The development of Swedish commercial banking, from establishment to consolidation: A presentation of a new database, 1866-1938

By

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SUMMARY

This paper presents the long-run development of Swedish commercial banking. It does so through data newly compiled into a database on aggregate and bank-level between 1866 and 1938. The database contains variables such as lending, deposits, capital, expenses, holding of bonds and stocks, loan losses, profits, and dividends. The data is used to study such issues as market concentration, profitability, and efficiency/productivity. The paper shows that markets for lending and deposits skyrocketed from 1880, which made commercial banks the leading financial institution in Sweden. The commercial banks then lost part of their dominant position from about 1918, as the banks suffered large losses and many reconstructions during the crises of 1921 and 1932. The second half of the period saw a sharp increase in market concentration, with larger banks acquiring many small- and medium sized competitors. We conclude that Swedish commercial banking during the period was essentially one of two distinct halves, with the first being competitive and expansionary and the second distinguished by concentration and contraction.

KEYWORDS
Commercial banking; market concentration; profitability; crises; credit
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I Introduction

It is well-established that a large and well-functioning financial market is vital for economic development. According to Levine (1997) and Rousseau & Sylla (2005) well-developed financial intermediaries can aid growth by lowering information and transaction costs, facilitating the trading of risk and by mobilizing and allocating resources efficiently. The Swedish financial market took time to grow and establish itself, but during the last three decades of the 19th century the country experienced a financial revolution that was largely led by the commercial banking sector.¹ The commercial banks were leading in extending credit to burgeoning Swedish industries as well as entrepreneurs and innovators, and, arguably, they were central in transforming Sweden from an impoverished agricultural economy to one of high sustained economic growth based on industrial production.²

This working paper results from two research projects³ that examine the long-run Swedish commercial banking, and in which ways bank efficiency impacted Swedish GDP growth rates. By constructing a long-run database from balance sheet data, we aim to analyze the development of Swedish commercial banks, between 1866 and 2016. This paper and the encompassing database are the first of two surveys, which stretches from

¹ Ögren (2010).
³ “Rejmskiften på den svenska kreditmarknaden under efterkrigstiden” (PI Mats Larsson) and “Financial market regimes, bank efficiency and economic growth in Sweden, 1866-2016” (PI Peter Hedberg), (both funded by Handelsbanken’s Research Foundation).
1866 to 1938. The second survey will cover the period from 1939 to 2016.

In this working paper we present a database with key variables describing the entire Swedish commercial banking population from 1866 to 1938. It contains variables never before compiled and analyzed on the aggregate as well as bank-level. The data can be used to analyze market concentration, capital adequacy, loan-deposit-ratios, efficiency, profitability, and more. The paper shows, among other things, that the loan and deposit markets grew substantially from 1880 to 1918 after which the commercial banking sector declined. Market concentration was low before World War I and increased sharply after 1916 until 1926, when the number of active banks decreased by more than half. Banks were generally more profitable during the first half of the examined period, while economic crises during the 1920s and 1930s created large loan losses and total losses, even though there were substantial differences between individual banks.

The paper is organized as follows: section II gives a background on the historiography of Swedish commercial banking. Section III explains the source material and the methodology used to create the database. Section IV presents a part of this data and the general development of Swedish commercial banking and finally in Section V the paper is concluded.
II Commercial Banking, Regulatory Regimes, and Crises

Historically, Swedish commercial banking has been organized in two different ways—as joint-stock banks with limited liabilities and mutual banks with unlimited liabilities. The first commercial bank in Sweden was founded in 1830 but was soon followed by others. It was, however, only in the wake of accelerating industrialization in Sweden during the latter part of the 19th century that conditions were created that allowed private banking on a larger scale. The banks that were founded before the 1860s were so called private (enskilda) banks, based on shares but with the owners being liable—one for all, all for one—for the bank’s obligations. These banks were primarily engaged in issuing banknotes and initially they showed little interest in deposits. But Stockholms Enskilda Bank, founded in 1856, displayed a much greater concern for deposit banking, which in turn led other banks to increase their deposits. The interest in deposits from the general public increased considerably when a new bank law was introduced in 1864. With this new law, it was made possible to establish joint-stock banks with limited liability and over the course of the 1860s and 1870s several new banks of this type were set up. These banks were not allowed to issue their own banknotes, but their operations were rather based on share capital, funds, and deposits from clients. The right for joint-stock banks with unlimited liability to issue
their own banknotes was successively curtailed during the end of the 19th century and was finally withdrawn in 1905.4

The establishment of new commercial banks with limited liability coincided with rapid economic growth in Sweden and accelerating processes of industrialization. Both the 1870s and the 1890s are regarded as breaking points for accelerated growth, which opened for a transition from a poor agrarian society to an industrialized economy. The financial sector in general and the commercial banks in particular played a decisive role in this development. However, this development was halted in the late 1870s and early 1880s with a drop in the international economy together with a short financial crisis, which in Sweden above all hit Stockholms Enskilda Bank.5 To protect old credits, several banks increased their lending to industrial companies and the contacts between banks and industry became stronger. This became the beginning of banking groups in Sweden, which grew stronger during the interwar period and became one of the main features of the Swedish 20th century financial system.6

The first decade of the 20th century thus brought several changes in the financial systems regulatory regime. In 1903, new legislations for limited liability banks as well as unlimited liability banks were introduced.7 At the same time the right to issue bank notes was centralized to the Riksbank (the bank of Sweden). With the new legislation the control of banks’ establishment, solidity and liquidity increased, all with the purpose to protect the depositors’ capital. The control of commercial banks became

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4 Söderlund (1978).
5 Ögren (2010); Gasslander (1962); Larsson & Lönnborg (2014).
6 Ch. 2 in Larsson & Söderberg (2017).
7 On the Banking Act of 1903, see for instance Grodecka, Kenny, and Ögren (2018).
more detailed in the 1911 banking law, but at the same time larger
commercial banks were given the right to own and trade with shares in
the bank’s name. This was a concession to the interest especially in some
commercial banks to have the Swedish banking system develop more like
German universal banking. In 1907, the Bank Inspection Board was
given status as an independent government office. With a more detailed
bank legislation it was important to tighten the control of banking. The
bank inspector also became directly involved in the commercial banks
business, when several banks were hit by financial problems.

During World War One profits in industry grew, largely as an effect of the
high inflation rates. Inflation also automatically resulted in growing
values on estates and machinery, which further stimulated the economy.
The expectations on growing share values, especially in industrial
companies, underpinned speculation and new companies were attracted
by the growing activity on the stock exchange. The commercial banks
also played a crucial role for this development. Especially through
affiliated investment companies (emissionsbolag), the commercial banks
helped new companies to enter the stock exchange, while at the same
time they became involved in the structural transformation of Swedish
industry. Inflation thus played an important role for both the
development of, and speculation on, Sweden’s financial market during
World War One. Expectations of large profits were high among
individuals, industrial companies and banks alike. However, towards the
end of the war the market began to fluctuate, with stagnating share
prices, but it was not until the early 1920s that this development turned

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9 Söderlund (1976).
10 Östlind (1945), Larsson & Lönnborg (2014)
The international wave of deflation, which was apparent during the summer of 1920, struck Sweden with full power in the autumn of the same year. In addition, the fall in share prices was promoted by the government's monetary policy, which aimed to restore the Swedish crown to its pre-war gold value. To make this strategy successful the official discount rate initially had to be increased and the state budget squeezed. These measures added additional fuel to the deflation fire. The deflation crisis hit both commercial banks and industrial companies. During the 1920s, several industrial reconstructions were carried out as an effect of the losses experienced during the 1921 crisis. Since most of the commercial banks’ lending had been channeled to industry, these banks were hit especially hard by the crisis. For the majority of the commercial banks, the crisis resulted in large losses on outstanding credits and for some banks their funds had to be used to cover the losses in order to continue business activities. These banks needed additional capital. This was achieved mainly through capital contributions from the shareholders, but in some cases other solutions had to be considered. Thus, several commercial banks were acquired by more solvent competitors.

Commercial banks had strong incentives to avoid bank failures where the depositors lost their capital, since this could lead to problems on systemic level for the banks and in the worst case a bank panic. In order to secure those banks where the owners could not (or would not) contribute with more capital, some of the larger commercial banks guaranteed the capital of failing banks. This cooperation, at the beginning of the crisis, probably helped to save the Swedish banking system, but when Sydsvenska Kredit

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AB in March 1922 reported severe losses, it became clear that not even a consortium of large banks would suffice to save the company. Instead the state – through the Bank of Sweden – entered as lender of last resort to secure the banking system. A special institute – AB Kreditkassan – was established by the Bank of Sweden and the commercial banks in cooperation, in order to transfer capital to banks that were experiencing difficulties. During the following years, AB Kreditkassan played a major role in the reconstruction of commercial banks in crises. A total of eight commercial banks were particularly hard hit by the financial crisis of the early 1920s. At least five of them would have encountered great difficulties to survive without support from Kreditkassan, namely: Smålands Enskilda Bank, Värmlands Enskilda Bank, Sydsvenska Kreditaktiebolaget, Svenska Lantmännens Bank and Nordiska Handelsbanken. The reconstruction of the other three commercial banks – Mälarprowinsernas Bank, Kopparbergs Enskilda Bank and Handelsbanken – was made possible with aid from three of the largest banks – Stockholms Enskilda Bank, Skandinaviska Kreditaktiebolaget and Göteborgs Bank. Beside these banks, the dominating Skandinaviska Kreditaktiebolaget, also experienced large losses. When the need for depreciation on loans was presented in December 1922, the Bank Inspection Board considered the banks evaluation of losses to be much too low. In order to avoid a large bank failure, the Social Democratic government presented a proposal of joint ownership – between the state and private interests – to the bank. The board of Skandinaviska Kreditaktiebolaget saw both advantages and disadvantages with this proposal. It would certainly have strengthened the bank in relation to its

12 Hagberg (2007).
13 A more detailed description of the reconstruction of Swedish commercial banks in the 1920s is given in Larsson (1992) and in Swedish by Östlind (1945) and Hagberg (2007).
competitors, especially Handelsbanken, which already had received a similar proposal. However, like Handelsbanken, and with the help of increasing profits, Skandinaviska Kreditaktiebolaget managed to avoid the government partnership.\footnote{Söderlund (1978).}

In general, the situation of the Swedish economy stabilized from 1924 onwards and during the latter half of the century the Swedish economy experienced strong growth. Several of the structural problems in Swedish industry that were connected to the 1920s crisis were solved during the latter half of the century, which gave the Swedish economy an extra advantage compared to several other countries. Thus, when the international economy dropped in 1929-1930, both Swedish banks and the economy was comparatively unaffected. However, in 1932 the crisis reached Sweden and affected primarily Skandinaviska Kreditaktiebolaget which had granted large credits to the Ivar Kreuger business group. The suicide of Ivar Kreuger in March 1932 and the subsequent collapse of his business empire resulted in large losses for the bank, but no widespread distribution of problems to other parts of the financial system.\footnote{Larsson & Lönnborg (2014).}

Compared to the 1920s, when the banking crisis primarily developed through national problems, the crisis of the 1930s had its origins in the international economic situation. Apart from Skandinaviska Kreditaktiebolaget, there were no major problems for the Swedish commercial banks, and with the loans from Kreditkassan this bank also quickly managed to re-establish their business.
We have collected data from the balance sheets and profit and loss statements of all Swedish commercial banks between 1866 and 1938. The data was originally gathered by the Swedish Bank Inspection and compiled into two series: *Sammandrag av de Enskilda bankernas uppgifter 1866-1911* and *Statistiska Meddelanden, Serie E, Uppgifter om bankerna, 1912-1953*. These are the main sources for all data in this working paper and the encompassing database.\(^\text{16}\) From 1866 to 1873, data is available by quarter, while from 1874 onwards, the sources contain monthly data. In order to be consistent over time our annual data is taken from the month of December each year. This also allows us to compare the data from the balance sheets with that from the profit and loss statements, which was compiled and published by the Bank Inspection by the end of each year. The basic items in the balance sheets, such as lending, deposits, and capital, are consistent over time, but some changes were made to for instance sub-categories of lending, such as the categorization of different collaterals (lending against shares, mortgages, name security, etc.).\(^\text{17}\) This does not affect the variables we analyze here, but it would affect analyses of the composition of lending collaterals. The profit and loss statements were only compiled from 1870, so we have no information on expenses and revenues from these sources for the years 1866–1869. Some big changes were also made to these statements, with

\(^{16}\) The database can be accessed downloaded on the UCBH website, where you find the UPFBH working paper series.

\(^{17}\) See Broberg & Ögren (2019).
the general trend being that they became more detailed over time. Expenses are for instance divided by sub-categories from 1916, including costs for salaries and similar expenses, taxes, and depositions to pension accounts for employees. However, it took until 1935 before revenues were specified by source, meaning we only have information on for instance income from interests from this year onward. Interest revenues are therefore not included here, but will be in future versions of the database when we have gathered bank-level data that cover the years after 1938. The variables that are the basis of this first version of the database are as follows: total lending, total deposits, total capital, total holdings of bonds and stocks, loan losses, holdings of bills, general expenses (from 1870), taxes (from 1916), gross profits (from 1870), net profits (from 1870), total dividends (from 1870), and return on capital (from 1870). The six latter items have been taken from the profit and loss statements, while the other are balance sheet items. The definitions and calculations of all variables will be described in the following.

- **Lending**: all categories of loans and credit are summarized. Certain changes to categories over time, but overall consistent as a total variable of lending. The security category “shares/goods” were for instance separated into two from 1877 onwards. In 1907, the collateral categories “bonds” (*skuldebrev*) and “name guarantee” (*borgen*) were combined into one.

- **Deposits**: all categories of deposits are summarized. The balance sheets specify two categories for all commercial banks up until 1876. From 1877, the limited liability banks have three categories of deposits, while the unlimited liability banks continue to have two. In 1892, the number of categories expand to four in the case of limited liability banks while for unlimited banks they expand
to three. In 1897, the final type of deposits is extended also to the unlimited liability banks, meaning all commercial banks have four categories of deposits until the end of the period in 1938.

- **Capital:** all categories (base funds, reserve funds, and disposal funds) of capital are summarized. Before 1892, disposal funds did not appear as a specific category, but instead as a category called “dividends not paid out last year”, which we have taken to be comparable with disposal funds thereafter.

- **Bonds and stocks:** total holdings of interest-bearing bonds, and shares in commercial companies. Before 1911, the commercial banks had limited right to hold shares in commercial companies.\textsuperscript{18}

- **Loan losses:** before 1913, this variable is proxied by the sum of loans that were being contested in court because they were not being paid back to the banks. These are divided in two sub-categories: lawsuits (lagsökning) and investigation of bankruptcy (konkursutredning). There is no data for this variable at all for 1914 and 1915. These two categories are then substituted by the entry “depreciation of claims” (avskrivning av fordringar) from the profit and loss statements from 1916 onwards. This means that loan losses are not strictly comparable before and after 1913, but we take the measurements to proxy similar developments in loans not paid back to the banks.

- **Holdings of bills:** the unlimited liability banks could issue their own bills until 1905, when this right was monopolized by the Bank of Sweden. This variable is measured as each bank’s holdings of bills (egna banksedlar), but since the right to hold bills was phased out from 1901, we have added the loans that the Bank of

\textsuperscript{18} See Fritz (1990).
Sweden gave to the banks in order to compensate for the loss of
own bills. From 1901 to 1905, the variable is hence divided up by
holding of bills and loans from the central banks (specifically
connected to the phasing out).

- **General expenses**: all expenses for each bank, from the profit
  and loss statements. The biggest sub-category here are expenses
  on salaries but is later specified also by taxes paid by banks and
deposition to pension accounts for employees. General expenses
also include expenses on offices and material, but such outlays are
not specified.

- **Taxes**: total taxes paid by each bank (from 1916), including taxes
  on income and company taxes. A sub-category to general
expenses (see above).

- **Gross profits**: the sum of all revenues from the profit and loss
  statements, i.e. income from interest (the largest share), sales of
  bonds and stocks, net profits from real estate, and other income
  not specified. All of these sub-categories were however not
  specified in the source material until 1935.

- **Net profits**: the sum of profits after deducting expenses and
  depreciations, taken from the profit and loss statements each
  year, but losses are only indicated by the number of zero. We have
  therefore calculated losses by subtracting all expenses and
  depreciations from the gross profits, hence arriving at negative
  net profits (net losses) certain years. This was the formula used
  in the statements themselves to arrive at net profit or net losses,
even though there could be deviations in a few cases as banks
could choose to move money from possible dividends to net
profits. Banks could also choose to declare losses only in certain
years or to spread out losses over several fiscal years. We are
therefore at the mercy of what the banks officially declared at what time.

- **Dividends**: all money paid back to shareholders and investors at the end of each year, declared in the profit and loss statements. Money could be moved between net profits and dividends, even though the movements in these flows most of the time mirrored one another.

- **Return on capital**: net profits divided by total capital (ROC), expressed in percentage terms. Net losses are indicated by a negative percentage in the data. This is explained in more detail above under “net profits”.

The database contains data on all commercial banks that were operating during the period. The number of banks range from a low of 23 in 1866 to a high of 84 in 1908 (see figure 1 below). The sources also specify the number of new banks entering the market each year, as well as banks being liquidated. Liquidated banks are defined as those who were bought up, merged with other banks, or simply went into bankruptcy without being acquired by other banks (see appendix A.1. for a complete list of all changes to the bank population). One caveat in the data pertains to new and liquidated banks. If a bank went into bankruptcy, was acquired, or was started during the calendar year a profit and loss calculation was seldom made, meaning that such data might not be available for the first and last year of banks' activity. The number of commercial banks entering and exiting the market are also plotted in figure 1 below.
One bank (*Stockholms Inteckningsgaranti AB*) is defined in the sources as a commercial bank, but is typically excluded when the sector is analyzed (Kock, 1932; Söderlund, 1964; Sjögren 1989). The reason for the exclusion is that this bank did not exactly operate as the others; it could, for instance, as the only bank in the population, issue its own bonds, which was a major item on the liabilities side in the balance sheet. The bank also had a much higher loan-deposit rate (LDR) than the other banks, because it basically used its own bonds as deposits.\(^\text{19}\) We have included the bank in the population here anyway since we want to analyze the whole commercial bank sector and have data for all banks in the database. We do, however, agree with previous authors that the bank should be excluded in analyses of the commercial bank sector.

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\(^{19}\) Larsson & Häggqvist (2018)
The sources distinguished between banks with unlimited liability to shareholders (enskilda banker) and banks with limited liability (aktiebanker). From 1935 onwards, the separation between these two statutes was however eliminated, meaning that for the final four years here all banks were limited liability banks. We have a total of 138 individual banks included in the database, across all years. We must, however, explain how we define “individual bank” in the paper and in the database. There were periods when there were many exits and entries of banks, as well as mergers, acquisitions, and name changes. This gives that there were few banks in the population who remained one and the same over the entire period (1866–1938). In total we can identify a number of seven such banks. We can add a couple more to that list if we lax the restrictions and allow for a slightly later start year of activity and allow for banks who only underwent name changes (and did not change name as a result of a takeover or merger). The question is when a bank seizes to be an active bank? Usually a bank is removed from the list of banks due to: a) bankruptcy; b) takeover; c) merger. Mergers are trickier since they could occur on equal terms between two banks, but a bank disappears from the population when its name seizes to be used. We instead have a couple of criteria for when a bank continues to be one and the same in the database:

1) It only changed name as a cosmetic change, but essentially remained the same bank. Example: when Stockholms Handelsbank changed its name to Svenska Handelsbanken in 1919. In the database this bank is called by its short name “Handelsbanken” throughout.

2) It changed its charter from an unlimited liability bank to a limited liability bank without reconstructing or merging. Example:
several banks, but for instance Mälarprovinserna Enskilda who became AB Mälarprovinserna Bank in 1903. We simply call this bank ”Mälarprovinserna” throughout in the database.

3) It underwent a reconstruction and a name change, but essentially remained the same bank since it was not acquired nor merged with another entity. Example: several, but for instance when Kristianstad Enskilda became Bank AB Södra Sverige in 1901. When this occurred, we use the name the bank had for the longest part of the period.

4) When it was the principal overtaking party in an acquisition. Example: many, but for instance when Nordiska Kreditbanken was bought up by Skandinaviska Kredit AB in 1917. In these cases, the former seizes to exist, while the latter just continues under the same name.

5) When a bank changed its name back and forth. Example: Göteborgs Handelsbank became Nordiska Handelsbanken in 1921 but changed back to the earlier name in 1925. In this case we call the bank ”Göteborgs Handelsbank” throughout.

6) When a bank acquired another bank and its name. Example: when Sydsvenska Kredit acquired Skånska Banken and took its name in 1935. To be consistent over time in the database this bank is called ”Sydsvenska” throughout the whole period.

In the accompanying database to this text banks are shown as “unlimited liability/enskilda” even if they at some point changed their charter or in other manner seized to be an unlimited liability bank. Readers are referred to table A.1. in the appendix to be able to keep track of changes to the bank population and for instructions on how to follow individual banks over time.
The growth of the commercial banking industry was at the heart of the expansion of institutional credit during the 1870s and the 1880s, which predated the Swedish industrial take-off in the 1890s. The first Swedish commercial bank was established already in 1830, but before the 1860s the total number of banks remained low and their share of the Swedish credit market was more or less insignificant. In 1864, new bank legislation was introduced which lifted the previous interest rate ceiling on lending, and allowed commercial banks to use the joint-stock company form. This paved the way for a rapid expansion in commercial bank lending and deposit-taking over the ensuing decades (see figure 2). Lending, expressed as share of GDP, increased from below ten percent of GDP during the mid-1860s to almost 70 percent in the years before World War One, while the volume of deposits increased from around five to over 40 percent of GDP. During and after World War One, both commercial bank lending and deposits declined as share of GDP, as the previous expansionary phase waned and was replaced by a far-reaching consolidation of the industry. Between the mid 1910s and the mid 1920s the Swedish commercial banking population was more than halved, while the average size of the banks increased fast. At the same time, new bank legislation had been introduced in 1911, which allowed commercial banks to acquire shares in commercial companies. This contributed to a

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situation where an increasing number of banks started to assume the role of universal banks, issuing long-term loans and making direct investments in select companies; sometimes even participating in management through seats on the board of directors. This close-knit cooperation between commercial banks and industry developed into a characteristic feature of the Swedish financial system that was to endure well into the late 20th century.\textsuperscript{21}

Figure 2. Total lending, deposits, and capital, as share of GDP

Source: See text. GDP: Schön & Krantz, 2015.

Figure 3 below illustrates the extremely swift, and far-reaching, changes that took place to the commercial banking industry’s market structure from the mid 1910s onwards, using a Herfindahl-Hirschman index (HHI) of market concentration, calculated with bank-level lending data. During the expansionary phase before World War One, when the number of

banks was steadily increasing and bank mergers were rare, the index displays a clear downward trend. The index then starts to increase slowly during the early 20th century, before taking off from the mid 1910s onwards. The growth in market concentration was the fastest between 1916 and 1919, and nearly as fast during the first half of the 1920s. From the mid 1920s onwards the growth in market concentration slowed down and stabilized at a level two to three times that of the 19th and early 20th century. The fast growth in market concentration during the 1910s and 1920s was driven by a limited number of larger banks that acquired and/or merged with several small and medium sized banks. Between 1916 and 1919 alone, a total of 31 mergers and acquisitions were carried out within the industry; i.e. almost eight per year. For the full period 1866–1938 we can identify a total of 91 mergers and acquisitions, with the grand majority (63) being concentrated to World War I and the post-war period 1913–1927 (see the appendix for details). 16 of the total 91 were furthermore found in the short period 1907–1911, connected to the crisis of 1907. 22 79 out of 91 mergers and acquisitions were hence concentrated to the two decades from 1907 to 1927. Market concentration was strongly negatively associated with the number of active banks, with a correlation coefficient of -0.71. As the number of banks increased, market concentration decreased. Figure 4 shows the shares of the three largest banks in the total credit market. Skandinaviska Kredit and Handelsbanken were those who expanded the most during the concentration phase, both in terms of number of mergers and acquisitions but also in lending shares. The banks expansion was not only in number, but also geographically as they would have branches in all counties by the 1930s. They had truly become national banks by the end

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of the concentration phase. In the case of Handelsbanken, the growth in market share was tremendous, from below five percent in 1913 to 25 in 1926. *Stockholms Enskilda* was the largest bank during the 1860s (together with *Skånes Enskilda*) but rapidly lost market shares during the 1870s and generally remained at a stable level throughout the rest of the period. During the last decade of the period the three banks made up half of total commercial bank lending.

*Figure 3. Concentration in the credit market (Herfindahl-Hirschman Index)*

*Source: See text.*
Figure 4. The lending shares of the three largest banks

Source: See text.

Figure 5 below shows Swedish commercial banks' total holdings of bonds and stocks, expressed in 1914 prices. During the 1860s, and 1870s an increasing number of commercial banks started to buy and hold shares in commercial companies, as an alternative to issuing long-term credits. Banks also started to engage in the issuance of bonds on behalf of industrial- and infrastructure companies, which also became an important complement to the issuance of traditional long-term investment credits. By transforming long-term loans into interest bearing bonds, a large portion of bank assets could be made more liquid, which significantly facilitated the credit expansion of the 1870s. A large share of the issued bonds could be sold to savings banks, as most savings banks experienced large deposit surpluses during the 1860s and the 1870s. But a large share of the bonds was also retained by commercial banks, hoping to profit from rising prices. The increase in commercial banks holdings of bonds and stocks came to a halt during the 1880's, mainly due to the
sharp fall in the value of railway bonds during the crisis of 1878/1879, which made many banks hesitant to rely too heavily on bond issuance. New bank legislation in 1886, moreover, prohibited commercial banks from owning shares in commercial companies, with a few exceptions – most notably, *Skandinaviska Kredit* and *Handelsbanken* retained this right and accounted for 80–90 percent of commercial banks' share holdings during the 1880s, 1890s and early 1900s. The issuance of and trade in bonds gained new momentum during the 1890s, and with the Banking Act of 1911, the right to hold shares in commercial companies was extended to all banks with sufficient funds (defined as banks with share capital/basic funds plus reserve funds exceeding six million SEK). This incited banks to either increase the size of their equity or merge with other banks, and thus the Act contributed to increase competition and speculation as well as to incite the large banks to launch extensive expansion strategies during the ensuing years. Apart from the increase in commercial banks' own holdings of shares, the banks also took an active part in the trade in shares on the booming Stockholm Stock Exchange and expanded the issuance of credit with shares and bonds as collateral. The increased risk exposure of the banks soon became evident, as share prices started to fall after 1917, eventually leading to a severe economic and banking crisis during the early 1920s. As a result of the crisis, commercial banks significantly increased their holdings of industrial shares, as shares had been held as collateral for loans to companies that became in need of assistance during the crisis years. Share prices started to develop more favorably after 1921, and as can be seen in figure 5, the total value of commercial banks' holdings of shares and bonds

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consequently increased fast during the remainder of the 1920’s. In the aftermath of the fall of the Krueger financial empire during the Great Depression, the commercial banks’ right to hold shares in commercial companies was one again revoked, forcing banks to divest their holdings after 1934.

Figure 5. Banks total holdings of bonds and stocks, in 1914 prices
Source: See text. CPI: Edvinsson & Söderberg.

The expense burden of the banks (see figure 6) generally increased over time, particularly so during the late 1870s and early 1880s, and sharply during the 1910s. By contrast, the 1890s and early 1900s were marked by relatively stable levels of general expenses. Before 1914 smaller banks generally had a higher expense burden than larger banks and newly established banks generally had high sunk costs in their infancy, which

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24 Larsson (1998), pp. 87-96. On the banks’ right to own and trade with shares, see Fritz (1990).
pushed their expense burden above the average for the entire population. The rise in the average expense burden that took place after 1914 was, on the other hand, mainly driven by increasing costs for large-scale banks. One clue to the increasing costs is revealed in figure 6 which plots the tax burden faced by banks, which was particularly high between 1916 and 1921. This was probably connected to the new taxes on income and capital put in place by the Swedish government in 1915, which sought to pay for increasing military expenditure. A third of the revenue from these new taxes came from private companies. But as can be seen by comparing figure 6 and 7, the increase in taxes does not tell the whole story. While the share of taxes in general expenses dropped from the early 1920s onwards, the average expense burden of the banks remained elevated, and even increased slightly during the 1920s and 1930s. During the concentration phase of the 1910s and 1920s, expansionary banks took on increasingly higher expenses – Skandinaviska Kredit and Handelsbanken foremost of all. These two banks were below the average expense burden before 1914, but moved quickly above the average during the following decade. More generally, the banks that were the most active in mergers and acquisitions during this period also tended to exhibit the fastest increase in expenses. The rise in the average expense burden after 1914 seems thus to have been connected to the concomitant rise in market concentration, where a number of banks established and acquired new branch offices at a very fast rate. Another contributing factor was the real wage level within the financial sector, which rose sharply during the late 1910s and early 1920s.

\footnote{Henreksson & Stenkula (2016).}
Figure 6. General expenses as share of gross profits (%)

Source: See text.

Note: Unweighted average of all banks

Figure 7. Taxes as share of general expenses (%), total for all banks

Source: See text.
Figure 8 below shows the average profitability of Swedish commercial banks during the period, measured as the average return on the banks’ capital (ROC). As seen in the figure, the ROC was very stable before 1914, especially during the 1890s and 1900s, averaging 7.8 percent with a standard deviation of 1.4 percent. The period after 1914 was, by contrast, marked by considerable volatility and a generally lower level of profits. Figure 9 shows that losses were the largest during the economic crises of the early 1920s and early 1930s. The average loss for all banks in 1921 was some 9.2 percent of total capital, while during the peak of the Great Depression in 1932 it was even higher, at 11 percent. Most banks that were active across all crises between 1866 and 1938 ran losses at least one year. Only three banks were exceptions to this rule: Stockholms Enskilda, Sundsvalls Enskilda, and Stockholms Inteckningsgaranti AB. Some banks (such as Värmlands Enskilda) had to use more than half of their total capital to cover for the loan losses faced. Several banks had to undergo reconstruction with the help of the government and other commercial banks, as described further in section II. Loan losses (see figure 9) were smaller during the middle of the 1880s as compared to the crisis of the late 1870s, but profits decreased more sharply in the former period. This could be because there were a larger number of newly established banks by the 1880s compared to earlier. Contrary to total losses, loan losses were slightly larger, as share of total lending, during the crisis of 1921 than in 1932.
Figure 8. Return on capital (ROC) (%)

Source: See text.

Note: unweighted average of all banks

Figure 9. Total loan losses as share of total lending (%)

Source: See text.

Note: no data for 1914 and 1915.
Figure 10 plots total dividends, as share of net profits and as share of GDP. What becomes evident from figure 10 is, above all that dividends did not drop relative to net profits in times of crisis. On the contrary, dividends were often still paid out even though banks made losses or were in balance, meaning that this relative measure rose sharply during the severe crises of the early 1920s and early 1930s. The years 1922 and 1932 have been removed from figure 10, but those years dividends were several thousand percent of net profits, if we include all banks. It should be noted however that there were large differences between banks in respect to the payout of dividends. As is also seen in figure 10, there was a temporary peak in the volume of dividends during the late 19th and early 20th centuries during which time commercial bank dividends climbed to over one percent of GDP. This rise in the payout of dividends was connected to the increasing difficulties for banks in trying to meet the demand for credit during this expansive period in Swedish economic history. Already by the mid 1890s, the commercial banks deposits started to become insufficient, and by the early 1900s loans exceeded deposits by more than half a billion SEK. In addition to other strategies, this prompted most joint-stock commercial banks to successively increase their share capital, which of course significantly increased the cost of dividends.27

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27 Nygren (1985), pp. 63-65
Figure 10. Dividends as share of net profits (left axis) and of GDP (right axis)

Source: See text. GDP: Schön & Krantz, 2015.
V Conclusions

In this working paper, the development of the Swedish commercial banks between 1866 and 1938 is presented. For this purpose, a long-term database has been constructed, which describes the entire Swedish commercial banking population.

During the period examined in this paper, the financial market underwent a major shift, which meant that the period was characterized by two different regimes, which in turn entailed radically different conditions for the commercial banks. From the 1860s until the early 1910s, the Swedish economy was characterized by strong finance-led growth, which accommodated the transition into an industrialized economy. For instance, between 1866 and 1910, the share of deposits and lending to GDP increased by more than a tenfold while the number of commercial banks increased from 23 to 80. During this period, the financial market developed the features of a rapidly expanding market-oriented banking system, which provided for increasing demand for credit and financial services.

During the 1910s, however, the course of developments began to change, and eventually the financial market regime began to shift into new one. Inspired by the German model of universal banking, the overall objective of the new regime was to safeguard for market stability – and in particular to protect depositors – by tightening the banks’ liquidity and solidity requirements; solid, large banks were considered to have greater
capacity to supply the industry with credit, and to be more stable than a
great number of smaller banks. The introduction of the Banking Acts of
1903 and 1911, the latter a response to the turbulence that followed from
the Panic of 1907, marked important steps to this shift. Yet another
important step was taken in 1905, when the commercial banks right to
issue notes was revoked and surpassed to the Bank of Sweden. Since this
meant that the banks’ main mean for expansion was suspended, they
turned to expansive deposit and lending strategies. Consequently,
commercial banks, especially the larger ones, began to expand
geographically (by branching) and as a result of this, competition grew
increasingly fiercer to levels that were considered unsound. In order to
counter this, the Banking Act of 1911 allowed banks to expand their
activities by trading and own stocks and shares. This incited banks to
either increase the size of their equity or merge with other banks, and
thus the Act contributed to increase competition and speculation. The
effect was clearly reflected in the commercial bank’s holdings of shares,
but also, after 1911, the commercial banks became increasingly involved
in the flourishing trade in stocks and shares on the Stockholm Stock
Exchange, and expanded the issuance of credit with shares and bonds as
collateral and made large investments in the industry. Up until at least the
1990s, universal banking, with widely operating commercial banks,
closely tied to large industrial companies, became one of the most
distinctive features of the financial system.

The new banking legislation in combination with the major events that
unfolded the following years reversed the trend of the previous decades.
The outbreak of the Great War in 1914, and the post-war deflationary
crisis, however, changed the conditions yet further. As prices, share
prices in particular, began to fall after 1917, the commercial bank’s
exposure to risk became sorely evident. In the wake of the great number of bankruptcies in industry and manufacturing that followed, the banks suffered massive losses, and set off a subsequent wave of bank mergers. The impact on the market structure was distinctive; viewed in terms of number of commercial banks and in the market concentration index (which increased faster after 1916 and peaked in 1933), the decline began already in 1908, but in particular after the introduction of the Act of 1911, when the number of banks began to decline. Between 1909 and the mid 1920s, however, the number of commercial banks decreased by about 2/3, and between 1916 and 1919 – the years that saw the fastest decline – no less than 31 mergers and acquisitions occurred. After 1926, the number of banks as well as the concentration index continued to decline, although at slower pace. The concentration trend thus levelled out, but at the same time, the banks grew notably larger. In 1920, the banking industry was dominated by four banks, which accounted for 60 per cent of the total commercial bank market.

It is worth noting that even though the commercial banks lending, deposits, and holdings as share of GDP, declined after 1922, they increased slightly in absolute terms. This may be interpreted as if the commercial banks had entered a somewhat declining phase. Increasing market concentration coincided with growing expenses, and at least two serious periods of bank losses as well as drops in their return on equity, and low profits. A more plausible explanation would include a number of covarying factors such as increasing competition from savings banks and other intermediaries, declining interest rates, and increasing risk aversion in the banks whom had adopted more cautious activities. Also,

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28 Table A6.9 in Edvinsson, Jacobson, & Waldenström (2014)
29 Larsson & Häggqvist (2018)
from 1932 onwards, profits sky-rocketed, and despite the shock wave that followed Kreuger’s suicide and the Great Depression, the Swedish commercial banks were well-prepared to manage the crisis.


Appendix

Table A.1. Mergers, takeovers, bankruptcies, and name changes, in Swedish commercial bank population

Overtaken bank on the left, overtaking bank on the right.


1868: Enskilda Industribanken i Norrköping → Norrköpings Enskilda
1868: Malmö enskilda → Skånes enskilda
1880: Wadstena Enskilda → Östergötlands Enskilda
1889: Oskarshamns Enskilda → Smålands Enskilda
1896: Stockholms Tjänstemanna Sparkassa → Nordiska Kreditbanken
1899: Västerbottens Enskilda → Bankaktiebolaget Stockholm-Övre Norrland
1901: Jämtlands Godtemplarbank → Östersunds Diskontobank
1901: Mellersta Hallands Folkbank → Mellersta Hallands Bankaktiebolag
1901: Kristianstads Enskilda → Bankaktiebolaget Södra Sverige
1903: Norrbottens Enskilda → Härnösands Enskilda
1903: Mälareprovinserna Enskilda bank → Aktiebolaget Mälareprovinsernas bank
1903: Göteborgs Enskilda bank → Aktiebolaget Göteborgs bank
1904: Göteborgs köpmansbank → Skånes Enskilda bank
1905: Hallands Enskilda bank → Aktiebolaget Göteborgs bank
1905: Bohusläns Enskilda bank ➔ Aktiebolaget Göteborgs bank
1905: Örebro Handelsbank ➔ Härnösands Enskilda
1906: Göteborgs köpmansbank ➔ Skånes enskilda
1906: Kalmar Enskilda bank ➔ Bankaktiebolaget Södra Sverige
1906: Oskarshamns folkbank ➔ Bankaktiebolaget Södra Sverige
1906: Vetlanda Bankaktiebolag ➔ Sydsvenska kreditaktiebolaget
1906: Gamleby folkbank ➔ Aktiebolaget Stockholms diskontobank
1906: Vimmerby folkbank ➔ Aktiebolaget Stockholms diskontobank
1906: Jönköpings bank ➔ Göteborgs handelsbank
1907: Gotlands Enskilda bank ➔ Bankaktiebolaget Södra Sverige
1907: Lindesbergs Bankaktiebolag ➔ Aktiebolaget Bergslagsbanken

[name change]
1907: Industri-kredit aktiebolag ➔ Skandinaviska Kreditaktiebolaget
1908: Härnösands Enskilda ➔ Bankaktiebolaget Norra Sverige
1909: Västerviks Handelsbank ➔ Skånska Handelsbanken
1909: Sundsvalls folkbank ➔ Sundsvalls kreditbank
1909: Fränsta bank ➔ Sundsvalls Köpmansbank
1909: Ströms Folkbank ➔ Jämtlands Folkbank
1910: Skånes Enskilda ➔ Skandinaviska Kreditaktiebolaget
1910: Sundsvalls köpmansbank ➔ Sundsvalls kreditbank
1910: Hudiksvalls folkbank ➔ Hudiksvalls kreditbank
1910: Aktiebolaget Linköpings bank ➔ Sydsvenska kreditaktiebolaget
1911: Halmstads Bankaktiebolag ➔ Göteborgs Handelsbank
1911: Gävleborgs Enskilda bank ➔ Bankaktiebolaget Norra Sverige
1911: Kristinehamns Enskilda bank ➔ Värmlands Enskilda bank
1911: Bankaktiebolaget Stockholm-Övre Norrland ➔ Norrlandsbanken
(from July 1st)
1911: Tranås bankaktiebolag ➔ Malmö folkbank
1911: Sollefteå folkbank ➔ Sundsvalls Enskilda bank

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1912: Härnösands folkbank → Ångermanlands folkbank [name change]
1913: Stockholms köpmanabank → Skånska handelsbanken
1913: Folkärna folkbank → Upplands enskilda
1913: Ängelholm lantmanabank → Skånska handelsbanken
1914: Norra Sverige → Stockholms handelsbank
1914: Ljusdals folkbank → Sundsvalls enskilda
1914: Föreningsbanken Stockholm → Mälarprovinserna bank
1914: Gävle Handelsbank → Norrlandsbanken
1914: Filipstads bank → Sydsvenska kreditaktiebolaget
1914: Ljusdals folkbank → Sundsvalls enskilda
1914: Avesta folkbank → Upplands enskilda
1914: Stockholm privatassistans → Stockholms privatbankaktiebolag
[change name]
1915: Söderhamns folkbank → Norrlandsbanken
1915: Hammerdals folkbank → Sundsvalls handelsbank
1916: Bergslagsbanken → Mälarprovinserna bank
1916: Jämtlands kreditbank → Stockholms handelsbank
1916: Mellersta Hallands → Smålands enskilda
1916: Bergsjö folkbank → Sundsvalls handelsbank
1916: Varbergs bank → Smålands enskilda
1916: Herrljunga Lantmanabank → Borås enskilda
1917: Hudiksvalls bank → Sundsvalls enskilda
1917: Hälsinglands enskilda → Mälarprovinserna bank
1917: Hallsbergs folkbank → Mälarprovinserna bank
1917: Norrlandsbanken → Stockholms handelsbank
1917: Nordiska kreditbanken → Skandinaviska kreditaktiebolaget
1917: Borås enskilda → Södra Sverige
1917: Sveriges privata centralbank → Skandinaviska kreditaktiebolaget
1917: Sundsvalls Handelsbank → Upplands Enskilda
1917: Marks bank → Göteborgs bank
1918: Arbetarringen → Köpmannabanken
1918: Örebro enskilda → Skandinaviska kreditaktiebolaget
1918: Malmö folkbank → Göteborgs handelsbank
1918: Tjänstemannabanken → Kopparbergs enskilda
1918: Mora folkbank → Dalarnas folkbank [name change]
1918: Halmstad folkbank → Svenska lantmännens bank
1918: Kullen → Industribanken
1919: Medelpads lantmannabank → Mälareprovinserna
1919: Dalarnas folkbank → Mälareprovinserna
1919: Skånska handelsbanken → Skandinaviska kreditaktiebolaget
1919: Göteborgs handelsbank → Nordiska handelsbanken
1919: Södra Sverige → Aktiebolaget Svenska handelsbanken
1919: Stockholms handelsbank → Svenska handelsbanken [name change]
1919: Värmlands folkbank → Enskilda banken Vänersborg
1919: Industribanken → Göteborgs handelsbank [Nordiska Handelsbanken]
1919: Gävleborgs Folkbank → Upplands Enskilda
1920: Nya Banken → Bank AB Norden [reconstruction and name change]
1920: Mellersta Sverige → Östergötlands enskilda
1920: Hudiksvalls kreditbank → Upplands enskilda
1921: Köpmannabanken → Södermanlands enskilda
1921: Nylands folkbank → Sundsvalls enskilda
1921: Ångermanlands folkbank → Handelsbanken
1921: Örebro läns bank → AB Göteborgs bank
1922: Sydsvenska kreditaktiebolaget → Sydsvenska banken
1922: Kopparbergs bank → Göteborgs bank
1922: Bollnäs folkbank → Sundsvalls enskilda
1923: Jämtlandsbanken → Jämtlands folkbank
1923: Svenska lantmannabanken → Jordbrukarbanken [reconstruction and name change]
1924: Övre Västerdalarnas bank → Göteborgs bank
1924: Hallands lantmannabank → Nordiska handelsbanken
1925: Nordiska handelsbanken → Göteborgs handelsbank
1926: Skandinaviska kreditaktiebolaget → Skandinaviska banken AB
1926: Mälareprovinserna bank → Svenska handelsbanken
1927: Smålands enskilda bank → Aktiebolaget Smålands bank
1927: Östergötlands enskilda → Norrköpings enskilda → Östergötlands enskilda [acquisition and name change]
1927: Bank AB Norden → Södermanlands enskilda
1933: Örebro folkbank → Södermanlands enskilda
1935: Skånska banken → Sydsvenska banken → Skånska banken [acquisition and change to the latter’s name]

**Bankrupcies without takeovers**
1879: Göteborgs handelskompani
1885: Kredit AB Sundsvall
1885: Stockholms Hantverksbank
1887: Gefle bank
1889: Ulricehamns folkbank
1889: Stockholms folkbank
1896: Stockholms köpmansbank
1903: Medelpads folkbank