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**Credit risk associated
to the central government of Finland and
the “Russian premium”, 1863–1938**

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1 Introduction

This paper examines the determination of the credit risk associated to the central government of Finland on the international financial exchanges in 1863–1938, that is, during the central government's first adherence to the international financial market, prior to a long absence. Finland's credibility is measured by evaluating the yield premiums associated to government's foreign bonds on German, Paris and London bourses. In particular, this study concentrates on assessing what was the impact of the great political turmoil of the Russian society in the late 19th and early 20th century's on foreign financiers' assessment on Finland.

Using of financial data may offer an interesting additional angle to Finnish history and turbulent Russo-Finnish relations during a period that faced profound economic and political changes both in Finland and in Russia. By their very nature the financial markets utilise all available information to assess the securities they are engaged in. They turn this information through bids and offers to quantitative data. A yield premium between two sovereign bonds contains information on various political and economic aspects affecting the creditworthiness of each issuer, assuming that the bonds differ only in terms of quality. This provides the useful link to historical research by offering the views of the contemporary people to various historical developments; it incorporates a price tag to historical events.

This phenomenon was very well understood by the people of the gold standard era, especially in case of bonds issued by sovereign states. For example, Johan Gripenberg from the Finnish state-secretary office in St. Petersburg in his letter to a Finnish politician in 1889 mentioned Finland's excellent credit on the international financial exchanges as one example of Finland's modernity and distinct autonomous status in the Empire, which had surprised many Russians familiar with Finland.¹

The precondition for the assessment power of the financial markets was the liberal world order that was highlighted in the common adherence to the international gold standard prior to the First World War and temporarily in the 1920s and 1930s. In general, the governments prior to the 1930s did not restrict trading in financial instruments over the national borders. The only exceptions were possible minor taxes on foreign exchange transactions and some politically motivated controls on public offerings, or, similarly, requirements to acquire a listing permission on the stock exchanges from

¹ National archives, Yrjö-Koskinen archives, Packet 18, No: 36, letter from Johan Gripenberg to Yrjö Sakari Yrjö-Koskinen 15.4.1889.

local public authorities. The First World War caused the only major break to this primarily liberal international financial order, which was permanently broken up only by the Great Depression and the collapse of the international financial system in the 1930s.

2 Historical backgrounds

Central government's borrowing in Finland became conceivable in 1809. In the peace treaty of Hamina, Finland was incorporated to the Russian Empire as an autonomous Grand Duchy, where Swedish laws were still in force. In contrast, prior to 1809 Finland had been part of Sweden for some 700 years with no special economic or administrative status of similar scale. On the course of the 19th century Finland was able to widen its political and economic autonomy within the Empire; Finland became a separate entity, belonging to the regions that were administratively very different from the Empire proper. The separate and distinct position was laid on few cornerstones, formed little by little during the 19th century: Finnish nationality, separate administration, own parliament, army, currency and tariffs and tax policies.

Following a prolonged expansion of the spectre of its autonomy, the winds changed in the end of the century. Since the late 19th century measures were instigated in Russia to integrate Finland closer to the Russian Empire, as had taken place earlier in Poland and in the Baltic provinces. This process was interrupted by the outbreak of the First World War in 1914 and Russian upheaval in 1917; in December 1917 Finland declared independency and became a parliamentary democracy. In November 1939 the Soviet invasion dragged Finland to the Second World War.

Finland's economic revival is usually considered to have begun in the 1870s, following series of economic and political reforms in the Grand Duchy that were implemented during the reign of the Emperor Alexander II (1855–1881); bias of economic policy was altered from mercantilism to liberalism. The mainly liberal stance of the economic policy set in between the 1850s and 1870s remained almost intact until the 1930s. The state fostered the development of free market economy relying on private entrepreneurship.

The same classical principles were reflected also in both fiscal and monetary policies. During the time of autonomy, an integral part of the economic sovereignty was Finland's independent and separate state finances. The state followed careful fiscal prudence; budget deficits were avoided and low level of state debt was preferred – same principles were followed also after independency. Finland's monetary autonomy was created through currency reforms in 1860 and 1865, the latter of

which included mark's peg to silver. Indeed, monetary policies were, above all, based on stable external and internal value of the currency, anchored by the adherences to international silver (1865–1878) and gold standards (1878–1914 and 1926–1931).

Despite of its dedication to economic liberalism, given the relative backwardness of the country, the state took an active role in removing obstacles to economic growth and promoting modernisation of the society. Consequently, the state took in the latter part of the 19th century an active stance in fostering development of the domestic infrastructure; already earlier in the form of building of the Saimaa Canal (1845–1856), connecting lake Saimaa to the Gulf of Viipuri, and later through the construction of national railway network. There was an urgent need to construct a communications network; the geographically large country was divided into economically isolated regions. In order to foster economic development it was necessary to draw in the interior of the country to take part in the commercial production process. The state's participation was rationalised by the positive externalities benefiting the society as a whole and by the magnitude of the process, it could not have been handled by private enterprises, as the failed private railway lines soon showed.²

The first railway line was opened in 1862 and was followed by constructions of several other railway connections to main Finnish towns and to St. Petersburg. The constructions continued until the First World War and were almost solely financed by the state. And very importantly, the state acquired the funds mainly from the foreign capital markets. Although the state debt was generally regarded as something to be avoided, the railway financing made an exception. The same line of thinking continued in the interwar period. Borrowing was allowed, but strictly limited for “productive investments”, including financing of the acquisition of foreign owned forest industries to state ownership (for example, Norwegian owned forest company W. Gutzeit was bought in 1918), construction of hydroelectric power to the Imatra Rapids (1921–1929) and improvement of the economic and financial conditions of Finnish farmers.³

In addition, the foreign loans played an important role in Finland's monetary reforms. The adoptions of the silver standard in 1865, the gold standard in 1878 and the gold exchange standard in 1926 were all made possible through issuance of loans that were denominated in hard currencies. This was due to the fact that note circulation during the gold standards was covered by the central bank's reserves, which constituted mainly of gold, silver and foreign assets, depending on the

² Heikkinen et al., 2000.

³ Järvinen, 1930.

specific rules regulating the relationship between the note issuance and central bank reserves. In practise, central bank reserves could be raised to higher levels through foreign currency bond issues quickly and efficiently, whereas the foreign bonds had to be redeemed only slowly over a period of several years and financed, for example, through steadily growing export revenues.

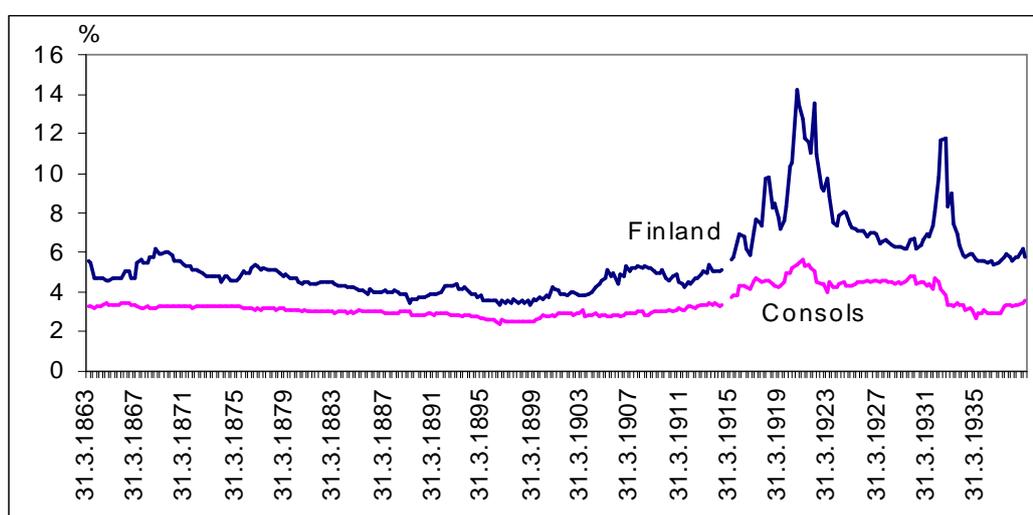
Three periods contradict with the harmonious picture of handling of the state finances during the period from the 1860s to the 1930s. The numerous and severe crop failures in the 1860s, – in 1867 Finland suffered from the last devastating famine in the history of Western Europe –, the consequences of the First World War and the Civil War in 1918 and the Great Depression of the early 1930s offer the important exceptions. During the crises years the state was forced abandon “business-as-usual” funding procedures and utilise all available borrowing potential to maintain the basic functions of the society.

Due to these considerations the central government of Finland became a frequent bond issuer on the international financial exchanges in the latter half of the 19th century, in a very similar manner with its western neighbours, the governments of Norway and Sweden. The first foreign bond – outside the Russian Empire – was issued in Frankfurt am Main in 1862 through the M.A. von Rothschild und Söhne. It was followed by frequent bond issuance in Germany and at the turn of the century in Paris and London. The engagement with the French capital market also witnessed the arrival of the Crédit Lyonnais and Stockholms Enskilda Bank (SEB) to the issuing syndicates. During the interwar years the American financial market offered the most foreign capital to the state, usually through the intermediation of the National City Company, although the state also tapped the bond market in Stockholm. Domestic borrowing remained throughout the timeframe very limited, during the last two decades preceding the First World War the central government had no exposure to domestic debt. Only during the 1930s the state utilised domestic savings in a greater extent. Quite interestingly, the Finnish government did not acquire any funding from the Russian capital markets after the 1850s and no Russian financial institutions took part in the Grand Duchy’s government’s issuing syndicates.

As indicated, the Finnish central government did not have an access to foreign bond markets during economic and political uproars, which stemmed from various domestic and foreign sources. In addition, the cost of borrowing showed significant variation for the reason that foreign investors’ appetite for Finnish securities altered as the next chapter will show.

3 Credit risk associated to the central government of Finland

The nominal yields of foreign bonds issued by the central government of Finland declined almost constantly from the 1860s until the turn of the century, – i.e. during a period characterised by a long-lasting international deflation – and rose moderately thereafter. In the interwar time, nominal yields peaked twice to unrecorded levels. First time this happened in the aftermath of the First World War, the highest yield was recorded in the summer of 1920. For the second time Finnish bond yields increased drastically in the early 1930s. In between, during the latter half of the 1920s government bond yields had steadily fallen. The stability of the British long-term consol yields – which can be regarded to have constituted the benchmark yield – offered a dramatic contrast to Finnish bond yields (graph 1).



Graph 1 Long-term exchange-rate risk free Finnish yields and consol yields, 1863–1938.

Note: After 1932 the computed yields of Finnish government bonds are not anymore directly comparable; the Finnish 5% sterling issue of 1923 traded clearly above par and the yield has been calculated to the first call date in 1943, meaning that they don't stand for long-term bond yields anymore.

Sources: see appendix.

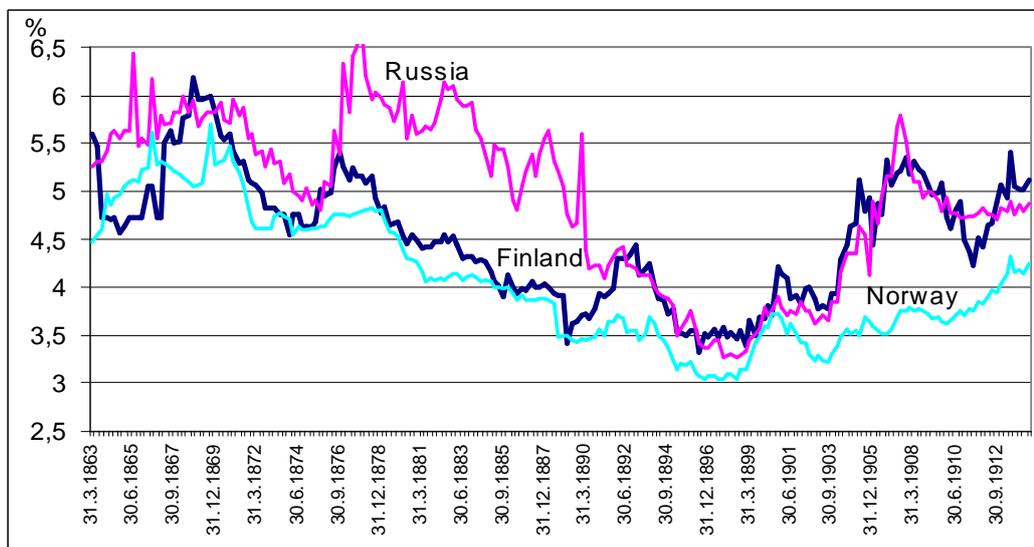
The difference between the two time series in graph 1 presents the credit risk associated to the central government of Finland. Investors' faith on Finland's economy and political stability was highest during a 25-year period from 1879 to 1904. During that phase the credit risk was continuously less than two percentage points (graph 2). In the end of the 1880s, and again, ten years later the credit premium shrunk even further. After the turn of the century the credit premium suddenly rose although it still slightly bounced back before the First World War. The state's creditworthiness seems to have hit the rock bottom in 1919–21 and again in 1931–32.



Graph 2 Credit risk associated to the central government of Finland, 1863–1932.

Source: see appendix.

The First World War clearly divided the timeframe into two distinct periods; the pre-war period was characterised with relatively stable yields (and yield spreads), whereas during the interwar years fluctuations were much greater. In order to capture the market developments during the first period more precisely, graph 3 plots some government bond yields from 1863 only to 1914.



Graph 3 Foreign bond yields of the central governments of Finland, Sweden, Norway and Russia, 1863–1914.

Source: see appendix.

Graph 3 presents absolute yields of three government bonds, those of Finland, Norway and Russia. The rationale for choosing Norway, in addition to Russia, for the evaluation is rather clear-cut. Norway was, like Finland, a small peripheral borrower in the international capital markets. It issued

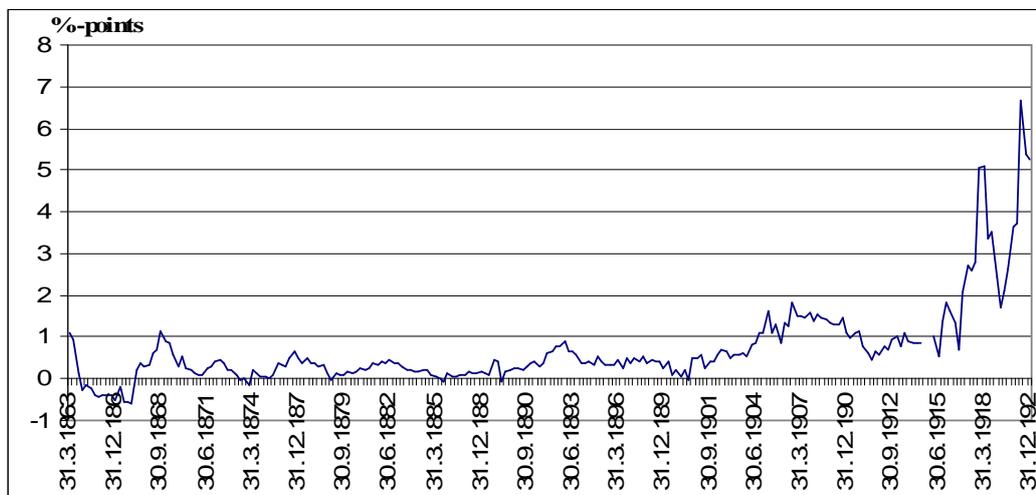
frequently foreign bonds to import foreign capital and finance its infrastructure investments and, furthermore, it even lacked full sovereignty until its final separation from Sweden in 1905.⁴ The early 1890s and the turn of the century offered interesting watersheds in the market assessment. Before the 1890s all Nordic bonds showed rather clear correlation with each other, i.e. they were assessed to carry quite similar credit risk. The yields of the Russian Imperial government securities were clearly higher – in this respect, a clear shift had taken place in 1877–78, time of the Balkan war. However, during the 1890s the yields on Russian government bonds sharply fell to similar levels with the Nordic government bonds, maybe due to the reason that its monetary conditions stabilised and Russia's adherence to gold became closer.

This outperformance of the Russian securities was reversed after the turn of the century. In particular, during the Russo-Japanese conflict and following Russia's internal political upheaval credit premiums between Russian and Nordic government bonds widened, but Finnish bonds were left out of this development. This means that suddenly the yields of the Finnish government bonds correlated with those of the Imperial government securities. After being regarded by the international capital similar to other Scandinavian states – especially during the 1880s and latter half of the 1890s – in the early 20th century Finland was assessed to be similar to the Russian Imperial government in terms of credibility as a borrower. This happened simultaneously with the beginning of the Russian policies to depress Finland's autonomy.

To illustrate Finland's performance against other Nordic states further, graph 4 shows the Finnish government's credit premium against Norway, but this time until 1920. It clearly indicates that following the volatile 1860s, shadowed by e.g. international financial crises and economic malaise in Finland, credit premium against Norwegian government bonds remained relatively stable until the beginning of the 20th century – the largest jump in the credit premiums was felt in the early 1890s during the international Barings crises and Russia's first efforts to suppress Finland's autonomy. As already indicated a much greater widening of the yield differentials took place after the turn of the century – although even Norway experienced political crisis as the personal union with Sweden broke apart. However, the period between the last quarter of 1917 and end of 1920 constituted a whole new phase. Between September and December 1917 the credit premium between Finnish and Norwegian government bonds enlarged from 2.78 per cent to 5 per cent. This

⁴ Against the Swedish government bonds development of the credit premium would have been very similar due to the yield correlation between the Norwegian and Swedish central government bonds.

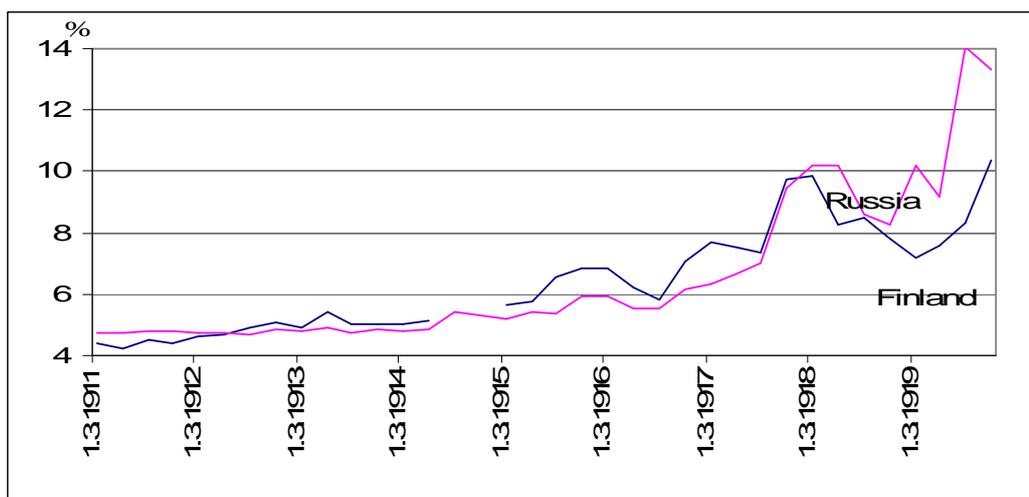
last quarter of 1917, naturally, witnessed the Bolshevik coup in Russia. Although the yield spread bounced back in early 1919, it again widened to over 5 per cent by the end of 1920.



Graph 4 Yield difference between Finnish and Norwegian government bonds (Finland–Norway), 1863–1920.

Note: London quotations after 1914. The comparison is done only until 1920 due to the lack of Norwegian data. Source: see appendix.

The correlation between the Finnish government and the Russian Imperial government bond yields ended for the most part only in 1920 (graph 5). Still in September 1918 the bonds were quoted almost at par despite of the fact that the Bolshevik government had announced a total default of all Imperial government debts in February 1918. Indeed, interest and redemptions of the Finnish loan of 1909 had not been paid as due in London in July 1918 because the British government had sequestrated Finnish deposits with banks in England due to Finland’s alliance with Germany. This meant that both Finnish and Russian securities were in a state of default in the latter part of 1918.



Graph 5 Long-term Finnish and Russian government foreign bond yields, 1911–1920.

Source: see appendix.

A clear convergence between Finnish and Russian securities in London took place again in the summer of 1919, although Finland had in January 1919 delivered all unpaid interests and redemptions to bondholders. This might imply that the western financial markets still in the summer of 1919 put the faith of the White Russians, who would probably have showed more respect for old Imperial government debts, and the White Finnish government into the same basket, i.e. the credit risk associated to the government in Helsinki was similar to that of the white armies.⁵ This is somewhat surprising because during the summer all central regions of Russia were in the hands of the reds, although three white Russian armies, headed by generals Kolchak, Denikin and Yudenich prepared extensive counter-offensives. In Finland, the white armies had won the civil war against the reds over a year earlier. As a curiosity, also the white government in Helsinki was in the early summer of 1919 headed by a Finnish ex-Russian army General Gustaf Mannerheim, who even planned support the Russian white armies in their attack to St. Petersburg.⁶

4 Determination of the credit risk

The following will contain a short interpretation of the determination of the credit risk associated to the central government. It will provide some examples of the contemporary people's views and beliefs over the Finnish securities and, as complementary approach, utilise an econometric analysis.

4.1 Difficult entry to western bond markets

The government's entry to the international capital markets along the 1860s was coincided with profound changes of the Finnish society but it was also accompanied with economic malaise. In order to implement the monetary reform of 1865 the government had to carry out severe deflation; the silver value of mark had been decided in St- Petersburg earlier, prior to a period of rapid inflation. Furthermore, along the 1860s Finland was also ravaged by bad harvests. Economic activity slowed down and government finances met great difficulties. On top of Finland's internal difficulties, international monetary conditions were not favourable. The Polish uprising of 1863 and, especially, the wars of German unification were shattering the financial markets of the Northern Europe. This financial distress, stemming from the Polish revolt, finally even prevented Russia's own monetary reform. Indeed, due to the adverse economic conditions in the middle of the 1860s the government was forced to raise several foreign short-term loans to meet its acute financial requirements

⁵ Hopes of western bondholders of repudiated Russian securities to receive invested capital back was naturally not only dependent on the results of the Russian civil war. See, for example, Landon-Lane and Oosterlinck (2005).

⁶ Ahti, 1987.

Loan negotiations turned out extremely intense; the course of the discussions highlights the difficult situation that faced the Grand Duchy's Senate in its attempts to acquire money under auspicious conditions. An emergency loan in 1867 could be raised only after prolonged and very intense negotiations with Carl von Rothschild in Germany. In the following year, the state wanted to acquire a loan to finance the construction of Riihimäki-St. Petersburg railway line. Issuance of the new railway loan proved out to be difficult, as Finnish Deputy Minister State Secretary Emil Stjernvall-Walleen had already anticipated in late 1867. He wrote that if the Rothschilds reject Finland's loan proposal, the Senate should turn to the financial markets in England. However, according to Stjernvall-Walleen, the Russian credit was not appreciated in England for the time being and, continued that, unfortunately, "our credit will be compared to that of Russia's and we have to pay a similarly high price". Stjernvall-Walleen proposed to search for a well-known and credible intermediary, who could explain to Englishmen Finland's distinct financial administration – differentiating Finland from Russia – and maybe even guarantee the new issue.⁷

Following a fierce competition between banks, Erlanger & Söhne organised the loan of 1868, but underwrote only 3/5 of the total loan amount of 17.3 million Finnish marks. In the end, the resulting 2/5 could not be placed to the markets because there was not sufficient investor demand, partly reflecting investors' mistrust on Finland. Instead, the residual was restructured to a lottery bond with weaker terms for the state. In particular, it was not possible for the Senate to redeem it prior to the maturity date. This proved to be a serious set-back for the issuer because it could not utilise the declining interest-rates in the following decades in accordance with the lottery bond.⁸ Still part of the next foreign bond issue, carried out in 1874, was later returned to Finland for domestic placement due to the insufficient investor appetite.⁹

4.2 Hey-day of state's foreign borrowing

After the end of the Franco-Prussian war the international financial conditions rapidly improved. In Finland, industrialisation gathered momentum and extensive railway constructions integrated different regions of the Grand Duchy into one entity. There was an increasing separation between the Grand Duchy and the empire. The regularly assembling Finnish Diet – regular assemblies had begun in 1863 – actively enacted new legislation for Finland and, in practise, steered Finland in its

⁷ J. V. Snellman samlade arbeten XI, 1998: 1387; letter from Emil Stjernvall-Walleen to J.V. Snellman, 10.12.1867.

⁸ Paasikivi, 1911.

⁹ Parliament documents, Book II, Letter by the estates to the Emperor, 5.6.1882; Pipping, 1967.

own distinct direction. Finland's monetary separation was also enforced; Finland joined the international gold standard in 1878, that is, two decades before Russia.

Moreover, the world financial markets had in their reach an ever growing amount of information, and at much faster pace. This held also on Finland's part. The Diet assemblies and newly founded newspapers increased discussion and information on the Finnish politics and economy. The Grand Duchy's Statistical office had been founded in 1865: it actively took part in international statistical co-operation. The Grand Duchy's foreign issuance had also similar effects. For example, after the 1882 bond issue Carl von Rothschild was able to congratulate the Bank of Finland for the "great victory" that was achieved. According to him, the coupon rate of the new government bond was historically low and its price had exceeded all expectations. The total amount of subscriptions had been large and consisted of many small tickets. This was a proof of the great investor demand on the Finnish securities, "the Finnish state of affairs had greatly attracted wider audiences" ("Dass die Sache in breiten Publicum grossen Anklang gefunden hat"), as he wrote in 1883.¹⁰

Later, an important step was also the arrival of the *Crédit Lyonnais* in the 1890s as the main banking partner for the state; the *Crédit Lyonnais* represented a new type of commercial banking with more transparent business operations compared to the House of Rothschild. The research department of the *Crédit Lyonnais*, the *Service des Etudes Financières* (SEF), was founded in 1871.¹¹ As regards Finland, the *Crédit Lyonnais* began its surveillance in 1892. The reports were typically prepared with greatest accuracy; they contained lots of detailed information on the Finnish economy and state finances in particular. The reports laid a hand on the Grand Duchy's politics as well. The political analyses were strikingly profound, presenting both the history and current stance of Finland's unique administration in the Russian Empire.

The tone of the analyses during the 1890s was extremely positive. The bank noted that the state revenues exceeded six times its debt service expenditure and furthermore, even the revenues from the state railways solely exceed the debt service costs. In 1898 the *Crédit Lyonnais* concluded that the state finances were managed with great wisdom and foresight. In 1898 the *Crédit Lyonnais* produced internal analysis ranking sovereign borrowers into three categories according to their management of state finances; indeed, Finland belonged to the highest category.

¹⁰ Bank of Finland archives, the archives of the Board, letter from M.A. Rothschild und Söhne 20.2.1883.

¹¹ Flandreau, 2003.

Finland's political situation was seen in a positive light. In a report from 1895 Finland was claimed to form its absolutely distinct political entity ("sa constitution politique est absolument distincte de celle de la Russie"). According to the *Crédit Lyonnais*, Finland had formed a personal union with Russia since 1809 and the governance was based on a constitutional monarchy – this view clearly exaggerated Finland's different status.¹²

4.3 Threat against Finland's autonomy

The new century brought an end to the economic and political calm in Finland. The political turmoil emerged already at the turn of the century and continued almost continuously for the next two decades. Economic difficulties begun only during the First World War; Finland's economic performance during the years preceding the Great War was still solid.

The political uproar came at two stages. First came forward a threat against Finland's autonomous status. The Russian efforts to curb it was culminated in the manifesto of February 1899, which stipulated that affairs concerning the whole empire would be regulated according to the imperial legislative procedures and the Finnish diet would only have a consultative role, lacking the possibility to veto a law coming into force in the Grand Duchy. In practise the risk towards Finland's distinct and unique status in the Empire meant that the credit risk associated to the Grand Duchy's government became more similar to the credit risk associated to the Imperial government. At the second stage the credit risk associated to Russia increased. The miserable outcome of the Russo-Japanese war in 1904–1905 and the following revolutionary movement in Russia underlined the credit risk of the seemingly vulnerable Russian government. The unrest spread also to the Grand Duchy in autumn of 1905 when a general strike broke out.

The tone of the *Crédit Lyonnais* reports changed. Unlike in the analyses prepared in the 1890s, the main emphasis was now in political matters; the economic aspects were left for less space as there had taken place no major changes. Although the state finances were again noted to be in a superior condition, the threats to economic and political autonomy were now highlighted. For example, the Russian efforts to integrate the Russian and Finnish monetary systems were carefully evaluated; a special report was dedicated to the Russian degree to integrate Finland's separate monetary system to that of Russia's, which also had switched over to gold standard, thus removing an important rationale for Finland's separate monetary system.

¹² *Crédit Lyonnais* archives, DAF 255-1, BE 1729 "Finances Finlandaises Note", 1895; DEEF 73309, BE 1154, "Note sommaire", 1895; DAF 255-1, BE 1729, "Emprunt 3 % Or 1898 du Grand-Duché de Finlande", 1898.

The new political climate was felt in the loan negotiations. During the preparation for the central government's bond issue in France in 1908 the new adverse circumstances were felt most concretely, resulting in the end to the cancellation of the whole issue; the Finnish Senate was for the first time ahead of a situation, where it lacked an access to the financial markets despite its serious attempts. This turns out, for example, from the response of Banque de Paris & des Pays-Bas in March 1908. According to the bank, many factors worked against new issue's efficient pricing. A new bond issue by the Grand Duchy would now correlate with the prices of Russian bonds, which, however, had much larger investor base than the Finnish ones; as a result, they should be priced under the Russian government securities. Illuminatingly, the bank's representative informed Stockholms Enskilda Bank – which represented Finland in the negotiations – that “the Russian persecution, although undeserved and rude, would lay uncertainty over the Finnish bond issue”.¹³ SEB's chairman K.A. Wallenberg regretted to the Bank of Finland, although he personally considered it unreasonable, that the French nowadays too much mix Finnish and Russian affairs. This means that the Finnish bonds had become dependent on Russian securities, which had recently underperformed on the Paris stock exchange.¹⁴

Finally the planned issue was cancelled, not only due to uncertainty stemming from Finland's political position vis-à-vis Russia, but also due to planned prohibition in Finland, which worked against the interests of French wine producers, providing an example of the growing linkage between the access to the French capital markets and French trade policies. The European bond markets, and the French markets in particular, were also getting increasingly politicised prior to the First World War. Russian government bonds floated to France, a great deal of the outcomes were used for Russian armament, which served the French security policy interests.¹⁵

4.4 Years of economic and political crises

Finland more or less managed to remain outside the actual war efforts during the First World War; the Finns were exempted from military service in the Russian army and the eastern front of the Great War never stretched to Finland. However, political confrontations and the economic crises of 1917, mainly resulting from the collapse of the Russian war orders, were the beginning of an extremely unstable era in Finland. Production stagnated, and the main export markets closed down as even the eastern trade halted. The current account turned into large deficit, causing pressure on

¹³ SEB archives, Svenska sekretariatets dossier, Akt 29(korrespondens), Moret to K.A. Wallenberg, 13.3.1908

¹⁴ SEB archives, Brevkopieböcker 1907-1908, K.A. Wallenberg to Clas von Collan 9.3.1908, 25.4.1908 and 1.5.1908.

¹⁵ Harcave, 1990: 318–319, 561–572.

the foreign reserves of the Bank of Finland. National production dropped by some 15 per cent both in 1917 and in 1918.¹⁶

Monetary conditions were also extremely cluttered. During the war, note circulation increased manifold. The government budget deficits soared and it was forced to borrow from the central bank. Simultaneously, the Russian officials forced the Bank of Finland to change Russian roubles to marks at an artificially high exchange rate, which caused an inflow of roubles to the Grand Duchy. As a result, inflation, an almost unknown phenomenon prior to the war, surged. The mark's convertibility to gold had been relinquished in 1914; after the war the inflated marks lost some 90 per cent of their pre-war value.

The Russian provisional government in March 1917 cancelled the Tsarist government's efforts to suppress Finland's autonomy. Following the Bolshevik coup in October, the Finnish parliament declared Finland independent in December 1917. However, Finland's both internal and international position remained fragile during the first years of independency. Internally, the society had gradually broken apart, which led to political turmoil in 1917. A general strike broke out in the autumn of 1917. In January 1918 a civil war began between reds and whites. The war was brief, but bloody. It ended to the victory of the white Finland in the spring of 1918, but the society remained fragmented for years to come.

The outcome of the civil war allied Finland with the imperial Germany, and isolated Finland from the Western allies. The German orientation was abandoned after the armistice, which ended the war efforts in Europe. Finally, during the spring of 1919 the Western powers recognised Finland's independency. The Russian Bolshevik government had recognised Finland's independency already in the end of 1917, but there was reason to believe that the Soviet government did not regard the recognition as the seal of final separation. The Russian civil war continued and Finland's destiny after the war remained unclear. The Bolsheviks had supported reds in Finland's civil war and the Russian whites were not ready to recognise Finland's full independency. In the west, the question of the Åland islands burdened the relations with Sweden.

Finland's political position and economy stabilised gradually in 1919–22. The new republican constitution was ratified in July 1919. The results of the parliamentary elections in March 1919 and

¹⁶ Hjerpe, 1989: 47–48, 193.

the choice on the republic's first president in July 1919 moved the country to the political centre. The peace treaty with the Soviet Union was signed in October 1920. The disputes over the Åland islands and the East Carelia were settled with Sweden and Russia in the early 1922. During the same years the economy found a new balance. Economic growth had bounced back already in 1919 and remained robust until the end of the 1920s. Within the year 1922 year the current account stabilised, inflation halted and the state returned to balanced budgets. Depreciation of the external value of mark was also finished by the end of the year 1922.

The outbreak of the First World War had dramatically altered the global financial landscape. Inflation soared and it was soon realised that the return to pre-war financial order was difficult or even impossible; the pre-war international monetary mechanism had required a special kind of environment, which no longer existed. Although the international gold standard was reconstructed between 1925 and 1928, it never gained the sort of credibility and functionality that had been the cornerstones of the pre-war classical gold standard. In the wake of the World War I the United States replaced the European war ridden and indebt countries as the leading lending nation.

Although Finland's economy and political situation stabilised, its geographical closeness to the Soviet Union shadowed government's foreign borrowing for the whole of the interwar period. The Bolshevik government had repudiated all Imperial government debts in February 1918. The loan negotiations between the state and foreign financial institutions showed that western capitalists' fear of bolshevism hampered Finland at disproportional extent; foreign financial markets remained closed for Finland's part for much longer than for other Nordic states and the credit premiums associated to Finnish securities remained considerably higher than those of other Nordic government bonds. Similarly, Moody's rating agency assigned Finland lower credit ratings than to other Nordic countries. Indeed, ratings assigned to Finland resembled bond ratings assigned to Latin American countries.¹⁷

As an example of markets' assessment, Finland's legacy to the United States reported in 1921 over prospects of government's new bond issue in the United States, reflecting discussion with American bankers. According to the Ambassador, the Finnish government did not have an access to the American bond market for six reasons:

- 1) Finland is too little known in the United States

¹⁷ Moody's Investors' Manuals.

- 2) Finland is included in the group of the “new European countries”
- 3) Financial markets are anxious about Finland’s internal and external “Bolshevik threat”
- 4) Russia may resume its former status and absorb Finland back
- 5) General pessimism over Europe
- 6) General market situation in the financial market of the United States¹⁸

Although the state was able to tap the American financial market between 1923 and 1928 – before the collapse of American foreign lending – the issues were executed at higher costs than other Nordic states. When the international financial system again run into crises in the late 1920s, Finland’s fragile position became evident. Despite of the fact that economic recession in Finland was milder than in many other countries – although it put a great strain on state budget as well and it had to once again lean on short-term funding – government bonds seriously underperformed on foreign bourses versus other Nordic government bonds. The Finnish legation to the United States reported in October 1931 to Helsinki that the Finnish government bonds in New York “had been cast adrift”. It noted that in the light of recent market performance, Finland’s credit seemed to be comparable to Yugoslavia, Romania, Poland and Argentina, not to the Scandinavian countries. Finland’s geographical position had been notified again; in the same spring credit agency Standard Statistics had refused to permit credit rating to Finland due to the “Russian effect”, which was not limited to political threat but also referred to dumping of forest products by the Soviet Union, thus posing an economic threat to Finnish exporters.¹⁹

Finland’s adherence to foreign capital markets ended along the Great Depression. During the following years the Finnish government bought back most of its foreign bonds; the strong post-recession export performance and consequent current account surpluses enabled the government to redeem its foreign securities and tap domestic savings. Last bonds dating back to the time of autonomy were amortised in 1938, interwar dollar denominated securities had been amortised a few years earlier. It seems to be that foreign assessment on Finland had not greatly changed since the 1860s: still in the early 1930s the Finnish government bonds were evaluated in the context of its eastern neighbour. However, the credit premiums associated to the Finnish government foreign bonds were now much greater than during the 19th century.

¹⁸ Ministry of Foreign Affairs archives, Group 32 O, United States, Saastamoinen from the United States to the Ministry of Foreign Affairs, 7.3.1921.

¹⁹ Ministry of Foreign Affairs archives, Group 32O, United States, L. Åström’s reports no: 2 and no: 8 from the United States to the Ministry of Foreign Affairs, 16.4.1931 and 21.10.1931

4.5 Econometric approach

The determination of the credit risk associated to the central government of Finland has also been evaluated by a simple regression analysis, where the applied regression model bears some resemblance to the classical Capital Asset Pricing Model (CAPM). The dependent variable is the yield spread between the Finnish government foreign bonds and the British government bonds. The independent variables in the right-hand side reflect market-wide fluctuations in interest rates, Russian political crises, Finland's adherence to gold standards (thus also reflecting the debate on the impact of gold adherence on yield spreads) and variables catching economic policies and economic conditions in Finland.²⁰ The model is presented below:

$$R_{FINt} - R_{UKt} = \alpha + \beta_1(R^*_t - R_{UKt}) + \beta_2RUS_t + \beta_3GOLD_t + \beta_4D(\log FIS_{FINt} - \log FIS_{UKt}) + \beta_5D(\log MON_{FINt} - \log MON_{UKt}) + \beta_6D(\log EXP_{FINt} - \log EXP_{UKt}) + e_t^{21}$$

Where

α = constant

R_{FINt} = Finnish government foreign bond yield

R_{UKt} = British government bond yield (risk-free interest rate)

R^*_t = return of the efficient market portfolio (average of sovereign bond yields)

RUS_t = Russian crises (dummy-variable, which has value 1 in 1904–06 and 1917–21)

$GOLD_t$ = Gold adherence (dummy-variable, which has value 1 in 1879–1914 and 1926–30)

FIS_t = Government interest expenses/Government income (=fiscal sustainability)

MON_t = Central bank reserves/Banknote circulation (=monetary stability)

EXP_t = Exports (1926=100) (=economic performance)

D = difference

log = logarithm

The results of the heteroskedasticity and autocorrelation consistent OLS estimates are presented in the following table 1. The regression was run for two periods, one for the years 1863–1914 and another one for the years 1863–1931. For both periods, two different models were run; one containing variables reflecting market-wide fluctuations, Russian crises and gold adherences and another one, which also included differentiated variables reflecting Finland's fiscal and monetary stability and economic conditions.

²⁰ Michael Bordo and Hugh Rockoff (1996), among others, have investigated the impact of adherence to gold on yield spreads. Fiscal and monetary policy variables are constructed here in a similar fashion as was done by Marc Flandreau and Frédéric Zumer (2004).

²¹ Foreign countries' bond yields are from Klovland (1994), Homer and Sylla (1996) and Global Financial Data Inc. Other British data is from Mitchell (1962). Finnish data is from Ikonen (1998), Pihkala (1977), Pipping (1967), and Schybergson (1914) and from Riitta Hjerpe's data.

Table 1 Results of the regression analyses.

| | Long period (1863–1931) | | | | Short period (1863–1914) | | | |
|----------------------|--------------------------------|--------|---------------------|--------|---------------------------------|--------|---------------------|--------|
| | Estimation 1 | | Estimation 2 | | Estimation 1 | | Estimation 2 | |
| | Coefficient (S.e.) | t-Stat | Coefficient (S.e.) | t-Stat | Coefficient (S.e.) | t-Stat | Coefficient (S.e.) | t-Stat |
| Constant | 1.30 (0.69) | 1.88 | 1.30 (0.69) | 1.88 | 1.52 (0.45) | 3.36 | 1.60 (0.43) | 3.69 |
| Market situation | 0.52 (0.23) | 2.28 | 0.56 (0.28) | 2.04 | 0.17 (0.22) | 0.76 | 0.13 (0.21) | 0.65 |
| Russian crises | 2.06 (0.75) | 2.73 | 2.06 (0.79) | 2.60 | 0.57 (0.12) | 4.90 | 0.58 (0.14) | 4.28 |
| Gold adherence | -0.98 (0.36) | -2.74 | -0.98 (0.37) | -2.64 | -0.42 (0.17) | -2.42 | -0.44 (0.17) | -2.59 |
| Fiscal stance | * | * | -0.35 (0.35) | -0.99 | * | * | -0.07 (0.31) | -0.24 |
| Monetary stability | * | * | 0.35 (0.58) | 0.61 | * | * | -0.57 (0.21) | -2.67 |
| Exports | * | * | 0.16 (0.32) | 0.51 | * | * | -0.52 (0.38) | -1.38 |
| Sample | 69 | * | 68 | * | 52 | * | 51 | * |
| Mean depend variable | 2.05 | * | 2.05 | * | 1.59 | * | 1.58 | * |
| Adjusted R-squared | 0.54 | * | 0.52 | * | 0.25 | * | 0.27 | * |
| F-statistic | 27.26 | * | 13.3 | * | 6.78 | * | 4.07 | * |

Results of all four regressions were highly similar in two respects: in every regression political and economic upheavals in Russia and adherences to gold were statistically significant. The revolutionary movement in Russia in 1904–06 and the regime changes in 1917 and the consequent civil war increased the credit risk associated to the central government of Finland. In contrast, Finland's adherences to international gold standards diminished the credit premiums against the British consols. The interest-rate fluctuations of the international financial markets affected the credit risk when the regression was run up until 1931. However, during the shorter period (1863 – 1914) it was not statistically significant. Other variables were not statistically significant.

5 Conclusions

Interest rate differential against the British government consols gradually declined towards the turn of the century; after 1878 yield spread remained continuously below 2 percentage points and even dipped below 1 percentage point during some years. In 1904–1905 a sudden and considerable widening between British consol and Finnish government bond yields took place. As regards yield differentials against other Nordic state securities, similar developments could be observed. Against

Swedish and Norwegian government bonds yield differential was almost non-existent in the end of the 1890s, but widened already at the turn of the century and again – this time even more – in 1904–1905.

It turned out that since the turn of the century yields on Finnish government bonds correlated with the Russian government foreign bonds, which greatly underperformed against many other European sovereign bonds after the Russian upheaval in 1904-1906. Correlation between Finnish and Imperial Russian government securities ended for the most part as late as in the latter half of 1919, that is, over two years after Finland's declaration of independency and the announcement of default of all Imperial government loans by the new Russian Bolshevik government. Towards the end of 1919 the destinies of the old Grand Duchy and the Empire separated: Finland moved to democracy and political centre through free elections and new constitution, whereas in Russia the reds headed to unavoidable victory.

The yield spreads between Finnish government bonds and those issued by the Swedish and Norwegian governments were highest in the aftermath of the First World War. Similarly, the yield differential between consols and Finnish government peaked at 8 percentage points in 1919–20 – and again in 1932. During the 1920s interest rate differential against the British consols markedly declined but never to the levels, which had been observed in the end of the 19th century; these years can well be regarded as the high point of Finland's creditworthiness in the eyes of foreign capital markets.

Political risk associated to the central government that mainly stemmed from Russia. It raised financial markets' attention at the turn of the century and hampered state's borrowing during the whole of the next three decades. This presented a major difference to the situation in the latter half of the 19th century. From the 1860s onwards the Grand Duchy had widened the sphere of its autonomy and formed a distinct and separate status in the Russian Empire. Under Russian benevolence and protection Finland managed prudently its economy and identified itself to the other Nordic states in the eyes of foreign investors and bankers; as a consequence of this, the borderland was assumed to be politically and economically more developed than the centre, in contrast the other great Empires of the 19th century.

The Russian efforts to integrate the Grand Duchy closer to the Empire and to curtail the sphere of its autonomy at the turn of the century questioned state's character as a separate and independent

actor on the international financial centres. Suddenly, credit risk associated to the Grand Duchy became similar to that of Russia's, which was greatly hampered by the disastrous Russo-Japanese war in 1904–1905 and the consequent revolutionary movement. The Bolshevik takeover in October 1917 disturbed state's borrowing even much further. Despite of its formal separation from Russian rule, western capitalists' deep fear of Bolshevism and the fragility of Finland's political position, affected by turmoil in Russia, prevented state's new foreign bond issuance for many years – and, in fact, the geographical closeness to the Soviet Union affected adversely state's borrowing for the whole of the interwar period. As one Swedish banker stated in 1930; “Your geographical position is not beautiful.”²²

Sources

Archives sources

Bank of Finland archives, Helsinki.

Crédit Lyonnais Historical archives, Paris.

Moody's archives, New York.

Ministry of Foreign Affairs archives, Helsinki.

National archives, Helsinki.

Parliamentary documents

Stiftelsen för Ekonomisk Historisk Forskning inom Bank och Företagande, Stockholm

Literature

Ahti, Martti (1987): *Salaliiton ääriiviat. Oikeistoradikalismi ja hyökkäävä idänpolitiikka 1918–1919*. Weilin+Göös, Espoo.

Bordo, Michael D. and Rockoff, Hugh (1996): The Gold Standard as a “Good Housekeeping Seal of Approval”. *The Journal of Economic History*, Vol. 56, No. 2, (June), pp. 389–428.

Flandreau, Marc and Zumer, Frédéric (2004): *The Making of Global Finance 1880–1913*. OECD Development Centre Studies, Paris.

Flandreau, Marc (2003): *Caveat Emperor: Coping with Sovereign Risk under the International Gold Standard, 1871–1913*. *International Financial History in the Twentieth Century*. Edited by Marc Flandreau, Carl-Ludwig Holtfrerich and Harold James. Cambridge University Press, Cambridge.

Gebhard, Hannes (1930): *Miksi Suomen ulkomaiset lainat ovat kalliimpia kuin useampien muitten maitten?*

Osuuskassojen keskusliiton julkaisuja, sarja I, Osuuskassakirjasto, N:o 3, Osuuskassojen keskusliitto r.y., Helsinki.

Harcave, Sidney (1990): *The Memoirs of Count Witte*. M. E. Sharpe, New York.

²² Gebhard (1930).

- Heikkinen, Sakari, Heinonen, Visa, Kuusterä, Antti and Pekkarinen, Jukka (2000): *The History of Finnish Economic Thought*. Societas Scientiarum Fennica.
- Hjerpe, Riitta (1989): *The Finnish economy 1860–1985, Growth and Structural Change*. Bank of Finland/Government Printing Centre, Helsinki.
- Homer, Sidney and Sylla, Richard (1996): *A History of Interest Rates*. Rutgers, the State University.
- Ikonen, Vappu (1998): *Suomen pankin tase vuosina 1868–1992*. Suomen Pankin keskustelualoitteita 19/98.
- J.V. Snellman, *Samlade Arbeten XI-XII*. Statsrådets kansli, 1998.
- Järvinen, Kyösti (1930): *Suomen velat*. Oy Suomen Yhdyspankki Unitas 1929–1930, 25–30.
- Klovland, Jan T. (2004): *Bond markets and bond yields in Norway 1820–2003*. *Historical Monetary Statistics for Norway 1819–2003*. Edited by Oyvind Eitrheim, Jan T. Klovland and Jan F. Qvigstad. Norges banks Skriftserie/Occasional Papers No. 35, Oslo.
- Klovland, Jan T. (1994): *Pitfalls in the Estimation of the Yield on British Consols, 1850–1914*. *The Journal of Economic History*, March, Volume 54, Number 1.
- Landon-Lane, John and Oosterlinck, Kim (2005): *Hope springs eternal...French bondholders and the Soviet Repudiation (1915–1919)*. Working Paper No: 2005–13, Rutgers University.
- Mitchell, B. R. (1962): *Abstract of British Historical Statistics*. Cambridge University Press, Cambridge.
- Paasiki, Juho Kusti (1911): *Suomen valtion 10-talarin palkintolaina*. *Aika*, N:o 11–12, Kesäkuu, pp. 289–302.
- Pipping, Hugo (1967): *Rothschildarne och Finland*. Särtryck ur Svenska Litteratursällskapets i Finland Historiska och litteraturhistoriska studier nr 42. Helsingfors.
- Pipping, Hugo (1961): *Paperiruplasta kultamarkkaan*. Suomen Pankki 1811–1877, Helsinki.
- Riksgäldskontoret (1921): *Årsbok*, Stockholm
- Schybergson, Emil (1914): *Suomen pankki 1811–1911*.

Appendix: Bond yields

Finnish bond prices are from German exchanges for the years 1863–1894, from Paris bourse for the years 1895–1914 and from London bourse for the years 1915–1938.

Sources

Finnish quarterly price data: Helsingfors Dagblad 1864–1886, Hamburgische Börsen-Halle 1886–1888, Huvudstadsbladet 1889–1894, Le Rentier 1895–1907, Mercator 1908–1914 and The Times 1914–1938. Foreign data: Global Financial Data for Russian data, Klovland (2004) for Norwegian data and Klovland (1994) and Global Financial Data Inc. for British data.