Chapter 10 – Credit, banking and monetary developments in Norway 1819–2003

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1. Introduction

This chapter gives a brief overview of the historical development of the banking sector in Norway and presents credit and bank data from 1820. The data are not available on an annual basis in the first decades after 1820. In general, the frequency and quality of data improves over time. We first consider the epoch prior to the outbreak of WW1 in 1914 followed by the inter-war period until WW2. Then we describe the main developments in the post-war period until the late 1970s and the more recent epoch after 1980. The development of the banking sector is closely intertwined with the general monetization process as more transactions are settled using money. The velocity of money is a useful indicator to describe this process. In constructing the velocity of money we combine data from Chapter 3 (consumer prices), Chapter 5 (monetary aggregates) and Chapter 6 (GDP). Finally we show some main characteristic aspects of the payment system from 1819 onwards.

2. Bank development prior to WW1

As part of the nation-building after Norway had gained its independence, the establishment of a Central Bank had been envisaged in the Constitution from 1814. Norges Bank was established in 1816 as a limited liability company, in part with private shareholders, and began normal operations in 1818. At the time of establishment of Norges Bank, silver provided by private investors was supposed to form the basis of the bank's capital. However, this had not succeeded, so the government had imposed a so-called "silver tax", which provided the central bank with the required amount of silver, and "depositors" had been given shares in return. Norges Bank was established before any private bank was in operation in Norway, and the use of notes and coins was very limited. Extension of long-term loans constituted an important part of its operations, i.e., as a means of increasing the amount of notes and coins in circulation. As part of this, Norges Bank established several branches over time. The central bank's share of total lending was 82% in 1840, see Figure 1. This share

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Figure 1: Credit institutions' lending at year-end as percentage of total lending 1840–1990

fell thereafter as Norges Bank gradually evolved into a more typical central bank in the sense that extension of short-term loans and the use of the discount rate as a monetary policy instrument became more important. Notes first became fully convertible into silver in 1842. The silver standard was replaced by the gold standard in 1874. The year after Norway joined the Scandinavian currency union.

The number of private banks and the role of these banks increased during the 19th century, reflecting a rising level of financial sophistication and the central bank's policy of reducing its role in the provision of long-term credit to non-financial companies. Figure 2 shows how the number of banks increased rapidly during the 19th century.

There were two types of private banking institutions, savings and commercial banks. For most of the 19th century, these had different objectives, a different corporate structure and were subject to different regulatory and supervisory arrangements. The first savings bank, *Christiania Sparebank*, was established in 1822, and the first commercial bank, *Christiania Bank og Kreditkasse*, in 1848, see Table A1. Savings banks were organized as mutually held institutions, and they were supposed to fulfill a more social role in collecting and safeguarding "ordinary" people's money, and not involve themselves in risky lending. Hence, they became subject to some regulation and supervision as early as 1824. They were, for example, required to send annual reports to the Ministry of Finance. A separate financial supervisory authority, the Inspectorate of Savings Banks, was established in 1900. The savings banks were small single-office banks, and concentrated their activities in the local



Figure 2: The number of private banks in Norway 1822–2003

community. Until 1888 there was a maximum rate of interest for mortgage loans, which discouraged the extension of such loans. Savings banks therefore preferred to give even long-term loans in the form of collateralized short-term bills, which were in many cases renewed several times after a small downpayment. The development over time in savings bank lending as well as commercial bank lending are reported in Table A2.

Commercial banks were organized as limited liability companies, and according to the liberal ideology of the time they were supposed to operate freely just as any other non-financial firm. Placing deposits at commercial banks was supposed to be at depositors' own risk. Hence, commercial banks were not subject to any regulation or supervision. There were also no uniform accounting and disclosure standards in place. The first Act of Parliament concerning limited liability companies, which implied regulation of the establishment, organization, operation, management, etc. of commercial banks, was introduced as late as 1910. Commercial banks were mostly single-office banks in the same way as savings banks, but their activities often stretched beyond their local community and they were usually larger than savings banks. They extended short-term loans to a greater extent than savings banks, often without requiring collateral. In the period 1852-1903, there was only one stateowned bank in operation, *Norges Hypotekbank*. It was chartered to extend mortgage loans, largely to farmers, and it funded itself mainly by bond issuance. Banks and limited liability companies were not allowed to issue bonds before 1897, and restrictions discouraged their use thereafter. The central government, local municipalities and state-owned banks were the main issuers, in particular before

EITRHEIM, GERDRUP AND KLOVLAND: CREDIT, BANKING AND MONETARY DEVELOPMENTS IN **379** Norway 1819–2003 WW2. The Hypotekbank financed part of its activities by floating bonds on the domestic market, but the government bonds were nearly all issued abroad. Bonds did not become an important source of finance for private banks before the 1980s.

In 1850, lending from savings banks, commercial banks and state-owned banks amounted to 28%, 2% and 12% respectively (Figure 1). All these three institutions' shares of total lending increased the next couple of decades. Changes over time in commercial bank and savings bank lending had also cyclical components, largely affected by changes in the money supply as deposits were the main source of finance. Bond issuance was as mentioned above restricted. Booms and busts in economic activity and changes in the trade balance fed into the money supply through the operation of the silver or gold standard. Balance of payments surpluses contributed to specie or foreign exchange inflow and lower discount rates. When the central bank paid for the gold by issuing notes or buying foreign bills, the money supply and bank lending were boosted. A generally higher level of economic activity, rising prices and asset price inflation raised the demand for money and encouraged discounting at the central bank. The central bank could discount more paper as long as its note reserves were not unduly low, and was in fact motivated to do so because this was a way to increase its profits.

Commercial and savings bank lending growth were for example high in the first half of the 1870s and early 1880s (Table A2). Both were periods of booms in economic activity. In contrast, in the prolonged downturn in large parts of the 1880s many private banks faced high losses and difficulties and their lending growth was low. Commercial bank lending fell by more than 10% in 1886, the same year as the first commercial bank failure in Norwegian banking history occurred.

The mid-1890s represented an important turning point for the banking structure in Norway. From 1895 to 1900, commercial bank lending growth was considerably higher than at savings banks and state-owned banks, and the commercial banks' share of total lending rose from 30% to 41%. An important reason for this was that commercial banks became an important part of the real-estate driven boom in this period. Commercial banks increased their lending well in excess of what they collected in deposits by issuing new share capital. The stock market was buoyant, and appears to have been highly willing to subscribe bank shares. Hence, banks' external financial constraints were lessened and decoupled from deposits, thereby facilitating rapid expansion at the new banks. The number of commercial banks increased from 48 in 1895 to 82 in 1900. Six new banks were established in Oslo, and evidence points to an aggressive lending policy stance at the new Oslo banks (Sundt (1901)). However, when the real-estate boom crashed in 1899, many commercial banks went bankrupt or incurred high loan losses. However, the crisis was not systemic, in part because of continued growth in economic activity abroad as well as money supply in 1900. Bank lending growth abated the next couple of years after 1900. The number of bankruptcies rose in the period 1899-1905, see Table A3. The years from 1906 to 1914 was a stable growth period both with respect to economic activity and banking. Economic growth varied annually between 2.2 and 5.4 per

cent in terms of real GDP. The First World War (WW1) brought the stable economic environment of the pre-war years to an end, and constituted a new important turning point for the banking structure.

3. Bank development 1914-1939

The banks and the stock market were immediately affected by the macroeconomic development during the war. In the first half of the war both high economic activity and monetary expansion supported expansion in the banking sector. In the second half of the war growth in economic activity was negative while the banking sector continued to expand against the background of continued monetary expansion. The number of commercial banks proliferated from 125 in 1914 to 200 in 1918, a sharp deviation from the previous trend (Table A1). The number of savings banks also increased, but not faster than before. The banking structure thus became even less concentrated than before (Nordvik (1992)). Commercial banks expanded their lending significantly during WW1 (Table A2), also in real terms. In addition to considerable increases in deposits, which reflected high growth in money supply, high earnings and new share capital issues boosted the commercial banks' lending possibilities. The buoyant stock market lessened the commercial banks' external financial constraints in the same way as during the latter half of the 1890s, by making it easy to issue new bank shares. By contrast, lending growth at savings banks was much lower in nominal terms during WW1, and being lower than the inflation rate. As a result, commercial banks' share of total credit rose from 47% in 1915 to 60% in 1920, whereas savings banks' share of total credit fell from 32% to 26% in the same period.

The banking structure changed considerably after 1920 and until WW2 as a result of severe banking difficulties. The precipitous fall in nominal GDP from 1920 to 1922 led to a sharp increase in the debt burden of the non-financial sector, and the number of bankruptcies rose to historically high levels (Table A3). Commercial banks experienced far more severe liquidity and solvency problems than savings banks, and their capital vanished rapidly in the early 1920s against the background of a world recession, considerable increases in the number of bankruptcies and materialization of high risks built up during the preceding boom years. Losses at savings banks were mostly concentrated in the latter half of the 1920s, once the "gold-parity depression" led to falling asset prices and increases in the debt burden. Difficulties in the farming sector added to the losses. The banks faced new difficulties in the early 1930s when the Great Depression affected Norway. Real GDP declined by 8% in 1931, slightly less than the decline of nearly 10% in 1921. In contrast to the earlier 1920s, a widespread solvency crisis was, however, avoided. Norges Bank suspended the prewar parity gold standard in 1931.

Norges Bank provided liquidity support to banks in crisis and increased its share of total lending in 1920. Commercial banks' share of total lending fell from the historical peak of 60% in 1920 to 24%

EITRHEIM, GERDRUP AND KLOVLAND: CREDIT, BANKING AND MONETARY DEVELOPMENTS IN **381** Norway 1819–2003 in 1940. Savings banks' share of total lending increased somewhat in this period. State-owned banks increased their share of total lending considerably in the inter-war years because of the establishment of several new state-owned banks and expansion in existing ones. Other financial institutions also increased their share of total credit considerably, in particular life insurance and mortgage companies. Non-financial companies and municipalities had borrowed heavily on a short-term basis from commercial banks during WW1 and its immediate aftermath, also to long-term projects, and faced difficulties when the banks were hit by crises. Expansion in State-owned banks, life insurance companies and mortgage companies thus lessened the burden for the non-financial sector. In addition, the bond market became an important source of finance for non-financial companies and municipalities in the inter-war years, see Table A4. However, the burden of the debt increased in years of economic crisis and deflation, in particular in the periods 1920-22 and 1925-27 and in 1931. Total debt measured as a percentage of nominal GDP fell sharply in the remainder of the 1930s as economic activity rebounded. The economic development from 1933 until WW2 was favourable and commercial and savings bank lending growth gradually returned to positive levels.

4. Bank development 1939-late 1970s

Norway was occupied throughout WW2, and this created a completely different environment for the banks. Inflation increased markedly during the war as some of the occupants' activities were financed by printing money. Bank deposit growth was thus high, but bank lending fell even in nominal terms (Table A2). Banks chose to place their funds in treasury bills and bonds instead of extending loans (Skånland (1967)). There was a period of high bank lending growth after WW2 as banks had vast amounts of deposits and wanted to normalize their balance sheet structure. Regulation of banks lending and interest rates were gradually imposed on the banks. From the 1950s a long period of comparatively stable bank lending growth started, both in nominal and real terms. The real interest rate was near zero and often negative until the beginning of the 1980s, as in many other countries. Suppression of private banks went hand in hand with the erection of new state-owned banks and expansion in existing ones. The expansion in State-owned banks pertains in particular to the 1970's. State-owned banks' share of total lending increased from 22% in 1945 to 41% in 1980, while commercial banks, savings banks and other financial institutions decreased their share of total lending.

5. Bank development late 1970s-2003

Deregulation of the financial sector in late 1970s and until the mid-1980s, represented an abrupt shift in the competitive environment for the banks. The number of banks increased slightly in the

mid-1980s, reversing the steady decline after WW2. There was, however, a rapid expansion in the number of branches at existing commercial banks following the liberalization of the authorization to establish branches. Competition from foreign-owned banks, credit companies, insurance companies and in particular finance companies led to intensified pressures. Bank managers were not used to operating in a competitive environment and increased their focus on gaining market share. Many banks expanded into geographical and business areas in which they had little prior knowledge, as many had during WW1. Contrary to WW1, however, commercial banks expanded into new areas through an increased number of branches because deregulation made this possible. Commercial and savings bank lending increased rapidly after 1982. Growth in commercial bank lending was supported by an inflow of foreign capital, as deregulation of capital movements made this possible. The same development occurred at the savings banks. Commercial and savings banks increased their share of total lending from 1980 to 1985, while state-owned banks decreased their share. The nonfinancial sector increased its debt much more than nominal GDP from 1981 to 1987, when it reached the same level of indebtedness as in 1931. A banking crisis developed after 1987, and it peaked in 1991 and 1992. The banking crisis coincided with the worst recession since the interwar period, reflecting the unsustainable boom in the mid-1980s. Bank losses mounted in line with the number of bankruptcies. Growth in commercial and savings bank lending slowed markedly in nominal and real terms from 1986 to the mid-1990s, and lending fell far more than deposits as banks repaid their foreign loans. Commercial banks suffered the most in the crisis because they had a more risky portfolio consisting of a higher share of risky business loans as opposed to household loans. There are indications of higher losses in the new branches. Non-financial sectors reduced their indebtedness in the course of the crisis as they corrected their balance sheets by increasing savings and reducing their debt. There was also a shift in the source of borrowing from state-owned banks to private banks, reflecting a political decision to reduce their role. Indebtedness fell further when economic activity rebounded in 1993. Since 1993, growth in bank lending and total credit has been high, measured in nominal terms or as a percentage of nominal GDP. The number of banks has, however, continued to fall because of mergers and acquisitions.

6. Credit aggregates

We can summarize the developments in bank lending and credit growth in the different sub-periods in two graphs. Figure 3 shows the development in commercial bank and savings bank lending over the entire period from 1840 to 2003. The variables are measured in logarithms. In the beginning we have only observations of savings bank lending every fifth year starting in 1840. Annual observations start in 1848 for commercial banks and in 1869 for savings banks. We have also included total lending to the general public from 1899. The different sub-periods are commented in the previous sections. Figure 4 shows average growth rates for commercial bank lending and savings bank lending. Commercial bank lending increase rapidly during the Crimean war in the early 1850s after

EITRHEIM, GERDRUP AND KLOVLAND: CREDIT, BANKING AND MONETARY DEVELOPMENTS IN **383** Norway 1819–2003 the first commercial bank was established in 1848. After the initial period with strong commercial bank lending there are four distinct periods of rapid growth, during the last half of the 1890s, during World War I, during the rebuilding period after World War II and during the deregulation period in the first half of the 1980s. Three of these periods were followed by periods with lower growth or even decline in lending (the 1920s) and involved also financial crises and restructuring of the bank-ing sector. These three periods of financial distress have been discussed in detail in Gerdrup (2003). Figure 5 shows growth rates for total credit to the general public from 1900 to 2003.



Figure 3: Commercial bank and savings bank lending 1840-2003. Logarithmic scale.

7. Main monetary developments 1830-2003

7.1. The velocity of money

Important aspects of the development in the monetary system can be summarized by the velocity of money, defined in terms of actual monetary balances relative to a scale indicator for the level of income. Bordo and Jonung (1987) shows that many countries, Norway included, experienced a sharp drop in the velocity of money in the period from 1870 to 1914. They found that the main factors behind the decline in velocity had to do with the expansion of the banking sector. In this section we investigate whether this picture fits for an extended historical data set for Norway starting in 1830. We calculate the velocity of money using as a proxy for the level of nominal income the GDP-indicator, Y, presented in Chapter 6 multiplied with the consumer price index, P, presented in Chapter 3. These data are combined with the data on the stock of broad money, M, presented in



Figure 4: Commercial bank and savings bank lending 1840-2003. Annual growth rates in per cent (five year averages)



Figure 5: Total credit to the general public 1900-2003. Average annual growth rates.

EITRHEIM, GERDRUP AND KLOVLAND: CREDIT, BANKING AND MONETARY DEVELOPMENTS IN **385** Norway 1819–2003 Chapter 5 into a measure of the velocity of money, *V*, using the well known "equation of exchange" identity associated with the quantity theory of money (Fisher, 1911):

$$V = \frac{P \cdot Y}{M}$$

The resulting velocity series are shown in Figure 6. The data are smoothed using a five-year centered average to highlight the long run trending behaviour of velocity. We note that during the period of strong growth in the banking sector the amount of money in the economy grew much faster than the nominal activity and the velocity of money fell substantially over a prolonged period of almost 100 years. As we see from Figure 6 the decline in the velocity of money fits well with the development in the banking sector in the 19th century and the number of banks increased rapidly, confirming the inverse relationship between the size of the banking sector and the velocity of money from 1830 to the early 1920s. The empirical investigation of velocity behaviour across five countries (US, UK, Canada, Norway and Sweden) conducted by Bordo and Jonung (1987) over the period 1870 and onwards indicates several interesting characteristics. The velocity of money typically seems to decline as the banking sector grows and the economy relies more heavily on money to settle transactions. We can denote this as the monetization process. This tendency seems to be strongly supported by our data as we move back to the first half of the 19th century. As pointed out in Siklos (1993) increased monetization has typically reduced long-run velocity, at least until the interwar period. Increased financial sophistication, on the other hand, is predicted to have the oppocite effect on velocity and may explain why velocity flattens out and eventually starts to rise, indicating a Ushaped development in velocity. In their studies of velocity behaviour, Bordo and Jonung (1987) and Siklos (1993) let the currency-money ratio, CM, serve as an indicator of financial sophistication, and both studies find that CM helps predict the long-run trend in velocity.

Figure 6 reveals that while the number of banks seems to be almost perfectly negatively correlated with velocity prior to 1920, indicating increased monetization, the stagnation and subsequent decline in the number of banks in the post-WWII period is a less likely explanation of velocity behaviour in this period. Admittedly, our eyeball technique is less sophisticated than rigorous econometric testing. We observe, however, that the currency-money ratio seems to pick up a similar effect as hypothesized by Bordo and Jonung (1987) and Siklos (1993) and yield some support to the view that velocity behaviour depend on the maturity and degree of sophistication of the financial sector. Similar results are reported in a previous study for Norway by Klovland (1983) who analyze data from 1867 to 1980.

We also observe that while the velocity of money in Norway is strongly downward trending in the period before 1920, its behaviour in the period from 1920 onwards is less variable and in particular velocity has remained less volatile over the last 50 years. From the quantity equation it transpires that when velocity is constant, the price level, *P*, becomes proportional to the money stock *M* scaled with the level of activity *Y*, cf. Figure 7 where we have plotted *P* against $\frac{M}{Y}$, setting both indices to



Figure 6: The velocity of money 1830–2003 (in logarithms) (left axis), the number of banks divided by 10 (right axis) and the Currency/M2-ratio (in per cent) (right axis).

100 in 1960. The relatively constant velocity over the last 50 years is reflected by the close mapping of the two indices over this period. So, if we disregard the first hundred years, we observe a very close link between the development of the CPI and the ratio of M2 to GDP. This relationship does not, however say anything about the causality or third factors that influence both money and prices.

The monetarist view of inflation — that inflation is always and everywhere a monetary phenomenon (Friedman (1963) p.17) has been central in the search for stable empirical relationships linking money and prices. Numerous attempts have been made to construct models where monetary authorities control inflation through monetary aggregates. Over the past decades, however, it is recognized in the monetary policy literature, that central banks typically employ short-term interest rates as their operating monetary policy instrument, and hence the role of monetary aggregates has been deemphasized in more recent generations of monetary policy models.

This is also reflected by the fact that the view on causality implied by the simple monetarist model inflation runs contrary to many of the inflation models which have emerged in the literature over the past 40 years. Examples of such models are the simple Phillips curve models of the 1960s following the seminal work in Phillips (1958), the natural rate (or NAIRU) models of unemployment by Phelps (1967) and others, Aukrust's (1977) main-course model and Calmfors (1977), who reconciled the Phillips curve model with the Scandinavian model of inflation. Later developments include the incomplete competition model of e.g., Layard and Nickell (1986) and the New Keynesian Phillips curve model used in modern monetary economics, see e.g., Clarida et al.(1999), Svensson (2000) and Woodford (2003). There are also models which explicitly include monetary aggregates such as

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Figure 7: The price level P and the stock of money scaled with the level of economic activity, M/Y. 1960=100

the P-star model of inflation proposed in Hallman et al.(1991). In a recent application by Gerlach and Svensson (2003) they find empirical support for the P-star model on aggregated data for the Euro area. For a comprehensive review of 40 years of international research on price and wage inflation in small open economies, see Bårdsen et al. (2004). Despite the notable differences that exist between these competing models, they all reflect the view that inflation is best understood as reflecting imbalances in product and labour markets. This view is inconsistent with a simple quantity theory of inflation, but not with having excess demand for money as a potential source of inflation pressure. Nelson (2003) reviews the literature on the role of monetary aggregates in monetary policy, focusing on the information content of money for aggregate demand.

7.2. Changes in payment technology from 1819 onwards

In Figure 6 we saw how currency has declined as a fraction of broad money M2 from 100 % in the first part of the sample to less than 10 % in the 1990s. Chapter 2 describes in detail the development in the currency share in the 1920s and during WW2. In the early part of the nineteenth century the means of payments for ordinary transactions were solely based on the amount of currency in circulation. The amount of currency in circulation was made up of notes and coins held by the private non-financial sector for transaction purposes. Note that gold coins are excluded from our definition of currency. Since gold coins were mainly denominated in large values they were less attractive for transaction purposes and we assume that they were mainly used as a store of value.

To get a more detailed picture of the development in the means of payment in Norway in the period



Figure 8: Coins, Notes and banks 1819-1914

from 1819 to 1914 we plot the time series of notes and coins in per cent of broad money M2 (dotted line) and coins in per cent of notes (solid line) against the development in the banking sector (number of banks). Figure 8 shows how the currency share starts to decline soon after the first banks emerge in the early 1820s. As the number of banks starts to increase at a faster rate around 1840 we see that the currency share declines at a faster rate as well. Eventually the currency share stabilizes and is about 10% in 1914. Our estimate of coins in per cent of notes are based on figures for the production of mint between 1814 and 1865 reported in Langberg (1865) and Rønning (1971).² The level of coin production was particularly large in the mid-1840s after Oscar I became king and during the years after the conversion from speciedaler to kroner in 1874, i.e., from 1876-1879, when the new conventional mint denominated in kroner and øre was produced. Parliamentary documents from 1875 contain information about the amount of coins in circulation which are corrected for additions of new mints, withdrawals of old mints and losses.

 $^{^{2}}$ Our estimates of the accumulated production of mint between 1814 and 1865 (measured in nominal values in kroner) from these two sources deviate with less than 0.8%.

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A. Technical appendix: The data

Table A1

The number of savings banks The annual banking statistics give data for the number of savings banks in operation at the end of each year from 1873 (see the 1948, 1968 and 1994 editions of Historical Statistics published by Statistics Norway). Norges Bank is the source for data from 1993. Before 1873 the number of banks has been estimated here as a by-product of the construction of aggregate savings bank deposits discussed in chapter 5 of this volume. The numbers include all savings banks in operation, as corroborated by the publication of annual accounts or other evidence that the banks had opened for business. In some cases we only have information on the date at which the bank's plan was authorized by the government, which may deviate somewhat from the first year of business (in both directions). Before 1919 a few unauthorized savings banks have been added. The number of commercial banks. Estimates before 1900 are based on the information in Matre (1992a), with the addition of a few banks which we know were in operation as commercial banks in this period. In the period 1900 to 1919 information from the foreword of the annual commercial bank statistics (annual editions of NOS Private aksjebanker, Statistics Norway) was used as the basis for the estimates, which supplemented with additional information on individual banks. From 1920 the number of banks were taken from official sources as explained above for savings banks, from 1993 from Norges Bank sources.

Table A2

Matre (1992a) is the source for the commercial bank lending data reported in column 1 in Table A2 for the period 1848-1900, as this source is more complete than Statistics Norway in this period. Statistics Norway is used as the source from 1901 to 1991, and Norges Bank thereafter. The commercial bank lending numbers understate, however, the actual numbers before 1924 since the number of reporting banks is lower than the total number, see Table A1. Commercial bank lending growth from 1900 to 1901 based on Statistics Norway is 6.6%. Commercial bank lending numbers from 1992 also include Postbanken, and this leads to a jump up in the lending number in 1992 of NOK 48276 million for total lending and NOK 15653 million for lending to the general public. A new change in the way Postbanken is handled in the statistics is made in 1996, leading to a shift downwards of NOK 31640 million that year for total lending. Savings bank lending numbers prior to 1869 are not available from Statistics Norway, but Matre (1992b) has estimates of total savings bank lending for 1840, -45, -50, -55, -60 and -65. Publications from the Ministry of Finance is used in the period 1869-1885, Statistics Norway in the period 1886-1991, and Norges Bank thereafter. From 1952 for commercial banks and 1953 for savings banks, lending numbers are reported before en bloc depreciation. En bloc depreciation amounted to NOK 101 million in 1952 for commercial banks and NOK 30 million in 1953 for savings banks. From 1953, Statistics Norway also reports commercial banks' and savings banks' lending to local governments, non-financial enterprises and

EITRHEIM, GERDRUP AND KLOVLAND: CREDIT, BANKING AND MONETARY DEVELOPMENTS IN **393** Norway 1819–2003 households. This data is also included in Table A2. Norges Bank is used as the source for this data from 1992.

Table A3

Different publications from Statistics Norway are used as the source for bankruptcies for the whole period 1887-2002.

Table A4

Skånland (1967) is used as a source for the non-financial sector's (households, non-financial companies and municipalities) total debt (loans from all banks, including foreign banks, and from other financial institutions, and bond debt) for the period 1820-1956. The data for the period 1820-1890 is only available at 10-year intervals, and is not specified and probably of not very good quality. The data for the period 1899-1956 is better, and total credit is the sum of bond debt and loan debt (from all sources). I have calculated total debt for the period 1957-84 on the basis of historical statistics 1994 (Statistisk sentralbyrå (1995)), i.e. by combining bond data by issuer sector

(http://www.ssb.no/emner/historisk_statistikk/tabeller/24-24-27.txt) and data for loans to households, non-financial companies and municipalities by sector

(http://www.ssb.no/emner/historisk_statistikk/tabeller/24-24-18.txt). Norges Bank's credit aggregate C3 is used from 1985 (only C3 mainland Norway from 1995). The different credit aggregates are available at http://www.norges-bank.no/front/statistikk/en/k3/.

A.1. Data

Table A1. Number of commercial banks and savings banks. 1822-2003

	Commercial banks*)	Savings banks**)	Total
1822		1	1
1823		4	4
1824		4	4
1825		6	6
1826		8	8
1827		8	8
1828		8	8
1829		8	8
1830		7	7
1831		7	7
1832		7	7
1833		8	8
1834		10	10
1835		14	14
1836		15	15
1837		16	16
1838		18	18
1839		21	21
1840		25	25
1841		32	32
1842		41	41
1843		52	52
1844		56	56
1845		58	58
1846		64	64
1847		77	77
1848	1	83	84
1849	1	87	88
1850	1	90	91
1852	1	95	90
1852	1	105	101
1853	1	105	100
1855	2	114	115
1856	2	124	120
1850	3	135	138
1858	3	135	150
1859	4	159	163
1860	4	181	185
1861	4	188	192
1862	4	201	205
1863	4	219	223
1864	4	227	231
1865	5	240	245
1866	5	248	253
1867	6	256	262
1868	8	259	267
1869	9	258	267
1870	11	262	273
1871	11	264	275
1872	11	266	277
1873	11	277	288
1874	13	278	291
1875	15	279	294

EITRHEIM, GERDRUP AND KLOVLAND: CREDIT, BANKING AND MONETARY DEVELOPMENTS IN **395** Norway 1819–2003

	Commercial banks*)	Savings banks**)	Total
1876	18	289	307
1877	20	296	316
1878	20	303	323
1879	21	310	331
1880	21	313	334
1881	22	318	340
1882	28	317	345
1883	30	325	355
1884	30	329	359
1885	33	329	362
1886	33	336	369
1887	39	340	379
1888	42	342	384
1889	42	346	388
1890	44	351	395
1891	46	354	400
1892	47	362	409
1893	48	365	413
1894	48	368	416
1895	48	374	422
1896	52	381	433
1897	65	395	460
1898	71	403	474
1899	84	412	496
1900	82	414	496
1901	82	422	504
1902	84	428	512
1903	88	435	523
1904	89	440	529
1905	90	447	537
1906	95	454	549
1907	100	461	561
1908	101	470	571
1909	107	477	584
1910	111	488	599
1911	111	497	608
1912	115	509	624
1913	123	520	643
1914	125	526	651
1915	127	528	655
1916	146	538	684
1917	169	542	711
1918	200	550	750
1919	198	555	753
1920	195	562	757
1921	189	572	761
1922	173	575	748
1923	170	579	749
1924	165	580	745
1925	160	584	744
1926	162	602	764
1927	152	619	771
1928	148	624	772
1929	151	633	784
1930	151	627	778

Table A1. Number of commercial banks and savings banks. 1822-2003

	Commercial banks*)	Savings banks**)	Total
1931	145	622	767
1932	133	617	750
1933	125	615	740
1934	120	616	736
1935	105	614	719
1936	105	605	710
1937	105	606	711
1938	105	606	711
1939	104	605	709
1940	104	607	711
1941	104	605	709
1942	103	605	708
1943	103	605	708
1944	103	605	708
1945	99	606	705
1946	99	606	705
1947	96	607	703
1948	93	604	697
1949	93	606	699
1950	89	606	695
1951	88	605	693
1952	83	605	688
1953	82	605	687
1954	78	604	682
1955	76	603	679
1956	76	602	678
1957	74	600	674
1958	73	600	673
1959	71	600	671
1960	68	597	665
1961	63	592	655
1962	58	590	648
1963	56	586	642
1964	52	567	619
1965	50	540	590
1966	48	534	582
1967	48	527	575
1968	48	520	568
1969	46	509	555
1970	40	493	533
1971	37	471	508
1972	36	450	486
1973	32	432	464
1974	31	418	449
1975	28	390	418
1976	27	368	395
1977	27	359	386
1978	27	362	389
1979	26	345	371
1980	24	322	346
1981	22	308	330
1982	22	270	292
1983	22	253	275
1984	21	227	248
1985	27	198	225

Table A1. Number of commercial banks and savings banks. 1822-2003

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	Commercial banks*)	Savings banks**)	Total
1986	29	192	221
1987	28	173	201
1988	28	158	186
1989	28	151	179
1990	23	142	165
1991	21	136	157
1992	21	134	155
1993	19	133	152
1994	19	132	151
1995	21	133	154
1996	20	133	153
1997	21	133	154
1998	21	133	154
1999	23	130	153
2000	22	130	152
2001	22	129	151
2002	23	129	152
2003	23	129	152

Table A1. Number of commercial banks and savings banks. 1822-2003

*) Sources: 1848-1900: Matre, H. I. (1992a): "Norske forretningsbanker" 1848-1990. "En tilbakeføring av forretningsbankstatistikken". Det nye pengesamfunnet, Rapport nr 41. 1905, 1910, 1947-1992: Statistics Norway (1995). Historical statistics 1994. NOS, C 188. Oslo-Kongsvinger. 1914-1946: Statistics Norway (1949). Statistical overviews 1948. NOS X. 178. Oslo. 1993: Norges Bank (1998). Annual statistics for 1991-97. Financial statistics, no. 14/1998. Oslo. 1994-2000: Norges Bank (2001). Annual statistics for banker 1994-2000. Financial statistics nr. 11/2001. Oslo. 2001-2003: Norges Bank.

**) Sources: 1822-1946: Statistics Norway (1949). Statistical overviews 1948. NOS X. 178. Oslo. 1947-1992: Statistics Norway (1995). Historical statistics 1994. NOS, C 188. Oslo-Kongsvinger. 1993: Norges Bank (1998). Annual statistics for 1991-97. Financial statistics, nr. 14/1998. Oslo. 1994-2000: Norges Bank (2001). Annual statistics for banks 1994-2000. Financial statistics nr. 11/2001. Oslo. 2001-2003: Norges Bank.

	Commercial banks		Savings bank		Private banks	
	Total lending [†]	Lending to the	Total lending [‡]	Lending to the	Total lending	Lending to the
		general public [†]		general public ‡		general public
1840			5.6		5.6	
1841						
1842						
1843						
1844						
1845			11.3		11.3	
1846						
1847						
1848	0.6					
1849	0.8					
1850	1.0		14.4		15.4	
1851	1.0		11.1		15.4	
1852	1.2					
1853	1.5					
1854	1.2					
1855	2.5		20.7		37.7	
1856	6.1		29.1		52.2	
1057	0.1					
1059	12.0					
1850	15.0					
1859	15.0		27.9		56.0	
1860	19.1		57.8		50.9	
1861	21.9					
1862	20.7					
1863	29.5					
1864	27.1		50.5		00.5	
1865	29.9		58.6		88.5	
1866	27.9					
1867	33.6					
1868	36.3					
1869	38.3		70.4		108.6	
1870	41.4		71.6		113.0	
1871	49.8		70.2		120.0	
1872	55.2		73.1		128.3	
1873	60.5		86.4		147.0	
1874	68.0		100.7		168.7	
1875	68.2		110.4		178.6	
1876	74.0		118.2		192.2	
1877	76.4		123.7		200.0	
1878	76.7		124.6		201.3	
1879	77.2		120.7		198.0	
1880	88.9		133.8		222.6	
1881	94.4		140.6		235.0	
1882	105.3		144.8		250.0	
1883	105.3		151.2		256.5	
1884	113.4		157.9		271.3	
1885	116.4		161.5		278.0	
1886	104.1		162.3		266.4	
1887	104.0		158.3		262.3	
1888	110.7		157.3		268.0	

Table A2. Commercial bank and savings bank lending in millions of NOK. At year-end 1840-2003. Lending to the general public comprise lending to municipalities, non-financial enterprises and households.

	Commercial banks		Savings bank		Private banks	
	Total lending [†]	Lending to the	Total lending [‡]	Lending to the	Total lending	Lending to the
1990	122.9	general public	160.7	general public	292.5	general public
1889	122.8		160.7		283.5	
1890	129.8		1/3.1		303.0	
1891	132.2		183.8		315.9	
1892	139.9		188.0		327.9	
1893	145.0		194.9		339.9	
1894	154.3		202.3		356.6	
1895	166.6		208.8		375.4	
1896	177.8		219.7		397.5	
1897	210.7		230.3		441.0	
1898	261.1		247.4		508.5	
1899	283.2		266.2		549.4	
1900	349.0		278.7		627.7	
1901	341.6		291.3		632.9	
1902	360.4		302.1		662.5	
1903	371.2		318.4		689.6	
1904	368.9		331.5		700.4	
1905	376.1		339.8		715.9	
1906	403.5		354.5		758.0	
1907	442.7		375.7		818.4	
1908	475.8		399.2		875.0	
1909	502.6		423.4		926.0	
1910	524.0		449.2		973.2	
1911	577.1		487.8		1 064.9	
1912	637.4		528.0		1 165.4	
1913	727.3		566.3		1 293.6	
1914	751.3		598.0		1 349.3	
1915	985.3		656.0		1 641.3	
1916	1 755.0		788.0		2 543.0	
1917	2 640.0		959.0		3 599.0	
1918	3 346.0		1 242.0		4 588.0	
1919	3 755.0		1 520.0		5 275.0	
1920	4 034.0		1 732.0		5 766.0	
1921	3 668.0		1 799.0		5 467.0	
1922	3 175.0		1 812.0		4 987.0	
1923	2 609.0		1 856.0		4 465.0	
1924	2 377.0		1 805.0		4 182.0	
1925	2 299.0		1 805.0		4 104.0	
1926	1 875.0		1 730.0		3 605.0	
1927	1 632.0		1 669.0		3 301.0	
1928	1 468.0		1 603.0		3 071.0	
1929	1 433.0		1 547.0		2 980.0	
1930	1 295.0		1 491.0		2 786.0	
1931	1 246.0		1 458.0		2 704.0	
1932	1 148.0		1 444.0		2 592.0	
1933	1 103.0		1 381.0		2 484.0	
1934	1 055.0		1 361.0		2 416.0	
1935	1 069.0		1 347.0		2 416.0	
1936	1 058.0		1 307.0		2 365.0	
1937	1 108.0		1 298.0		2 406.0	
1938	1 137.0		1 309.0		2 446.0	

Table A2. Commercial bank and savings bank lending in millions of NOK. At year-end 1840-2003. Lending to the general public comprise lending to municipalities, non-financial enterprises and households.

	Commercial banks		Savings bank		Private banks	
	Total lending [†]	Lending to the	Total lending [‡]	Lending to the	Total lending	Lending to the
		general public [†]		general public ‡		general public
1939	1 293.0		1 364.0		2 657.0	
1940	1 104.0		1 257.0		2 361.0	
1941	873.0		1 115.0		1 988.0	
1942	798.0		964.0		1 762.0	
1943	731.0		850.0		1 581.0	
1944	720.0		765.0		1 485.0	
1945	910.0		754.0		1 664.0	
1946	1 453.0		1 065.0		2 518.0	
1947	1 968.0		1 466.0		3 434.0	
1948	2 521.0		1 723.0		4 244.0	
1949	2 894.0		1 953.0		4 847.0	
1950	3 441.0		2 244.0		5 685.0	
1951	3 958.0		2 500.0		6 458.0	
1952	4 347.0		2 803.0	2 803.0	7 150.0	
1953	4 509.0	4 485.0	3 145.0	3 145.0	7 654.0	7 630.0
1954	4 835.0	4 814.0	3 516.0	3 516.0	8 351.0	8 330.0
1955	5 005 0	4 919 0	3 761 0	3 753 0	8 766 0	8 672 0
1956	4 976 0	4 896 0	3 958 0	3 952 0	8 934 0	8 848 0
1957	5 187 0	5 117 0	4 242 0	4 227 0	9 429 0	9 344 0
1958	5 366 0	5 250 0	4 553 0	4 523 0	9 919 0	9 773 0
1959	5 789 0	5 508 0	4 935 0	4 901 0	10 724 0	10 409 0
1960	8 475 0	6 365 0	5 381 0	5 336 0	13 856 0	11 701 0
1961	7 356 0	7 241 0	5 741 0	5 718 0	13 097 0	12 959 0
1962	7 924 0	7 809 0	6 192 0	6 172 0	14 116 0	13 981 0
1963	8 359 0	8 221 0	6 667 0	6 656 0	15 026 0	14 877 0
1964	9 108 0	8 951 0	7 135 0	7 129 0	16 243 0	16 080 0
1965	9 681 0	9 462 0	7 629 0	7 623 0	17 310 0	17 085 0
1966	10 885.0	10 530.0	8 331.0	8 316.0	19 216.0	18 846.0
1967	11 706 0	11 305 0	9 146 0	9 120 0	20,852,0	20 425 0
1968	12 651.0	12 166.0	10 082.0	10 046.0	22 733.0	22 212.0
1969	14 408 0	13 842.0	11 396 0	11 352.0	25 804 0	25 194 0
1970	15 762.0	15 108.0	12 669.0	12 620.0	28 431.0	27 728.0
1971	17 722.0	17 000.0	14 156.0	14 040.0	31 878.0	31 040.0
1972	20 110 0	19 323 0	15 674 0	15 570 0	35 784 0	34 893 0
1973	22 508.0	21 685.0	17 603.0	17 534.0	40 111.0	39 219.0
1974	25 312.0	24 258.0	19 981.0	19 929.0	45 293.0	44 187.0
1975	29 374.0	28 630.0	22 917.0	22 798.0	52 291.0	51 428.0
1976	33 905.0	33 035.0	26 498.0	26 330.0	60 403.0	59 365.0
1977	39 537 0	38 749 0	30 551 0	30 462 0	70 088 0	69 211 0
1978	43 284.0	41 863.0	33 677.0	33 361.0	76 961.0	75 224.0
1979	47 897 0	46 543 0	37 892 0	37 704 0	85 789 0	84 247 0
1980	54 566.0	53 295.0	42 093.0	41 899.0	96 659.0	95 194.0
1981	64 400.0	61 661.0	48 369.0	47 999.0	112 769.0	109 660.0
1982	76 703.0	71 832.0	55 543.0	54 324.0	132 246.0	126 156.0
1983	91 693.0	81 950.0	64 889.0	61 671.0	156 582.0	143 621 0
1984	119 183 0	103 967 0	80 505 0	77 465 0	199 688 0	181 432 0
1985	152 128.0	132 679.0	111 073.0	104 024.0	263 201.0	236 703 0
1986	203 608 0	173 560 0	146 547 0	129 801 0	350 155 0	303 361 0
1987	242 352 0	211 822.0	173 068 0	159 074 0	415 420 0	370 896 0
1088	250 544 0	222.678.0	185 688 0	173 158 0	436 232 0	395 836 0

Table A2. Commercial bank and savings bank lending in millions of NOK. At year-end 1840-2003. Lending to the general public comprise lending to municipalities, non-financial enterprises and households.

	Commercial banks		Savings bank		Private banks	
	Total lending [†]	Lending to the	Total lending [‡]	Lending to the	Total lending	Lending to the
		general public †		general public \ddagger		general public
1989	276 961.0	247 639.0	192 511.0	184 100.0	469 472.0	431 739.0
1990	285 402.0	250 986.0	187 734.0	191 951.0	473 136.0	442 937.0
1991	264 412.0	231 893.0	197 049.0	191 652.0	461 461.0	423 545.0
1992	325 770.0	251 237.0	197 040.0	192 312.0	522 810.0	443 549.0
1993	325 957.0	250 251.0	207 038.0	202 474.0	532 995.0	452 725.0
1994	325 484.0	256 826.0	221 049.0	216 930.0	546 533.0	473 756.0
1995	345 214.0	284 693.0	241 112.0	236 350.0	586 326.0	521 043.0
1996	363 705.0	318 467.0	273 709.0	266 123.0	637 414.0	584 590.0
1997	441 583.0	382 473.0	313 955.0	303 642.6	755 538.0	686 115.6
1998	498 353.0	413 172.0	348 111.0	336 085.2	846 464.0	749 257.2
1999	510 749.0	426 005.0	418 765.0	393 480.3	929 514.0	819 485.3
2000	576 757.0	483 636.0	484 835.0	454 404.1	1 061 592.0	938 040.1
2001	624 511.0	522 146.0	544 477.6	508 474.3	1 168 988.6	1 030 620.3
2002	657 259.0	545 929.0	592 807.1	550 364.5	1 250 066.1	1 096 293.5
2003	703 768.0	580 702.0	654 655.0	605 381.0	1 358 423.0	1 186 083.0

Table A2. Commercial bank and savings bank lending in millions of NOK. At year-end 1840-2003. Lending to the general public comprise lending to municipalities, non-financial enterprises and households.

†) Sources: 1848-1900: Matre, H. I. (1992a): "Norske forretningsbanker 1848-1990. En tilbakeføring av forretningsbankstatistikken". Det nye pengesamfunnet, Rapport nr 41. 1901-1923: Statistisk sentralbyrå (1949). Statistiske oversikter 1948. NOS X. 178. Oslo. 1924-1951: Statistisk sentralbyrå (1969). Historisk statistikk 1968. NOS XII 245, C 188. Oslo-Kongsvinger. 1952-1991: Statistisk sentralbyrå (1995). Historisk statistikk 1994. NOS, C 188. Oslo-Kongsvinger. 1992-1995: Norges Bank (1998). Årsstatistikk for 1991-97. Finansstatistikk, nr. 14/1998. Oslo. 1996-2003: Norges Bank. Accounting statistics for banks and other financial intermediaries (http://www.norgesbank.no/front/statistikk/en/fiks/). See "Loans (utilized) by borrower sector"

‡) Sources: 1840-1865: Matre, H. I. (1992b): "Norske kredittinstitusjoner 1850-1990. En statistisk oversikt". Det nye pengesamfunnet, Rapport nr 42. 1869-1872: Finants- og Told-departementet (1876). Tabeller vedkommende Norges Sparebanker i aarene 1870, 1871 og 1872. D. No. 2. Christiania. 1873-1878: Finants- og Told-departementet (1880). Tabeller vedkommende Norges Sparebanker i aarene 1876, 1877 og 1878. Norges Officielle Statistik. D. No. 2. Christiania. 1879-1885: Finants- og Told-departementet (1880). Tabeller vedkommende Norges Sparebanker i aarene 1876, 1877 og 1878. Norges Officielle Statistik. D. No. 2. Christiania. 1879-1885: Finants- og Told-departementet (1880). Tabeller vedkommende Norges Sparebanker i aarene 1876, 1877 og 1878. Norges Officielle Statistik. D. No. 2. Christiania. 1886-1890: Det statistiske centralbureau (1887). Tabeller vedkommende Norges Sparebanker i aaret 1886. Norges Officielle Statistik. Tredie Række No. 45. Kristiania. 1891-1895: Det statistiske centralbureau (1892). Tabeller vedkommende Norges Sparebanker i aaret 1891. Norges Officielle Statistik. Tredie Række No. 265. Kristiania. 1903-1906: Det statistiske centralbureau (1904). Tabeller vedkommende Norges Sparebanker i aaret 1896. Norges Sparebanker i aaret 1903. Norges Officielle Statistik. Fjerde Række No. 93. Kristiania. 1907-1910: Det statistiske centralbureau (1907). Norges Sparebanker 1906. Norges Officielle Statistik. V. 44. Kristiania. 1911-1913: Statistisk sentralbyrå (1949). Statistiske oversikter 1948. NOS X. 178. Oslo. 1914-1952: Statistisk sentralbyrå (1969). Historisk statistikk 1968. NOS XII 245, C 188. Oslo-Kongsvinger. 1953-1991: Statistisk sentralbyrå (1995). Historisk statistikk 1994. NOS, C 188. Oslo-Kongsvinger. 192-1995: Norges Bank (1998). Årsstatistikk for 1991-97. Finansstatistikk, nr. 14/1998. Oslo. 1996-2003: Norges Bank. Accounting statistics for banks and other financial intermediaries (http://www.norges-bank.no/front/statistikk/en/fiks/). See "Loans (utilized) by borrower sector"

Year		Year		Year	
1887	554	1927	1 292	1967	288
1888	350	1928	1 017	1968	283
1889	259	1929	822	1969	332
1890	241	1930	723	1970	326
1891	345	1931	621	1971	355
1892	478	1932	755	1972	478
1893	420	1933	583	1973	630
1894	361	1934	482	1974	657
1895	341	1935	387	1975	589
1896	348	1936	337	1976	506
1897	352	1937	286	1977	538
1898	336	1938	294	1978	671
1899	587	1939	316	1979	801
1900	586	1940	243	1980	765
1901	663	1941	111	1981	810
1902	625	1942	53	1982	955
1903	736	1943	86	1983	1 236
1904	588	1944	105	1984	1 304
1905	539	1945	103	1985	1 340
1906	487	1946	109	1986	1 426
1907	390	1947	110	1987	2 075
1908	455	1948	162	1988	3 891
1909	485	1949	192	1989	4 536
1910	426	1950	221	1990	3 814
1911	395	1951	199	1991	4 926
1912	441	1952	219	1992	5 749
1913	395	1953	280	1993	5 158
1914	398	1954	301	1994	3 634
1915	378	1955	296	1995	3 500
1916	147	1956	340	1996	3 458
1917	97	1957	300	1997	3 333
1918	110	1958	330	1998	3 347
1919	190	1959	288	1999	3 243
1920	386	1960	279	2000	3 576
1921	1 030	1961	313	2001	3 562
1922	969	1962	291	2002	4 473
1923	916	1963	295	2003	5 223
1924	866	1964	323		
1925	889	1965	276		
1926	1 317	1966	298		

Table A3. Number of bankruptcies. 1887-2003

Sources: 1887-1947: Statistics Norway (1949). Statistical overviews 1948. NOS X. 178. Oslo. 1948-1993: Statistics Norway (1995). Historical statistics 1994. NOS, C 188. Oslo-Kongsvinger. 1994-2001: Statistics Norway. Statistical yearbook 2002. 2002-2003: Statistics Norway. Bankruptcies. http://www.ssb.no/english/subjects/11/02/konkurs_en/

	Bond debt	Loan debt	Total
1020	1		10
1820			10
1821			
1822			
1823			
1824			
1825			
1826			
1827			
1828			
1829			
1830			31
1831			
1832			
1833			
1834			
1835			
1836			
1837			
1838			
1839			
1840			48
1841			
1842			
1843			
1844			
1845			
1846			
1847			
1848			
1849			
1850			76
1851			, 0
1852			
1853			
1853			
1855			
1055			
1850			
1050			
1858			
1859			1.5.4
1860			154
1861			
1862			
1803			
1864			
1865			
1866			
1867			
1868			
1869			
1870			242
1871			

Table A4. Total credit to the general public in millons of NOK. At yearend. 1820-2002

	Bond debt	Loan debt	Total
1872			
1873			
1874			
1875			
1876			
1877			
1878			
1879			
1880			300
1881			390
1882			
1883			
1884			
1885			
1886			
1887			
1888			
1889			
1890			536
1891			550
1892			
1893			
1894			
1895			
1896			
1897			
1898			
1899	62	908	970
1900	82	974	1056
1901	82	1008	1090
1902	87	1038	1125
1903	109	1085	1194
1904	109	1100	1209
1905	108	1125	1233
1906	114	1170	1284
1907	114	1251	1365
1908	118	1328	1446
1909	129	1405	1534
1910	137	1486	1623
1911	152	1614	1766
1912	168	1735	1903
1913	180	1891	2071
1914	216	2039	2255
1915	222	2336	2558
1916	285	3325	3610
1917	324	4594	4918
1918	371	5749	6120
1919	445	6523	6968
1920	584	7285	7869
1921	720	7101	7821
1922	895	6407	7302
1923	958	5939	6897

Table A4. Total credit to the general public in millons of NOK. At yearend. 1820-2002

	Bond debt	Loan debt	Total
1924	1017	5685	6702
1925	1061	5366	6427
1926	1064	5030	6094
1927	1186	4854	6040
1928	1163	4838	6001
1929	1137	4855	5992
1930	1112	4839	5951
1931	1215	4902	6117
1932	1204	4772	5976
1933	1005	4723	5728
1934	940	4693	5633
1935	890	4740	5630
1936	853	4831	5684
1937	820	4964	5784
1938	860	5118	5978
1939	807	5492	6299
1940	789	4942	5731
1941	771	4575	5346
1942	748	4213	4961
1943	715	3868	4583
1944	731	3620	4351
1945	745	3946	4691
1946	864	4804	5668
1947	977	6377	7354
1948	942	7718	8660
1949	1110	9133	10243
1950	1319	10524	11843
1951	1384	12313	13697
1952	1655	13507	15162
1953	1804	15321	17125
1954	1902	1/405	19367
1955	2059	19648	21/0/
1950	2187	24019	25000
1957	2229	24018	20247
1959	2688	28735	31423
1960	2969	31078	34047
1961	3367	34900	38267
1962	3738	38393	42131
1963	4130	41635	45765
1964	5023	45858	50881
1965	5786	50269	56055
1966	6039	56664	62703
1967	6873	62792	69665
1968	7514	67449	74963
1969	8005	73933	81938
1970	8786	82157	90943
1971	9400	93022	102422
1972	9893	105301	115194
1973	10410	122471	132881
1974	11083	139472	150555
1975	13593	168924	182517

Table A4. Total credit to the general public in millons of NOK. At yearend. 1820-2002

	Bond debt	Loan debt	Total
1976	17614	198868	216482
1977	21306	240093	261399
1978	23793	268177	291970
1979	24281	200111	316692
1980	27149	336071	363220
1981	33195	375608	408803
1982	40677	436966	400003
1983	43941	489736	533677
1984	34193	578403	612596
1985	54175	570105	691 823
1986			828 265
1987			931 306
1988			1 011 190
1989			1 080 751
1990			1 092 488
1991			1 071 413
1992			1 069 466
1993			1 074 109
1994			1 075 804
1995			1 014 051
1996			1 085 112
1997			1 210 661
1998			1 342 838
1999			1 464 689
2000			1 716 902
2001			1 861 608
2002			1 973 266
2003			2 093 242

Table A4. Total credit to the general public in millons of NOK. At yearend. 1820-2002

Sources: 1820-1956: Skånland, H. (1967): "The Norwegian credit market since 1900", Samfunnsøkonomiske studier 19, Statistics Norway. 1957-1984: Statistics Norway (1995). Historical statistics 1994. NOS, C 188. Oslo-Kongsvinger (Bond debt: http://www.ssb.no/emner/historisk_statistikk/tabeller/24-24-27.txt. Loan debt: http://www.ssb.no/emner/historisk_statistikk/tabeller/24-24-18.txt). 1985-2003: Norges Bank. Credit indicator (C3): http://www.norges-bank.no/front/statistikk/en/k3/(from 1995 C3 to Mainland-Norway)

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