9,6 %	10,9 %	1,0 %	..
1927	0,051	105,8	0,043	9,4 %	10,9 %	1,0 %	..
1928	0,057	118,3	0,048	9,4 %	11,4 %	1,1 %	..
1929	0,053	109,6	0,045	8,9 %	10,2 %	0,9 %	..
1930	0,056	115,5	0,047	8,6 %	10,4 %	0,9 %	0,145
1931	0,062	128,2	0,052	9,7 %	10,4 %	1,0 %	0,139
1932	0,062	127,2	0,052	9,3 %	10,7 %	1,0 %	0,128
1933	0,059	122,6	0,050	8,0 %	12,0 %	1,0 %	0,125
1934	0,059	121,6	0,050	7,4 %	12,2 %	0,9 %	0,130
1935	0,057	118,3	0,048	7,8 %	11,0 %	0,9 %	0,145
1936	0,057	118,1	0,048	7,9 %	10,4 %	0,8 %	0,162
1937	0,058	119,4	0,049	7,6 %	10,8 %	0,8 %	0,175
1938	0,068	141,1	0,058	8,1 %	11,1 %	0,9 %	0,192

H = real military expenditures (ME) (deflated with the wholesale price index, 1926=100); I = volume of real (1926=100) ME in 1926 prices; J = real ME (deflated with the wholesale price index, 1927=100); K = % of central government expenditures (CGE) of GDP; L = % of ME of CGE; M = % of ME of GDP; N = nominal central government consumption

NOTE! Monetary figures in billions of Norwegian kroner unless otherwise noted.

(Series A. Table 9 cont.)

Year	O.	P.	Q.	R.	S.	T.	U.
1920	..	0,060	0,031	69,8	0,525	0,275	69,2
1921	..	0,056	0,038	83,4	0,554	0,371	93,5
1922	..	0,053	0,046	101,2	0,520	0,447	112,5
1923	..	0,047	0,040	89,7	0,465	0,399	100,6
1924	..	0,045	0,034	75,3	0,448	0,337	85,0
1925	..	0,045	0,035	77,9	0,434	0,338	85,2
1926	..	0,045	0,045	100,0	0,397	0,397	100,0
1927	..	0,042	0,050	110,7	0,373	0,442	111,4
1928	..	0,039	0,049	109,6	0,350	0,442	111,4
1929	..	0,039	0,052	116,1	0,338	0,453	114,1
1930	0,207	0,037	0,053	117,2	0,330	0,470	118,5
1931	0,222	0,035	0,056	124,1	0,322	0,514	129,4
1932	0,204	0,032	0,051	113,4	0,307	0,490	123,4
1933	0,199	0,031	0,049	109,9	0,301	0,480	120,9
1934	0,207	0,031	0,049	109,9	0,307	0,490	123,4
1935	0,221	0,033	0,050	111,7	0,328	0,499	125,8
1936	0,231	0,040	0,057	126,7	0,356	0,507	127,8
1937	0,221	0,048	0,061	134,8	0,384	0,485	122,3
1938	0,250	0,058	0,075	167,7	0,418	0,544	137,0

O = real central government consumption (deflated with the wholesale price index, 1926=100); P = nominal military consumption; Q = real military consumption (deflated with the wholesale price index, 1926=100); R = volume of real (1926=100) military consumption in 1926 prices; S = nominal public consumption; T = real public consumption (deflated with the wholesale price index, 1926=100); U = volume of real (1926=100) public consumption in 1926 prices

NOTE! Monetary figures in billions of Norwegian kroner unless otherwise noted.

(Series A. Table 9 cont.)

Year	V.	X.	Y.	Z.
1920	..	11,4 %	..	7,0 %
1921	..	10,1 %	..	10,2 %
1922	..	10,2 %	..	10,4 %
1923	..	10,1 %	..	9,3 %
1924	..	10,0 %	..	8,0 %
1925	..	10,4 %	..	7,7 %
1926	..	11,3 %	..	8,5 %
1927	..	11,3 %	..	8,8 %
1928	..	11,1 %	..	8,3 %
1929	..	11,5 %	..	7,8 %
1930	25,5 %	11,2 %	43,9 %	7,5 %
1931	25,2 %	10,9 %	43,2 %	8,4 %
1932	25,0 %	10,4 %	41,7 %	7,9 %
1933	24,8 %	10,3 %	41,5 %	7,8 %
1934	23,8 %	10,1 %	42,3 %	7,5 %
1935	22,8 %	10,1 %	44,2 %	7,5 %
1936	24,7 %	11,2 %	45,5 %	7,3 %
1937	27,4 %	12,5 %	45,6 %	6,9 %
1938	30,2 %	13,9 %	45,9 %	7,2 %

V = % of military consumption of central government consumption; X = % of military consumption of public consumption; Y = % of central government consumption of public consumption; Z = % of public consumption of GDP

Series A. Table 10. Percentage of Votes by Parties in Norwegian Parliamentary Elections, 1918—1936

Parties	1918	1921	1924	1927	1930	1933	1936
Liberals	28,3%	20,1%	18,6%	17,3%	20,2%	17,1%	16,0%
Worker Democrats	3,3%	-	-	-	-	-	-
Conservatives	-	-	-	24,0%	27,4%	20,2%	21,3%
National Liberals	30,4%	33,3%	32,5%	1,4%	2,6%	1,6%	1,3%
Labour Party	31,6%	21,3%	18,4%	36,8%	31,4%	40,1%	42,5%
Agrarian League/ Farmers Party	4,7%	13,1%	13,5%	14,9%	15,9%	13,9%	11,5%
Radical Peoples Party	-	2,5%	1,8%	1,3%	0,8%	0,5%	0,4%
Social Democratic Workers Party	-	9,2%	8,8%	-	-	-	-
Communist Party	-	-	6,1%	4,0%	1,7%	1,8%	0,3%
Christian Peoples Party	-	-	-	-	-	0,8%	1,3%
Commonwealth Party	-	-	-	-	-	1,5%	3,1%
National Socialists	-	-	-	-	-	2,2%	1,8%
Others	1,7%	0,4%	0,3%	0,2%	-	0,2%	0,3%

Series A. Table 11. Economic Development and Military Spending in Sweden, 1920—1938

Year	A.	B.	C.	D.	E.	F.	G.
1920	12,449	2802	5,155	5,057	0,945	0,369	0,227
1921	9,438	2674	6,292	6,173	1,155	0,726	0,198
1922	8,074	2906	6,902	6,772	0,959	0,774	0,180
1923	7,735	3047	7,068	6,935	0,797	0,687	0,154
1924	8,062	3130	7,367	7,228	0,756	0,652	0,155
1925	8,265	3233	7,618	7,474	0,758	0,659	0,155
1926	8,401	3404	8,401	8,242	0,810	0,764	0,146
1927	8,464	3500	8,627	8,464	0,654	0,629	0,142
1928	8,734	3657	8,734	8,569	0,701	0,662	0,132
1929	9,202	3869	9,754	9,570	0,702	0,702	0,138
1930	9,182	3937	11,187	10,976	0,819	0,941	0,130
1931	8,504	3782	11,410	11,195	0,894	1,131	0,125
1932	7,906	3666	10,744	10,541	1,067	1,368	0,125
1933	8,060	3722	11,242	11,029	0,973	1,280	0,118
1934	8,776	3992	11,485	11,268	1,148	1,418	0,122
1935	9,449	4233	11,646	11,427	1,108	1,288	0,123
1936	10,038	4466	12,230	11,999	1,199	1,378	0,154
1937	11,028	4664	11,928	11,703	1,373	1,401	0,172
1938	11,487	4725	12,817	12,575	1,575	1,658	0,234

A = nominal GDP at factor cost; B = GDP per capita in thousands of 1990 Geary-Khamis dollars by Maddison (1995); C = real GDP (deflated with the wholesale price index, 1926=100); D = real GDP (deflated with the wholesale price index, 1927=100); E = nominal central government expenditures (CGE); F = real CGE (deflated with the wholesale price index, 1926=100); G = nominal military expenditures (ME)

NOTE! Monetary figures in billions of Swedish kronor unless otherwise noted.

(Series A. Table 11 cont.)

Year	H.	I.	J.	K.	L.	M.	N.
1920	0,239	0,094	64,3	0,092	7,6 %	24,0 %	1,8 %
1921	..	0,132	90,1	0,129	12,2 %	17,1 %	2,1 %
1922	0,200	0,154	105,2	0,151	11,9 %	18,8 %	2,2 %
1923	..	0,141	96,3	0,138	10,3 %	19,3 %	2,0 %
1924	0,174	0,142	96,7	0,139	9,4 %	20,5 %	1,9 %
1925	..	0,143	97,6	0,140	9,2 %	20,4 %	1,9 %
1926	0,168	0,146	100,0	0,144	9,6 %	18,1 %	1,7 %
1927	..	0,144	98,6	0,142	7,7 %	21,7 %	1,7 %
1928	0,154	0,132	90,5	0,130	8,0 %	18,9 %	1,5 %
1929	..	0,146	99,9	0,144	7,6 %	19,7 %	1,5 %
1930	0,153	0,158	108,0	0,155	8,9 %	15,9 %	1,4 %
1931	..	0,168	114,8	0,165	10,5 %	14,0 %	1,5 %
1932	0,149	0,170	116,0	0,167	13,5 %	11,7 %	1,6 %
1933	..	0,165	112,7	0,162	12,1 %	12,2 %	1,5 %
1934	0,148	0,159	108,8	0,156	13,1 %	10,6 %	1,4 %
1935	..	0,151	103,4	0,149	11,7 %	11,1 %	1,3 %
1936	0,183	0,188	128,2	0,184	11,9 %	12,8 %	1,5 %
1937	..	0,186	127,3	0,183	12,4 %	12,5 %	1,6 %
1938	0,269	0,261	178,6	0,256	13,7 %	14,9 %	2,0 %

H = nominal military expenditures (ME) by Höök (1962; final accounts series); I = real ME (deflated with the wholesale price index, 1926=100); J = volume of real (1926=100) ME in 1926 prices; K = real ME (deflated with the wholesale price index, 1927=100); L = % of central government expenditures (CGE) of GDP; M = % of ME of CGE; N = % of ME of GDP

NOTE! Monetary figures in billions of Swedish kronor unless otherwise noted.

(Series A. Table 11 cont.)

Year	O.	P.	Q.	R.	S.	T.	U.
1920	0,369	0,631	88,9	2,9 %	7,1 %	5,1 %	0,509
1921	0,366	0,643	94,2	3,9 %	9,5 %	6,8 %	0,504
1922	0,317	0,558	100,5	3,9 %	9,4 %	6,9 %	0,427
1923	0,278	0,505	102,7	3,6 %	8,8 %	6,5 %	0,362
1924	0,265	0,497	101,3	3,3 %	8,5 %	6,2 %	0,355
1925	0,264	0,512	102,6	3,2 %	8,5 %	6,2 %	0,359
1926	0,262	0,499	100,0	3,1 %	8,1 %	5,9 %	0,352
1927	0,259	0,501	102,3	3,0 %	8,0 %	5,9 %	0,345
1928	0,262	0,514	102,9	3,0 %	8,0 %	5,9 %	0,351
1929	0,263	0,524	104,8	2,8 %	7,8 %	5,7 %	0,352
1930	0,263	0,532	105,7	2,8 %	7,9 %	5,8 %	0,350
1931	0,263	0,553	109,6	3,1 %	8,7 %	6,5 %	0,347
1932	0,264	0,554	110,4	3,3 %	9,3 %	7,0 %	0,347
1933	0,259	0,541	110,3	3,2 %	8,9 %	6,7 %	0,342
1934	0,260	0,541	110,9	2,9 %	8,2 %	6,2 %	0,340
1935	0,276	0,580	117,8	2,9 %	8,1 %	6,1 %	0,363
1936	0,292	0,599	120,2	2,9 %	8,0 %	6,0 %	0,379
1937	0,312	0,643	123,5	2,8 %	8,0 %	5,8 %	0,417
1938	0,340	0,724	124,2	2,9 %	8,6 %	6,3 %	0,463

O = nominal central government services; P = nominal public services; Q = volume of real (1926=100) public services in 1926 prices (see Eloranta 1997a for details); R = % of central government services of GDP; S = % of public consumption of GDP; T = % of public services of GDP; U = nominal central government consumption

NOTE! Monetary figures in billions of Swedish kronor unless otherwise noted.

(Series A. Table 11 cont.)

Year	V.	W.	X.	Y.	Z.	AA.
1920	0,887	85,5	61,5 %	44,6 %	36,0 %	25,6 %
1921	0,895	94,5	54,0 %	39,2 %	30,7 %	22,1 %
1922	0,762	101,1	56,9 %	42,2 %	32,3 %	23,6 %
1923	0,678	100,4	55,5 %	42,6 %	30,5 %	22,7 %
1924	0,682	101,1	58,5 %	43,6 %	31,2 %	22,7 %
1925	0,701	102,1	58,6 %	43,1 %	30,3 %	22,1 %
1926	0,680	100,0	55,9 %	41,6 %	29,3 %	21,5 %
1927	0,680	102,3	54,7 %	41,0 %	28,3 %	20,8 %
1928	0,698	103,5	50,5 %	37,7 %	25,8 %	19,0 %
1929	0,715	106,2	52,6 %	39,2 %	26,3 %	19,3 %
1930	0,725	108,6	49,4 %	37,1 %	24,4 %	17,9 %
1931	0,743	112,4	47,6 %	36,1 %	22,7 %	16,8 %
1932	0,736	111,6	47,3 %	36,0 %	22,6 %	17,0 %
1933	0,715	111,0	45,7 %	34,6 %	21,9 %	16,5 %
1934	0,716	111,2	46,9 %	35,8 %	22,5 %	17,0 %
1935	0,767	117,7	44,5 %	33,9 %	21,2 %	16,0 %
1936	0,799	121,5	52,8 %	40,7 %	25,7 %	19,3 %
1937	0,878	127,6	55,2 %	41,3 %	26,8 %	19,6 %
1938	0,986	131,5	69,0 %	50,6 %	32,3 %	23,8 %

V = nominal public consumption; W = volume of real (1926=100) public consumption in 1926 prices (see Eloranta 1997a for details); X = % of military expenditures (ME) of central government services; Y = % of ME of central government consumption; Z = % of ME of public services; AA = % of ME of public consumption

NOTE! Monetary figures in billions of kronor unless otherwise noted.

Series A. Table 12. Percentage of Votes by Parties in Swedish Parliamentary Elections, 1920—1940

Parties	1920	1921	1924	1928	1932	1936	1940
Social Democrats	29,7%	36,2%	41,1%	37,0%	41,7%	45,9%	53,8%
Liberals	21,8%	18,7%	-	-	-	-	-
Prohibitionist Liberals	-	-	13,0%	12,9%	9,8%	-	-
Peoples Party	-	-	-	-	-	12,9%	12,0%
Swedish Liberal Party	-	-	3,9%	3,0%	2,0%	-	-
Conservatives	27,8%	25,8%	26,1%	29,4%	23,5%	17,6%	18,0%
Agrarian Party	8,0%	11,0%	10,8%	11,2%	14,1%	14,4%	12,0%
Farmers Union	6,2%	-	-	-	-	-	-
Left Socialists	6,4%	3,2%	-	-	-	-	-
Communists	-	4,6%	3,6%	6,4%	3,0%	3,3%	3,5%
Höglund Communists	-	-	1,5%	-	-	-	-
Kilbom Communists	-	-	-	-	5,3%	-	-
Socialists	-	-	-	-	-	4,4%	0,6%
Others	0,2%	0,4%	-	0,1%	0,7%	1,6%	-

Series A. Table 13. Economic Development and Military Spending in the United Kingdom, 1920—1938

Year	A.	B.	C.	D.	E.	F.	G.
1920	5,799	4651	2,784	2,680	0,489	0,235	0,186
1921	4,683	4238	3,512	3,382	0,488	0,366	0,166
1922	4,169	4427	3,881	3,738	0,435	0,405	0,121
1923	3,941	4545	3,669	3,533	0,395	0,368	0,104
1924	4,101	4698	3,630	3,496	0,398	0,352	0,104
1925	4,291	4912	3,961	3,814	0,412	0,380	0,111
1926	4,119	4713	4,119	3,966	0,420	0,420	0,116
1927	4,345	5075	4,512	4,345	0,423	0,439	0,114
1928	4,333	5115	4,543	4,375	0,425	0,446	0,111
1929	4,444	5255	4,800	4,622	0,435	0,470	0,110
1930	4,370	5195	5,363	5,165	0,443	0,544	0,107
1931	4,011	4906	5,626	5,417	0,431	0,605	0,106
1932	3,830	4916	5,515	5,311	0,431	0,621	0,102
1933	3,933	5039	5,664	5,454	0,430	0,619	0,102
1934	4,140	5354	5,732	5,520	0,446	0,618	0,110
1935	4,338	5537	6,006	5,784	0,483	0,669	0,130
1936	4,583	5762	5,963	5,743	0,537	0,699	0,172
1937	4,910	5937	5,524	5,319	0,618	0,695	0,242
1938	5,056	5983	6,135	5,908	0,748	0,908	0,352

A = nominal GNP; B = GDP per capita in thousands of 1990 Geary-Khamis dollars by Maddison (1995); C = real GNP (deflated with the wholesale price index, 1926=100); D = real GNP (deflated with the wholesale price index, 1927=100); E = nominal central government expenditures (CGE); F = real CGE (deflated with the wholesale price index, 1926=100); G = nominal military expenditures (ME)

NOTE! Monetary figures in billions of British pounds unless otherwise noted.

(Series A. Table 13 cont.)

Year	H.	I.	J.	K.	L.	M.	N.	O.	P.
1920	0,089	77,0	0,086	8,4 %	38,0 %	3,2 %	65,4 %	25,9 %	8,7 %
1921	0,125	107,3	0,120	10,4 %	34,0 %	3,5 %	62,1 %	30,3 %	7,6 %
1922	0,113	97,1	0,108	10,4 %	27,8 %	2,9 %	50,2 %	42,6 %	7,2 %
1923	0,097	83,5	0,093	10,0 %	26,3 %	2,6 %	40,9 %	50,6 %	8,5 %
1924	0,092	79,4	0,089	9,7 %	26,1 %	2,5 %	41,2 %	49,7 %	9,1 %
1925	0,102	88,3	0,099	9,6 %	26,9 %	2,6 %	39,1 %	48,5 %	12,5 %
1926	0,116	100,0	0,112	10,2 %	27,6 %	2,8 %	37,1 %	50,0 %	13,0 %
1927	0,118	102,1	0,114	9,7 %	27,0 %	2,6 %	37,4 %	49,4 %	13,3 %
1928	0,116	100,3	0,112	9,8 %	26,1 %	2,6 %	37,6 %	49,4 %	12,9 %
1929	0,119	102,4	0,114	9,8 %	25,3 %	2,5 %	35,7 %	50,1 %	14,2 %
1930	0,131	113,2	0,126	10,1 %	24,2 %	2,4 %	35,8 %	49,3 %	14,9 %
1931	0,149	128,2	0,143	10,7 %	24,6 %	2,6 %	36,5 %	47,4 %	16,1 %
1932	0,147	126,6	0,141	11,3 %	23,7 %	2,7 %	35,9 %	47,6 %	16,5 %
1933	0,147	126,6	0,141	10,9 %	23,7 %	2,6 %	34,9 %	48,5 %	16,6 %
1934	0,152	131,3	0,147	10,8 %	24,7 %	2,7 %	34,8 %	49,6 %	15,6 %
1935	0,180	155,2	0,173	11,1 %	26,9 %	3,0 %	34,9 %	49,7 %	15,5 %
1936	0,224	192,9	0,216	11,7 %	32,0 %	3,8 %	32,6 %	47,3 %	20,1 %
1937	0,272	234,7	0,262	12,6 %	39,2 %	4,9 %	29,5 %	43,6 %	26,9 %
1938	0,427	368,2	0,411	14,8 %	47,1 %	7,0 %	31,9 %	39,5 %	28,5 %

H = real military expenditures (ME) (deflated with the wholesale price index, 1926=100); I = volume of real (1926=100) ME in 1926 prices; J = real ME (deflated with the wholesale price index, 1927=100); K = % of central government expenditures (CGE) of GNP; L = % of ME of CGE; M = % of ME of GNP; N = % of Army appropriations of the total ME (from Mitchell 1988); O = % of Navy appropriations of the total ME (from Mitchell 1988); P = % of Air Force appropriations of the total ME (from Mitchell 1988)

NOTE! Monetary figures in billions of British pounds unless otherwise noted.

Series A. Table 14. Percentage of Votes by Parties in British Parliamentary Elections, 1918—1935

Parties	1918	1922	1923	1924	1929	1931	1935
Conservative Party	39,6%	38,5%	38,0%	46,8%	38,1%	55,3%	48,1%
National Liberal Party	-	-	-	-	-	3,7%	3,7%
National Labour	-	-	-	-	-	1,5%	1,5%
National Democratic Party	1,7%	0,4%	-	-	-	0,5%	-
Lloyd George Liberals	12,6%	9,4%	-	-	-	-	-
Liberal Party	13,0%	18,9%	29,7%	18,4%	23,6%	6,7%	6,8%
Labour Party	21,4%	29,7%	30,7%	33,3%	37,1%	29,3%	38,1%
Irish Nationalist Party	2,2%	-	-	-	-	-	-
Irish Republicans	4,6%	0,4%	0,4%	0,2%	0,1%	0,4%	0,4%
Communist Party	-	0,2%	0,2%	0,3%	0,2%	0,3%	0,1%
Scottish National Party	-	-	-	-	-	0,1%	0,1%
Welsh Nationalists	-	-	-	-	-	-	0,6%
Independent Labour Party	1,5%	-	-	-	-	-	-
Others	4,9%	2,5%	1,0%	1,0%	0,9%	0,7%	0,6%

Series A. Table 15. Economic Development and Military Spending in the United States, 1920—1938

Year	A.	B.	C.	D.	E.	F.	G.
1920	91,500	5529	59,111	56,277	88,400	6,403	..
1921	69,600	5329	71,060	67,653	73,559	5,116	..
1922	74,100	5546	76,728	73,049	73,610	3,373	..
1923	85,100	6171	84,521	80,469	85,673	3,295	..
1924	84,700	6240	86,477	82,331	87,112	3,049	..
1925	93,100	6290	90,017	85,701	90,839	3,063	..
1926	97,000	6610	97,000	92,349	97,193	3,098	..
1927	94,900	6584	99,679	94,900	95,785	2,974	..
1928	97,000	6577	100,440	95,624	97,660	3,103	..
1929	103,900	6907	109,132	103,900	..	3,299	2,629
1930	91,200	6220	105,676	100,610	..	3,440	2,764
1931	76,400	5698	104,247	99,249	..	3,577	4,181
1932	58,500	4914	89,905	85,595	..	4,659	3,185
1933	56,000	4783	85,167	81,083	..	4,623	3,985
1934	65,600	5120	87,868	83,655	..	6,694	6,394
1935	72,800	5473	90,844	86,489	..	6,521	6,535
1936	83,100	6211	102,819	97,889	..	8,493	8,653
1937	91,300	6438	105,792	100,720	..	7,756	7,397
1938	85,400	6134	108,421	103,223	..	6,792	8,609

A = nominal GNP; B = GDP per capita in thousands of 1990 Geary-Khamis dollars by Maddison (1995); C = real GNP (deflated with the wholesale price index, 1926=100); C = volume of real (1926=100) GNP in 1926 prices; D = real GNP (deflated with the wholesale price index, 1927=100); E = alternative nominal GNP by Romer (1988) for 1920—1928, in 1926 prices; F = nominal federal government expenditures (FGE); G = alternative nominal FGE by The National Income and Product Accounts (1981) for 1929—1939

NOTE! Monetary figures in billions of US dollars unless otherwise noted.

(Series A. Table 15 cont.)

Year	H.	I.	J.	K.	L.	M.	N.
1920	4,136	3,997	2,582	440,6	2,458	7,0 %	62,4 %
1921	5,223	2,581	2,635	449,7	2,509	7,4 %	50,4 %
1922	3,493	0,929	0,962	164,2	0,916	4,6 %	27,5 %
1923	3,273	0,680	0,675	115,3	0,643	3,9 %	20,6 %
1924	3,113	0,647	0,661	112,7	0,629	3,6 %	21,2 %
1925	2,962	0,591	0,571	97,5	0,544	3,3 %	19,3 %
1926	3,098	0,586	0,586	100,0	0,558	3,2 %	18,9 %
1927	3,124	0,578	0,607	103,6	0,578	3,1 %	19,4 %
1928	3,213	0,656	0,679	115,9	0,647	3,2 %	21,1 %
1929	3,465	0,696	0,731	124,8	0,696	3,2 %	21,1 %
1930	3,986	0,734	0,851	145,1	0,810	3,8 %	21,3 %
1931	4,881	0,733	1,000	170,7	0,952	4,7 %	20,5 %
1932	7,160	0,703	1,080	184,4	1,029	8,0 %	15,1 %
1933	7,031	0,648	0,986	168,2	0,938	8,3 %	14,0 %
1934	8,966	0,540	0,723	123,4	0,689	10,2 %	8,1 %
1935	8,137	0,711	0,887	151,4	0,845	9,0 %	10,9 %
1936	10,508	0,914	1,131	193,0	1,077	10,2 %	10,8 %
1937	8,987	0,937	1,086	185,3	1,034	8,5 %	12,1 %
1938	8,623	1,030	1,308	223,1	1,245	8,0 %	15,2 %

H = real federal government expenditures (FGE) (deflated with the wholesale price index, 1926=100); I = nominal military expenditures (ME); J = real ME (deflated with the wholesale price index, 1926=100); K = volume of real (1926=100) ME in 1926 prices; L = real ME (deflated with the wholesale price index, 1927=100); M = % of FGE of GNP; N = % of ME of FGE

NOTE! Monetary figures in billions of US dollars unless otherwise noted.

(Series A. Table 15 cont.)

Year	O.	P.	Q.
1920	4,4 %	68,8 %	31,2 %
1921	3,7 %	63,2 %	36,8 %
1922	1,3 %	49,0 %	51,0 %
1923	0,8 %	54,4 %	45,6 %
1924	0,8 %	51,8 %	48,2 %
1925	0,6 %	51,7 %	48,3 %
1926	0,6 %	53,8 %	46,2 %
1927	0,6 %	53,6 %	46,4 %
1928	0,7 %	54,8 %	45,2 %
1929	0,7 %	53,9 %	46,1 %
1930	0,8 %	55,4 %	44,6 %
1931	1,0 %	57,9 %	42,1 %
1932	1,2 %	57,1 %	42,9 %
1933	1,2 %	55,4 %	44,6 %
1934	0,8 %	57,9 %	42,1 %
1935	1,0 %	52,8 %	47,2 %
1936	1,1 %	53,9 %	46,1 %
1937	1,0 %	53,0 %	47,0 %
1938	1,2 %	51,9 %	48,1 %

O = % of ME of GNP; P = % of Army appropriations of the total ME (Historical Statistics of the United States 1970); Q = % of Navy appropriations of the total ME (Historical Statistics of the United States 1970)

Series A. Table 16. Percentage of Votes in Elections of the House of Representatives in the United States, 1920—1936

Parties	1920	1922	1924	1926	1928	1930	1932	1934	1936
Democratic Party	35,7%	44,1%	39,9%	40,3%	41,5%	44,6%	54,1%	54,4%	56,3%
Republican Party	58,2%	52,2%	55,9%	57,1%	56,6%	52,6%	42,2%	41,1%	39,6%
Socialist Party	2,8%	1,8%	3,6%	2,2%	-	0,9%	1,6%	1,1%	-
Farmer-Labor Party	2,0%	1,5%	*	*	0,7%	1,1%	0,9%	1,2%	1,1%
Wisconsin Progressive Party	-	-	-	-	-	-	-	1,0%	1,1%
Others	1,3%	0,4%	0,5%	0,5%	1,1%	0,8%	1,3%	1,2%	1,9%

* = Socialist Party and Farmer-Labor Party participated on a joint ballot

Series A. Table 17. Percentage of Votes by Parties in Presidential Elections in the United States, 1920—1940

Parties	1920	1924	1928	1932	1936	1940
Democratic Party	34,2%	28,8%	40,8%	57,4%	60,8%	54,7%
Republican Party	60,3%	54,1%	58,2%	39,6%	36,5%	44,8%
Prohibition Party	0,7%	0,2%	0,1%	0,2%	0,1%	0,1%
Socialist Labor Party	0,1%	0,1%	0,1%	0,2%	0,0%	0,0%
Socialist Party	3,4%	-	0,7%	2,2%	0,4%	0,2%
Farmer-Labor Party	1,0%	-	-	-	-	-
Progressive (R. La Follette)	-	16,6%	-	-	-	-
Communist Party	-	0,1%	0,1%	0,3%	0,2%	0,1%
Union Party	-	-	-	-	2,0%	-
Others	0,3%	0,1%	0,0%	0,2%	0,0%	0,0%

SERIES B. COMPARISONS OF NATIONAL RESOURCES AND MILITARY SPENDING

Series B. Table 1. Annual Change in (Aggregate) GDP Per Capita Average for Eight Countries, 1920—1938

Year	A.	B.
1920	28217	..
1921	27059	-4,1 %
1922	29314	8,3 %
1923	30999	5,7 %
1924	31806	2,6 %
1925	32285	1,5 %
1926	33090	2,5 %
1927	33875	2,4 %
1928	34902	3,0 %
1929	36324	4,1 %
1930	35818	-1,4 %
1931	34096	-4,8 %
1932	32660	-4,2 %
1933	33380	2,2 %
1934	34673	3,9 %
1935	35915	3,6 %
1936	37756	5,1 %
1937	39005	3,3 %
1938	38971	-0,1 %

A = annual average of GDP per capita in 1990 Geary-Khamis dollars by Maddison (1995); B = annual percentage change in column A

Series B. Table 2. Military Expenditures in a Common Currency (1926, 1927 FIM) for Eight Countries, 1920—1938

Year	A.	B.	C.	D.	E.	F.	G.
1920	1264	1365	256	243	375	378	..
1921	1251	1352	431	411	339	342	..
1922	1584	1711	483	460	366	369	16526
1923	1637	1768	400	381	458	462	11711
1924	919	993	513	489	500	505	10379
1925	1126	1217	541	515	590	595	9382
1926	772	833	648	617	607	612	8661
1927	737	796	614	584	593	598	15175
1928	851	919	670	638	612	617	12782
1929	956	1033	706	672	690	696	16872
1930	1164	1257	759	723	786	793	22668
1931	1250	1350	854	813	883	891	23132
1932	1194	1289	846	806	792	800	21719
1933	1110	1199	809	771	758	765	25977
1934	1608	1736	789	751	874	882	22495
1935	1441	1556	645	615	970	979	22818
1936	1546	1670	669	637	1051	1060	21987
1937	1718	1855	714	680	1009	1018	24117
1938	1722	1860	788	750	1412	1425	29050

A = military expenditures (ME) in Belgium, in 1926 FIM; B = ME in Belgium, in 1927 FIM; C = ME in Denmark, in 1926 FIM; D = ME in Denmark, in 1927 FIM; E = ME in Finland, in 1926 FIM; F = ME in Finland, in 1927 FIM; G = ME in France, in 1926 FIM

(Series B. Table 2 cont.)

Year	H.	I.	J.	K.	L.	M.
1920	..	306	300	1000	685	102511
1921	..	377	370	1402	960	104615
1922	17517	471	463	1637	1121	38189
1923	12414	412	404	1498	1026	26812
1924	11001	332	326	1506	1031	26225
1925	9945	336	330	1520	1040	22686
1926	9181	431	423	1557	1066	23264
1927	16085	456	448	1536	1051	24102
1928	13548	510	501	1409	964	26967
1929	17884	473	464	1556	1065	29023
1930	24028	498	489	1682	1151	33765
1931	24520	553	543	1788	1224	39707
1932	23021	548	538	1807	1237	42892
1933	27535	529	519	1755	1201	39124
1934	23844	524	515	1694	1160	28715
1935	24186	510	501	1610	1102	35223
1936	23306	509	500	1996	1366	44896
1937	25564	515	505	1981	1356	43103
1938	30792	608	597	2781	1904	51914

H = military expenditures (ME) in France, in 1927 FIM; I = ME in Norway, in 1926 FIM; J = ME in Norway, in 1927 FIM; K = ME in Sweden, in 1926 FIM; L = ME in Sweden, in 1927 FIM; M = ME in the United States, in 1926 FIM

(Series B. Table 2 cont.)

Year	N.	O.	P.
1920	97596	17233	16601
1921	99600	24031	23149
1922	36358	21745	20947
1923	25527	18690	18004
1924	24967	17770	17119
1925	21598	19777	19052
1926	22149	22390	21569
1927	22947	22851	22012
1928	25674	22465	21641
1929	27631	22931	22089
1930	32146	25347	24417
1931	37803	28697	27644
1932	40835	28351	27311
1933	37249	28351	27311
1934	27338	29398	28320
1935	33534	34744	33469
1936	42743	43199	41614
1937	41037	52550	50622
1938	49425	82448	79423

N = military expenditures (ME) in the United States, in 1927 FIM; O = ME in the United Kingdom, in 1926 FIM; P = ME in the United Kingdom, in 1927 FIM

Series B. Table 3. Military Expenditures in a Common Currency (1926, 1927 FIM) Per Capita (Excluding Colonial Populations) in Eight Countries, 1920—1938

Year	A.	B.	C.	D.	E.	F.	G.
1920	167	181	83	79	120	121	..
1921	167	180	131	125	107	108	..
1922	209	226	145	138	114	115	419
1923	214	232	119	113	141	142	294
1924	119	129	151	144	153	154	257
1925	145	156	158	150	179	180	231
1926	98	106	188	179	182	183	212
1927	93	101	177	168	176	178	371
1928	107	115	191	182	180	182	311
1929	119	129	201	191	201	203	409
1930	144	156	214	204	228	230	545
1931	154	166	239	228	254	256	553
1932	146	157	235	224	226	228	519
1933	135	146	223	212	215	217	620
1934	195	210	215	205	246	249	536
1935	174	188	175	166	271	274	544
1936	186	201	180	171	292	294	525
1937	206	222	190	181	278	281	575
1938	206	222	209	199	386	390	692

A = military expenditures (ME) per capita in Belgium, in 1926 FIM; B = ME per capita in Belgium, in 1927 FIM; C = ME per capita in Denmark, in 1926 FIM; D = ME per capita in Denmark, in 1927 FIM; E = ME per capita in Finland, in 1926 FIM; F = ME per capita in Finland, in 1927 FIM; G = ME per capita in France, in 1926 FIM

(Series B. Table 3 cont.)

Year	H.	I.	J.	K.	L.	M.
1920	..	116	114	170	117	959
1921	..	141	139	236	162	960
1922	444	175	172	274	188	346
1923	311	152	149	250	171	239
1924	273	122	119	250	171	229
1925	245	122	120	251	172	195
1926	225	156	153	257	176	197
1927	393	164	161	253	173	202
1928	330	183	180	231	158	223
1929	434	169	166	255	174	237
1930	577	177	174	274	188	273
1931	586	196	192	291	199	319
1932	550	193	189	293	200	342
1933	657	185	182	283	194	310
1934	568	182	179	272	186	226
1935	577	177	173	258	177	275
1936	556	175	172	319	218	349
1937	610	176	173	316	216	333
1938	734	207	203	442	302	398

H = military expenditures (ME) per capita in France, in 1927 FIM; I = ME per capita in Norway, in 1926 FIM; J = ME per capita in Norway, in 1927 FIM; K = ME per capita in Sweden, in 1926 FIM; L = ME per capita in Sweden, in 1927 FIM; M = ME per capita in the United States, in 1926 FIM

(Series B. Table 3 cont.)

Year	N.	O.	P.
1920	913	394	380
1921	914	545	525
1922	329	490	472
1923	227	419	404
1924	218	396	381
1925	186	439	423
1926	188	495	477
1927	192	503	485
1928	212	493	475
1929	226	502	484
1930	260	553	532
1931	303	623	600
1932	326	612	589
1933	295	609	587
1934	215	630	607
1935	262	741	714
1936	332	918	884
1937	317	1111	1070
1938	379	1736	1672

N = military expenditures (ME) per capita in the United States, in 1927 FIM; O = ME per capita in the United Kingdom, in 1926 FIM; P = ME per capita in the United Kingdom, in 1927 FIM

Series B. Table 4. Military Expenditures in a Common Currency (1926 FIM) Per Capita (Inclusive of Colonial Populations), 1920—1938

Year	A.	B.	C.	D.	E.	F.	G.	H.
1920	73	77	120	..	116	170	39	848
1921	72	128	107	..	141	236	54	861
1922	89	143	114	168	175	274	48	313
1923	91	117	141	118	152	250	41	218
1924	50	149	153	104	122	250	39	213
1925	61	156	179	93	122	251	44	183
1926	41	185	182	85	156	257	49	187
1927	39	174	176	148	164	253	50	193
1928	44	189	180	124	183	231	49	214
1929	49	197	201	162	169	255	50	230
1930	58	211	228	216	177	274	55	266
1931	62	235	254	219	196	291	62	311
1932	58	231	226	204	193	293	61	334
1933	53	219	215	242	185	283	61	303
1934	76	212	246	208	182	272	63	222
1935	67	172	271	209	177	258	74	271
1936	71	177	292	200	175	319	92	343
1937	78	188	278	218	176	316	111	328
1938	77	205	386	260	207	442	174	393

A = military expenditures (ME) per capita in Belgium, in 1926 FIM; B = ME per capita in Denmark, in 1926 FIM; C = ME per capita in Finland, 1926 FIM; D = ME per capita in France, in 1926 FIM; E = ME per capita in Norway, in 1926 FIM; F = ME per capita in Sweden, in 1926 FIM; G = ME per capita in the United Kingdom, in 1926 FIM; H = ME per capita in the United States, in 1926 FIM

Series B. Table 5. Military Expenditures in a Common Currency (1926 FIM) Per Area (Excluding Colonial Areas) in Eight Countries, 1920—1938

Year	A.	B.	C.	D.	E.	F.	G.	H.
1920	41122	5943	967	..	944	2231	70634	10941
1921	40716	10027	875	..	1165	3127	98498	11166
1922	51540	11224	945	29993	1455	3651	89127	4076
1923	53245	9297	1181	21255	1271	3341	76605	2862
1924	29912	11930	1291	18837	1025	3357	72838	2799
1925	36647	12575	1522	17028	1037	3389	81062	2421
1926	25106	15053	1566	15719	1331	3472	91773	2483
1927	23991	14270	1529	27541	1409	3424	93660	2572
1928	27697	15567	1579	23198	1575	3141	92081	2878
1929	31119	16408	1779	30621	1460	3469	94147	3098
1930	37877	17643	2028	41141	1537	3750	103892	3604
1931	40663	19848	2278	41984	1707	3986	117624	4238
1932	38836	19678	2045	39418	1694	4028	116204	4578
1933	36115	18812	1955	47146	1632	3913	116204	4176
1934	52301	18344	2256	40827	1619	3777	120498	3065
1935	46880	15005	2503	41413	1575	3591	142407	3759
1936	50305	15551	2711	39906	1572	4450	177065	4792
1937	55891	16600	2604	43771	1589	4418	215391	4600
1938	56034	18321	3643	52723	1879	6201	337937	5541

A = military expenditures (ME) per area in Belgium, in 1926 FIM; B = ME per area in Denmark, in 1926 FIM; C = ME per area in Finland, in 1926 FIM; D = ME per area in France, in 1926 FIM; E = ME per area in Norway, in 1926 FIM; F = ME per area in Sweden, in 1926 FIM; G = ME per area in the United Kingdom, in 1926 FIM; H = ME per area in the United States, in 1926 FIM

Series B. Table 6. Military Expenditures in a Common Currency (1926 FIM) Per Area (Including Colonial Areas) in Eight Countries, 1920—1938

Year	A.	B.	C.	D.	E.	F.	G.	H.
1920	516	1929	967	..	944	2231	498	10573
1921	511	3255	875	..	1165	3127	694	10790
1922	647	3643	945	1313	1455	3651	628	3939
1923	668	3018	1181	931	1271	3341	540	2765
1924	375	3873	1291	825	1025	3357	513	2705
1925	460	4082	1522	746	1037	3389	571	2340
1926	315	4886	1566	688	1331	3472	647	2399
1927	301	4632	1529	1206	1409	3424	660	2486
1928	347	5053	1579	1016	1575	3141	649	2781
1929	390	5326	1779	1341	1460	3469	663	2993
1930	475	5727	2028	1801	1537	3750	732	3483
1931	510	6443	2278	1838	1707	3986	829	4095
1932	487	6388	2045	1726	1694	4028	819	4424
1933	453	6107	1955	2064	1632	3913	819	4035
1934	656	5955	2256	1788	1619	3777	849	2962
1935	588	4871	2503	1813	1575	3591	1004	3633
1936	631	5048	2711	1747	1572	4450	1248	4631
1937	701	5389	2604	1917	1589	4418	1518	4446
1938	703	5947	3643	2308	1879	6201	2382	5354

A = military expenditures (ME) per area in Belgium, in 1926 FIM; B = ME per area in Denmark, in 1926 FIM; C = ME per area in Finland, in 1926 FIM; D = ME per area in France, in 1926 FIM; E = ME per area in Norway, in 1926 FIM; F = ME per area in Sweden, in 1926 FIM; G = ME per area in the United Kingdom, in 1926 FIM; H = ME per area in the United States, in 1926 FIM

Series B. Table 7. Military Personnel on the Whole and as a Percentage of Male Population Aged 20—40 in Eight Countries, 1920—1938

Year	A.	B.	C.	D.	E.	F.	G.	H.
1920	156000	10,8%	16000	3,0%	39000	6,5%	1457000	22,6%
1921	100000	7,0%	15000	2,7%	35000	5,7%	547000	8,4%
1922	117000	8,1%	13000	2,3%	30000	4,8%	545000	8,2%
1923	133000	9,0%	13000	2,2%	31000	4,9%	511000	7,5%
1924	82000	5,5%	14000	2,4%	31000	4,8%	479000	6,9%
1925	88000	5,8%	14000	2,3%	32000	4,9%	475000	6,7%
1926	83000	5,4%	14000	2,3%	29000	4,4%	471000	6,6%
1927	66000	4,2%	13000	2,1%	30000	4,5%	494000	6,8%
1928	65000	4,1%	14000	2,2%	30000	4,4%	469000	6,4%
1929	67000	4,2%	12000	1,9%	29000	4,2%	411000	5,5%
1930	69000	4,3%	11000	1,7%	27000	3,9%	411000	5,4%
1931	66000	4,1%	11000	1,7%	31000	4,4%	441000	5,7%
1932	67000	4,1%	11000	1,6%	31000	4,4%	422000	5,5%
1933	66000	4,0%	11000	1,6%	31000	4,4%	449000	5,8%
1934	68000	4,1%	10000	1,4%	31000	4,3%	458000	5,9%
1935	68000	4,1%	11000	1,6%	31000	4,3%	548000	7,1%
1936	67000	4,0%	13000	1,8%	31000	4,3%	588000	7,6%
1937	72000	4,2%	12000	1,7%	31000	4,2%	613000	7,9%
1938	90000	5,3%	11000	1,5%	36000	4,9%	581000	7,5%

A = Belgian military personnel (MP); B =% of MP of male population aged 20—40 in Belgium; C = Danish MP; D = % of MP of male population aged 20—40 in Denmark; E = Finnish MP; F = % of MP of male population aged 20—40 in Finland; G = French MP; H = % of MP of male population aged 20—40 in France

NOTE! The number of military personnel given in the tables is defined as the number of persons serving in all active units of the military forces on 1 January of each year. It is the actual number of persons in uniform on active military duty and able to be immediately employed for military purposes. Conversely, military personnel who have to be mobilized to perform military service are not included in the number. This definition includes: colonial (native) personnel if they are integrated in the metropolitan forces, but not native troops with metropolitan advisers under a local potentate's nominal control; rear and non-combat units such as the quartermaster corps. It excludes: reserves, militia, territoriales and inactives unless they are normally called up for at least 6 months; trainees in the armed services whose length of traineeship does not extend for at least 6 months; police forces; civil defense personnel; and insurgent and foreign troops. See Flora 1983 for further details.

(Series B. Table 7 cont.)

Year	I.	J.	K.	L.	M.	N.	O.	P.
1920	7000	1,6%	26000	2,5%	596000	7,4%	343000	..
1921	7000	1,6%	25000	2,4%	448000	5,5%	387000	..
1922	7000	1,5%	31000	2,9%	368000	4,8%	270000	..
1923	7000	1,5%	25000	2,3%	337000	4,3%	247000	..
1924	7000	1,5%	24000	2,2%	337000	4,3%	261000	..
1925	6000	1,3%	21000	1,9%	342000	4,3%	252000	..
1926	7000	1,5%	19000	1,7%	341000	4,3%	247000	..
1927	6000	1,2%	13000	1,2%	338000	4,2%	249000	..
1928	6000	1,2%	14000	1,2%	330000	4,1%	251000	..
1929	6000	1,2%	14000	1,2%	325000	4,0%	255000	..
1930	4000	0,8%	13000	1,1%	318000	3,9%	256000	..
1931	5000	1,0%	14000	1,2%	319000	3,8%	253000	..
1932	5000	1,0%	15000	1,3%	317000	3,8%	245000	..
1933	4000	0,8%	14000	1,2%	316000	3,7%	244000	..
1934	4000	0,8%	14000	1,2%	318000	3,7%	247000	..
1935	4000	0,7%	15000	1,2%	321000	3,7%	252000	..
1936	4000	0,7%	14000	1,1%	336000	3,9%	291000	..
1937	4000	0,7%	15000	1,2%	350000	4,0%	312000	..
1938	4000	0,7%	19000	1,5%	376000	4,2%	323000	..

I = military personnel (MP) in Norway; J = % of MP of male population aged 20—40 in Norway; K = MP in Sweden; L = % of MP of male population aged 20—40 in Sweden; M = MP in the United Kingdom; N = % of MP of male population aged 20—40 in the United Kingdom; O = MP in the United States; P = % of MP of male population aged 20—40 in the United States (data not available)

Series B. Table 8. Military Personnel Per Area (Excluding Colonial Possessions) in Eight Countries, 1920—1938

Year	A.	B.	C.	D.	E.	F.	G.	H.
1920	5,075	0,372	0,101	2,644	0,022	0,058	2,443	0,037
1921	3,253	0,349	0,090	0,993	0,022	0,056	1,836	0,041
1922	3,806	0,302	0,077	0,989	0,022	0,069	1,508	0,029
1923	4,327	0,302	0,080	0,927	0,022	0,056	1,381	0,026
1924	2,668	0,325	0,080	0,869	0,022	0,054	1,381	0,028
1925	2,863	0,325	0,083	0,862	0,019	0,047	1,402	0,027
1926	2,700	0,325	0,075	0,855	0,022	0,042	1,398	0,026
1927	2,147	0,302	0,077	0,897	0,019	0,029	1,385	0,027
1928	2,115	0,325	0,077	0,851	0,019	0,031	1,353	0,027
1929	2,180	0,279	0,075	0,746	0,019	0,031	1,332	0,027
1930	2,245	0,256	0,070	0,746	0,012	0,029	1,303	0,027
1931	2,147	0,256	0,080	0,800	0,015	0,031	1,308	0,027
1932	2,180	0,256	0,080	0,766	0,015	0,033	1,299	0,026
1933	2,147	0,256	0,080	0,815	0,012	0,031	1,295	0,026
1934	2,212	0,232	0,080	0,831	0,012	0,031	1,303	0,026
1935	2,212	0,256	0,080	0,995	0,012	0,033	1,316	0,027
1936	2,180	0,302	0,080	1,067	0,012	0,031	1,377	0,031
1937	2,342	0,279	0,080	1,113	0,012	0,033	1,435	0,033
1938	2,928	0,256	0,093	1,054	0,012	0,042	1,541	0,034

A = military personnel (MP) per area in Belgium; B = MP per area in Denmark; C = MP per area in Finland; D = MP per area in France; E = MP per area in Norway; F = MP per area in Sweden; G = MP per area in the United Kingdom; H = MP per area in the United States

Series B. Table 9. Military Personnel Per Area (Including Colonial Possessions) in Eight Countries, 1920—1938

Year	A.	B.	C.	D.	E.	F.	G.	H.
1920	0,064	0,121	0,101	0,116	0,022	0,058	0,017	0,035
1921	0,041	0,113	0,090	0,043	0,022	0,056	0,013	0,040
1922	0,048	0,098	0,077	0,043	0,022	0,069	0,011	0,028
1923	0,054	0,098	0,080	0,041	0,022	0,056	0,010	0,025
1924	0,033	0,106	0,080	0,038	0,022	0,054	0,010	0,027
1925	0,036	0,106	0,083	0,038	0,019	0,047	0,010	0,026
1926	0,034	0,106	0,075	0,037	0,022	0,042	0,010	0,026
1927	0,027	0,098	0,077	0,039	0,019	0,029	0,010	0,026
1928	0,027	0,106	0,077	0,037	0,019	0,031	0,010	0,026
1929	0,027	0,091	0,075	0,033	0,019	0,031	0,009	0,026
1930	0,028	0,083	0,070	0,033	0,012	0,029	0,009	0,026
1931	0,027	0,083	0,080	0,035	0,015	0,031	0,009	0,026
1932	0,027	0,083	0,080	0,034	0,015	0,033	0,009	0,025
1933	0,027	0,083	0,080	0,036	0,012	0,031	0,009	0,025
1934	0,028	0,075	0,080	0,036	0,012	0,031	0,009	0,025
1935	0,028	0,083	0,080	0,044	0,012	0,033	0,009	0,026
1936	0,027	0,098	0,080	0,047	0,012	0,031	0,010	0,030
1937	0,029	0,091	0,080	0,049	0,012	0,033	0,010	0,032
1938	0,037	0,083	0,093	0,046	0,012	0,042	0,011	0,033

A = military personnel (MP) per area in Belgium; B = MP per area in Denmark; C = MP per area in Finland; D = MP per area in France; E = MP per area in Norway; F = MP per area in Sweden; G = MP per area in the United Kingdom; H = MP per area in the United States

Series B. Table 10. Military Expenditures in a Common Currency (1926 FIM) Per Military Personnel in Eight Countries, 1920—1938

Year	A.	B.	C.	D.	E.	F.	G.	H.
1920	8102	15979	9615	..	43688	38480	28914	298602
1921	12515	28756	9686	..	53875	56085	53641	270644
1922	13540	37139	12200	30322	67322	52817	59089	141333
1923	12305	30762	14774	22918	58797	59940	55459	108547
1924	11212	36656	16161	21668	47412	62730	52731	100405
1925	12800	38639	18438	19752	55971	72368	57828	90110
1926	9297	46252	20931	18389	61580	81939	65661	94036
1927	11173	47219	17767	30718	76042	118116	67605	96818
1928	13097	47832	20400	27253	85004	100617	68077	107477
1929	14276	58817	23793	41051	78766	111138	70675	113801
1930	16873	68994	29111	55154	124422	129363	79708	132077
1931	18937	77618	28484	52454	110534	127692	89960	157189
1932	17816	76955	25581	51466	109682	120434	89435	175139
1933	16819	73566	24452	57855	132130	125360	89718	160448
1934	23641	78912	28226	49116	131064	120993	92448	116191
1935	21190	58680	31290	41638	127480	107355	108236	139886
1936	23078	51458	33903	37394	127278	142542	128569	154093
1937	23860	59507	32548	39343	128632	132096	150142	138237
1938	19137	71647	39222	50000	152076	146355	219276	160758

A = military expenditures (ME) in 1926 FIM per military personnel (MP) in Belgium; B = ME in 1926 FIM per MP in Denmark; C = ME in 1926 FIM per MP in Finland; D = ME in 1926 FIM per MP in France; E = ME in 1926 FIM per MP in Norway; F = ME in 1926 FIM per MP in Sweden; G = ME in 1926 FIM per MP in the United Kingdom; H = ME in 1926 FIM per MP in the United States

SERIES C. MEMBERS OF SELECT SMALL ORGANIZATIONS INVOLVED IN THE FINNISH MILITARY DECISION-MAKING DURING THE INTERWAR PERIOD

Series C. Table 1. Members of the Defense Revision Committee, 1923—1926

Original member	Replacement	Further replacement
Holma, K.V. (Master of Laws, NC)	Pennanen, P. (MP, NC)	Saastamoinen, A.H. (MP, NC)
Hornborg, E. (Chairman, MP, SPP)		
Huttunen, E. (MP, SDP)	Puro, O. (Board Secretary, Minister in 1927, SDP)	
Kontu, A. (Agronomist, MD, PP)		
Malmberg, L. (Jaeger Colonel)	Grandell, L. (Jaeger Major)	
Martola, A. (Jaeger Major)		
Vesterinen, V. (Farmer, Minister, AU)	Niukkanen, J. (Farmer, Minister, AU)	
Wetzer, M. (Major General)		
Öhqvist, H. (Jaeger Lt. Colonel)	Heinrichs, E. (Jaeger Colonel)	

Abreviations: NC = National Coalition; MP = Member of Parliament; SPP = Swedish Peoples Party; SDP = Social Democratic Party; MD = Managing Director; PP = Progressive Party; AU = Agrarian Union

Series C. Table 2. Members of the Board of Acquisitions, 1919—1926

Alanen, J. (Managing Director)	Nikander, O. (Managing Director)
Boije, R.L. (Engineer)	Nikander, R. (Managing Director)
Feiring, F. (Commercial Counsellor)	Niklander, A. (Commercial Counsellor)
Hovilainen, T. (Manager)	Nousiainen, E. (Managing Director)
Inberg, E. (Lt., Managing Director)	Parkkinen, O. (Managing Director)
Ingelberg, Hj. (Colonel)	Sahlbom, J. (Managing Director)
Lavonius, R. (Engineer, Mining Counsellor)	Spåre, M.H.A. (Colonel)
Niiranen, A. (Engineer)	Stjernvall, J. (Minister, Mining Counsellor)

Series C. Table 3. Chairmen and Board Members of the Finnish Federation of Industries, 1921—1946

Honorary chairmen:

von Julin, A.L. 1941—1944 (Mining Counsellor)

Chairmen:

Feiring, F. (Commercial Counsellor) 1927—1931
Grundström, J. (Mining Counsellor) 1937—1941
von Julin, A.L. (Mining Counsellor) 1921—1926
Lavonius, R. (Mining Counsellor) 1932—1936
Wahlforss, W. (Mining Counsellor) 1942—

Vicechairmen:

Feiring, F. (Commercial Counsellor) 1921—1926, II vicechairman 1937
Grundström, J. (Mining Counsellor), vicechairman 1931—1936
Herlin, H. (Engineer), II vicechairman 1932
Kauppi, O. (Head Consul), II vicechairman 1943—
Lavonius, R. (Mining Counsellor), II vicechairman 1931
Solin, A. (Mining Counsellor), II vicechairman 1933, vicechairman 1944—
Stjernvall, J. (Mining Counsellor), 1927—1930
Voss—Schrader, C. (Colonel), II vicechairman 1934—1936, vicechairman 1936
Wahlforss, W. (Mining Counsellor), vicechairman 1938—1941
von Wendt, Hj. (Mining Counsellor), II vicechairman 1938—1941, vicechairman 1942—1943
Westerlund, T. (Manager), II vicechairman 1942

Actual Board Members and Supplementary Members:

Aaltonen, E. (Mining Counsellor) 1927—31
Ahiström, H. (Engineer) 1940
Alenius, E. (Master of Laws) 1944—
Alfthan, C. (Manager) 1942—
Almqvist, G. (Master of Laws) 1931
Aminoff, B. (Baron) 1942
Aminoff, G. (Baron) 1929—35
Andstén, C.A. (Manager) 1940—
Antero, A. (Mining Counsellor) 1933—38
Arppe, G. (Engineer) 1933—37
Backberg, H. (Engineer) 1933—34
Balthasar, G. (Manager) 1936—
von Behr, O.W. (Engineer) 1924—40
Bernström, J.M. (Engineer) 1921—26
Björkstén, W. (Master of Laws) 1921— 36
Brander, G. (Manager) 1933—39
Brax, E. (Engineer) 1933—41
Christides, G.A. (Manager) 1936—
Collan, E.J. (Factory Manager) 1933—40
Donner, A. (Engineer) 1926—28
Ehrnrooth, H. (Engineer) 1941
Ehrström, O. (Colonel) 1921—1926
Ek, J.H. (Engineer) 1933—
Eklund, T. (Manager) 1944—
Eklundh, L. (Engineer) 1933—43
Elfving, H.A. (Commercial Counsellor) 1921—32
Enberg, R. (Engineer) 1938—
Fazer, S. (Manager) 1933—39
Feiring, F. (Commercial Counsellor) 1921—
Fogelholm, J. (Manager) 1935—37
Forss, R. (Manager) 1936—40, 1942
Forsström, P. (Mining Counsellor) 1931—32, 1938—
von Frenckell, K. (Manager) 1938
Gartz, Å. (Mining Counsellor) 1942—
Granholm, W. (Master of Laws) 1938—41
Grundström, J. (Mining Counsellor) 1922—
Grönblom, B. (Mining Counsellor) 1938—42
Grönqvist, W. (Engineer) 1921—23
Heinonen, V. (Manager) 1921— 29
Heinrichs, O. (Colonel) 1935—37, 1942—45
Helander, W.O. (Manager) 1933—35
Helenius, L. (Mining Counsellor) 1933—39, 1943—
Hellemaa, A. (Commercial Counsellor) 1930 — 31
Herlin, H. (Engineer) 1925—32
Herlitz, C.—G. (Mining Counsellor) 1928—
Hernberg, R. (Engineer) 1945—
Heyer, E. (Manager) 1938—
Hohenthal, A. (Manager) 1921—32
Huber, B.F. (Engineer) 1934—35
Huhtamäki, H. (Mining Counsellor) 1945—
Huotinen, N. (Manager) 1926—31
Jansson, H. (Manager) 1924—25, 1932—

Jensen, H. (Mining Counsellor) 1922—25, 1933—
von Julin, A.L. (Mining Counsellor) 1921—41
von Julin, J. (Engineer) 1941—
Juustinen, L. (Consul) 1928—34
Kahelin, E. (Engineer) 1921—30, 1933—37
Kahma, J. (Manager) 1921—25
Kaila, T.T. (Doctor of Philosophy) 1932—37
Kanto, B. (Manager) 1934—43
Kauppi, O. (Head Consul) 1933—
Kauppinen, A. (Manager) 1933—37
Kerttula, I. (Consul) 1935—39
Kettunen, O. (Industrialist) 1926—33
Khüry, U. (Consul) 1933, 1941
Kihlman, Å. (Manager) 1933—
Kilpinen, O. (Chief Accountant) 1924—42.
Kolehmainen, A.P. (Mining Counsellor) 1929—44
Kolehmainen, P. (Manager) 1943—45
Koristo, H.A. (Manager) 1926—31
Korpi, T. (Manager) 1922—23
Kramer, A. (Mining Counsellor) 1940—41
Lampén, M. (Manager) 1933—36
Lavonius, M. (Mining Counsellor) 1932 — 45
Lavonius, R. (Mining Counsellor) 1931—36
Levämäki, S. (Manager) 1927
Liljeroos, E.H. (Mining Counsellor) 1933—
Lindström, B. (Factory Manager) 1931—32
Luoma, L. (Master of Laws) 1933
Mattinen, J. (Manager) 1942—
Meinander, T. (Factory Manager) 1942—
Mäkinen, E. (Mining Counsellor) 1941
Neovius, H. (Architect) 1921—28
Neu, C. (Engineer) 1929—32
Nikander, A.T. (Mining Counsellor) 1933—
Nordgren, K. (Master of Philosophy) 1938—40
Nordman, K.B. (Engineer) 1940—44
Nylund, S.A. (Consul) 1937—38
Paavolainen, L. (Engineer) 1941—
Pacius, C.E. (Special Accountant) 1934—37
Pajari, T.J. (Manager) 1929—32
Pajari, T.K. (Manager) 1933—35
Pajari, V.L. (Manager) 1936—
Palmén, K.E. (Baron) 1921—31
Polón, E. (Master of Laws) 1921—30
Raevuori, Y. (Master of Laws) 1930—31
Ramsay, W. (Mining Counsellor) 1922—25
Relander, H. (Engineer) 1939—
Sandelin, R. (Manager) 1940—41
Sandell, S. (Manager) 1941—
Sarlin, E. (Mining Counsellor) 1933—
Schmidt, O.F. (Engineer) 1933—36
Simola, V.P. (Engineer) 1943—
Solin, A. (Mining Counsellor) 1930—
Stenbäck, A. (Engineer) 1921—26
Stjernvall, J. (Mining Counsellor) 1921—25, 1927—33
Ståhle, G. (Manager) 1922—30
Sundberg, J. (Engineer) 1943—
Söderberg, A. (Candidate of Law) 1933—37
von Troil, S.W. (Baron) 1938—41
Voss-Schrader, C. (Colonel) 1924—39
Wahlforss, W. (Mining Counsellor) 1933—
Wallin, E. (Manager) 1933—34, 1943—
Weckman, V. (Engineer) 1942—
Wegelius, B. (Manager) 1939—45
von Wendt, Hj. (Mining Counsellor) 1926—
Westerlund, T. (Chief General Manager) 1931—
Widlund, A. (Office Manager) 1933—35
Wrede, G.W. (Baron) 1932
Wrede, G.W. (Baron) 1937—40
Wrede, R. (Baron) 1931, 1933—34
von Wright, G. (Colonel) 1937—40
von Wright, S. (Major) 1935—
Zilliacus, P.H. (Manager) 1933—
Åhlström , H. (Engineer) 1941—
Östling, G.J. (Professor) 1922—28

Managing Directors:

Helenius, L. (Mining Counsellor) 1940—42
Lev6n, M. (Professor) 1943—45
Viljanen, V.M.J. (Mining Counsellor) 1921—40

Assistant Directors:

Fellman, Y. (Candidate of Law) 1944—
Koskelainen, Y. (Manager) 1925—