What Are the Explanations for the Varying Performance in the Scandinavian Banks 2001-2014?

A Comparison of the Scandinavian Bank Markets

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ABSTRACT


Den skandinaviska bankmarknaden karakteriseras av några sex stora och många små banker. Detta har lett till en hög koncentration i regionen, och också i de enskilda marknaderna. Länderna erbjuder begränsad organisk växt vilket bidragit till att de stora bankerna växten genom sammanslagningar och därmed blivit betydande institutioner i de tre länderna. De små bankerna har snarare en lokal fokus, men konkurrerar ändå med storbankerna eftersom de också försöker öka sina marknadsandelar.

De tre bankmarknaderna liknar varandra mycket, men det finns ändå en del skillnader som är intressanta att analysera i denna uppsats för att se vad som ligger bakom utvecklingen i bankerna eftersom den skiljer sig åt beroende på institutets geografiska hemvist. Detta är mycket intressant eftersom man skulle kunna anta att de banker som är aktiva på alla tre marknader skulle ha mer diversifierade portföljer och därmed en annorlunda riskbild. Därför är det intressant att jämföra de banker som endast är aktiva på sin hemmamarknad med storbankerna.

Denna uppsats har identifierat fyra olika förklaringar, den makroekonomiska utvecklingen, bankmarknadsstrukturen, corporate governance och bankernas kundbas.
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1. INTRODUCTION

The aim of this thesis is to identify structural differences among the Scandinavian banks and see what has driven the varying performance.

The thesis analysis the varying performance among the Scandinavian banks during 2001-2014. These institutions shared a positive development during the first seven years, independent of size and domestic domicile. Especially the Danish domestic banks faced increased growth and expanded balance sheets following the boom in the country. In 2007-2008 the Danish bank market was hit by several bankruptcies, for example the eighth largest institution Roskilde Bank, was declared insolvent. The following years was prevailed by mergers and acquisitions in combination with active government intervention. Neither the Norwegian nor the Swedish bank market had any universal bank being declared bankrupt during this time; this despite an integrated market structure where the largest players dominate the whole region in terms of market shares. It is therefore interesting to analyse where the three markets differ despite the similar structures.

This thesis will focus on domestic and international banks, where the latter are institutions with operations outside its domestic market. When comparing the bank markets it has been useful to separate these two types of institutions rather than dividing it into the size of the institutions. These institutions are primarily universal banks with similar business models and should therefore face the same growth during the boom and challenges during the recession independent of domestic domicile. This has not been the case and there are differences also among the Tier 1 banks in the region. Therefore, there must be structural differences in the domestic markets driving the banks performance.

This project will analyse four different explanations; macroeconomic development, bank market structure, corporate governance, clients' exposures, government intervention and financial legislation. These have been chosen to capture a broad range of explanations and provide a holistic overview of the three bank markets. The aim of these explanations is to provide analysis from various angles and provide a more comprehensive discussion.

The macroeconomic development is important as it supports the banks performance in the boom. According to the IMF, there is a correlation between the macroeconomic development and banks' impaired loans. It is interesting to analyse the macroeconomic development in the three countries based on their similar development up to 2007 and varying development after the recession. Both Sweden and Norway recovered quickly while Denmark is still suffering from weak economic development. Six macroeconomic indicators have been chosen to pro-
vide a holistic overview of the three markets and its impact on the banks' performance.

The impact of the bank market structure seems to be important for both the domestic and international banks. It could have been assumed that the international institutions would not be affected by the domestic market due to their diversification opportunities, but their significant size in their domestic market makes this factor interesting. It is also related to the institutions’ funding structures, which was important in the last months of 2008.

Corporate governance is related to the management of the banks, and it has both a direct and indirect impact on the institutions’ performance. There has not been much written literature on Scandinavian corporate governance and management, which made this factor challenging compared to the other explanations. In order to analyse its impact, a broad range of sources have been used. The low cultural barriers in the region imply the management should be similar in the three countries. However, the ownership structure is also of importance. While the Danish institutions are characterised by spread owners with low influence on the strategic development, both the Norwegian and Swedish institutions have large owners with insight in the daily operations. Thus, while the Danish management operates with a high extent of freedom, the other Scandinavian peers are governed with tight control.

The largest risk for a bank is the credit risk associated with the client lending. As both the corporate and pan-Nordic institutions cover the same client groups, households and corporations, these have been the primary interesting groups. The private sector is heavily indebted across the region, but it is not only the level of debt that is of importance but the collaterals provided combined with the banks funding. These clients demand for growth increased especially during the first years of the time period, and to a higher extent in Denmark than in Norway or Sweden. The corporations’ relation to their bank varies depending on its size; small to medium corporations use their bank to fund the activities while the larger organisation needs more complex financial services. Therefore, it has become a natural division among the banks in this coverage depending on their size.

The main conclusion from the analytical discussion is that there is not one primary driver behind the varying performance. These factors might not be correlated but interact with each other, and the development in one will impact the others.
1.1 Research Question and Objectives

The research question for this thesis is; "What Are the Explanations for the Differences in the Bank Market Development Among the Scandinavian Countries 2001-2014?"

Additional research objectives will be;

- What impact does the Scandinavian macroeconomic environment have on the banks performance?
- Is the bank market structure explaining the varying performance in the three countries? Why do the larger banks not follow the same development despite the integrated market?
- What part does the governance and management have in the varying results in the Scandinavian banks? The Scandinavian market has similar cultural traditions, so can the ownership structure be part of the explanation?

1.2 Purpose and Motivation

The purpose of this thesis is to analyse possible explanations to the differences in the development of the banks in the Scandinavian countries. It will cover commercial and savings banks with their domestic domicile in one of the countries, but the pan-Nordic institutions will also be covered.

This study is useful for readers who wish to get a better understanding to why the Scandinavian banks developed so differently after 2008 despite their similarities. While the Norwegian and Swedish sectors recovered within a year, the Danish market was prevailed by bank failures and mergers making the sector unstable. The Scandinavian bank market is integrated and the largest banks operate across not only the regional borders but also in Europe. They have similar business models targeting the same client base, but still the performance among the individual institutions differ. It is interesting to analyse the bank sectors across the three countries due to the similarities but at the same time there is variance in the market composition. Therefore it is useful to analyse and identify factors behind the varying performance. It is interesting to get an understanding of the drivers in the sector, not only at a regional basis but also domestic.

A lot of research focus either on the domestic market or the pan-Nordic institutions, and it is therefore interesting to compare the three markets at a sector level.
1.3 Limitations

Focus is on Scandinavian banks, that is, institutions offering banking services to both households and corporations. Thus niche banks have been excluded from the analysis in order to avoid outliers that can impact negatively on the analysis and conclusions. It is the institutions’ banking activities that are of primary interest for the project, and the author has tried to exclude other business areas from the numbers and conclusions when possible. However, as many of the institutions provide their results at an aggregated, group level, the analysis will take this into account when possible.

The bank market’s performance will be analysed on an aggregated level, i.e. the project will analyse the sector’s performance rather than individual institutions. These institutions are small operating with similar business models and are therefore more interesting to compare at an aggregated basis. To analyse and compare the individual institutions’ performance is a large project, and one single factor should be isolated as explanation.

The time period analysed in the project is 2001-2014 as this is two full market cycles.

1.4 Further Research Areas

First, the countries various relations to the EU as it might provide some useful insight to the different in developments of key macroeconomic indicators which have not been covered in this thesis as thoroughly as might be deserved.

Second, the housing market development’s impact on the banks’ balance sheet could also be useful to analyse in more depth considering its impact on the households’ relations to banks and the importance to financial stability.

Third, comparing the balance sheet of the largest banks in the region and identify the various drivers in their performance in a more extensive case study.

Fourth, involving other types of financial institutions such as insurance companies or pension funds and analyse if their performance differs across the countries.

Fifth, compare the countries development after 1990s banking crisis with the most recent one and see if there are similarities in how the states have counteracted the crisis.
2. METHOD AND DATA

This chapter will provide an overview of the method used in order to write the thesis. The aim of this thesis is to provide a set of explanations to the varying performance among the Scandinavian institutions after the financial crisis in 2008. It has been important to identify aggregated drivers behind the institutions’ development, and how these are influenced by various external factors. Even though a majority of the institutions are small and domestic, they are influenced by the global tail winds for various perspectives. The rest of the section will focus on the choice of method, collection of data, methodological criticism and literature review in order to provide a complete overview of the method used.

2.1 Choice of Method

It is important that the method used in the project is coherent with the research question and objectives. Further, the choice of method shall also support the insight the researcher wants to obtain. This thesis will be written by using a qualitative method as the project builds on written analysis and already collected data. The method is beneficial for projects where the amount of data is limited as it enables the author to provide a deeper insight into the material analysed.

Even though the bank markets are analysed at an aggregated level, a large scope of banks will be analysed as a group. This requires a lot of data and information, and therefore a quantitative approach will be used.

This project aims for providing a comparison of the development in the three countries financial institutions, taking a bottom-up and top-down approach. By both analysing the macroeconomic environment and the industry specific conditions, the analysis aims for providing a holistic view of the drivers being the development in the Scandinavian banks. The aim of the project is not to compare single institutions in the three bank markets, but rather the aggregated sector. However, smaller events in single institutions will impact the performance of the sector, and it is important that the method used captures this.

The impact from the financial distress in 2008 was larger in Denmark than in Norway and Sweden. Therefore, more research has been spent on analysing what went wrong in the domestic market rather than why the Norwegian and Swedish ditto remained stable. It has been important to find research and data that enables a comparison across the three markets, identifying differences and similarities.

During the time period analysed, the bank sectors have changed and it has been important
that the method used in the project supports this development without creating any outliers in the analysis. The author is of the opinion, that by using empirical research from several sources, the coherency is maintained.

When the method has been decided, the next step is to collect the data.

2.2 Collection of Data

When collecting data, an author can either use primary or the secondary data. Primary data is collected by the researcher him/herself, and is previously not documented, while the secondary data is collected by another party. Due to the research question and objectives to be answered in this project, the author has chosen a secondary data method.

In order to answer the research question, primarily academic journals, working papers and statistical databases have been used. The use of books has been limited as there is not much written material on this subject.

Most of the information used in this project is collected from statistic databases, journals, central banks, government agencies or multilaterals. These sources are considered to be reliable due to their role in the market. Despite this, it is important to remain critical to the information provided and validate with other sources if possible.

It has been important to use a broad range of sources, from Central Bank research to industry specific bodies and multilaterals like the IMF or World Bank. As the scope of the project involves so many institutions in the three markets, Bloomberg has been used to get a summary of the institutions balance sheets. It would have been a too extensive task to go through all the bank’s annual reports, even if most of them are published online, and the database does not correct the data so it is equivalent to what the single institution reports.

The data collected covers the time period 2001-2014, and some of the institutions have disappeared, either through bankruptcy or mergers and acquisition. It is difficult to evaluate the exact impact on the analysis but as it is the aggregated sector rather than the single institutions that is in focus, the data is not considered to include too many outliers.
2.3 Methodological Criticism

When performing a project like this it is important to maintain a high level of reliability and validity;

Reliability. Reliability in a thesis relates to how flexible the models and information are. Error values can be related to sources the authors cannot impact.

Validity. Validity in a project refers to how the economic indicators and ratios are defined. These are defined in the academic literature and therefore possible to compare across the countries.

This project uses a quantitative approach, and therefore, it is important to follow a data collection determined when deciding the research question. All the data on the bank’s performance and results have been audited by both the authorities and third-parties. There are no calculations or first-hand data in this project, and the sources used are considered to be of high-quality based on their reputation and wide-use among researchers.

2.4 Literature Review

Despite the data and information being audited and considered to have validity and reliability, it is important to remain critical to the information used. As the reader of the information, you cannot control how the banks, central banks or multilaterals have collected the information and if they have manipulated it. Multiple sources have therefore been used in order to ensure the reliability in the information. This has primarily been in order to avoid incorrect definitions, and ensuring that the data is based on the same understanding as in this project.

For the quantitative analysis, used in graphs and tables for example, Bloomberg has been used in combination with national statistical databases. The qualitative information has been gathered from multilaterals, for example the OECD and IMF, national financial authorities, financial publications and central bank research. These are considered to be of high-quality and gives access to the primary information.
3. THE FINANCIAL CRISIS IN SCANDINAVIA

The aim of this chapter is to provide the reader with a summary of the negative development in 2007-2008 that lead to a global recession and an understanding to the Scandinavian bank sector. It will also provide an overview of the Scandinavians development in some key ratios focusing on stability, performance, and risks.

3.1 Background to the Global Financial Crisis

The background to the crisis, which is the most severe one since the Great Depression, is still debated but the trigger was an increase in subprime mortgage defaults. However, this is not the only explanation for the turmoil prevail the financial markets during the end of 2008. If the problems had been isolated to the American mortgage backed securities, it would not have spread across the financial system to the extent it did.

The problems begun in February 2007 when the interest rate on structured products linked to the American mortgage bonds increased. These assets were called subprime bonds and were linked to mortgage bonds issued to households with a lower credit score\(^1\). During the spring, a handful of hedge funds and banks closed funds investing in subprime-linked assets due to a significant increase in default of subprime mortgage-backed securities. For example Bear Sterns decided to inject a larger sum into two of their hedge funds while UBS closed down their internal hedge fund focusing on subprime mortgages following larger losses.

These negative events forced the rating agencies to review these assets and during the summer the assets were downgraded. The rating agencies saw a need to continue downgrading these assets during the following months. Several financial institutions with primary positions in the subprime market faced losses and at the same time, the new home sales declined\(^2\).

The problems with the mortgage-backed assets lead to a credit crunch during the summer of 2007. In August, the signs of a financial crisis became visible in the market when the interest rate on some structured products increased significantly.

Due to the integrated global financial market, the problems quickly spread to Europe and in September 2007, ECB and the European Parliament begun to investigate how these problems could disturb the financial stability\(^3\). A small German bank, IKB, was the institution suffering from the financial instability. The institution was unable to provide the promised credit line when its conduit was unable to roll over asset-backed commercial papers, and a rescue pack-

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\(^2\) pp 12-27, M Brunnheimer, *Deciphering the Liquidity and Credit Crunch 2007-2008*

\(^3\) Petersen, E24
age was negotiated in order to save the institution. Next, French BNP Paribas suffered from illiquidity and had to stop redemptions in three of its investment funds. This lead to a steep increase in the TED-spread forcing the Federal Reserve, shortly followed by other central banks, to cut the interest rate. This action was followed by governmental injections, both in Euroland and the US, in order to maintain the stability in the interbank markets\(^4\). Problems with the liquidity in markets based on mortgage backed assets caused difficulties in the valuation of these assets. The banks became reluctant to lend money to each other as they wanted to protect their own liquidity and the trust was low among institutions. This lead to further increases in spread between LIBOR and the risk free Treasury rate\(^5\).

The first bank to fail due to the distressed market conditions was British Northern Rock in February 2008. Bank of England took over the governance of the bank in order to prevent a bank run in the institution aiming for protecting financial stability\(^6\). This event was followed by JP Morgan Chase, supported by the Federal Reserve, taking over the ownership of Bear Sterns to a favourable rate. In October 2008 Lehman Brothers was declared bankrupt and next Merrill Lynch was acquired by Bank of America. By now, the Western financial markets were severely distressed and the financial crisis was now a fact. The Euroland and US was hit worst and faced a deeper recession than other financial markets\(^7\).

The autumn of 2008 was characterised by bankruptcies and mergers and acquisitions supported by the governments. This leads to nervousness in the financial markets and despite the support packages implemented by central banks, both in Europe and the US.

The Scandinavian countries were also hit by the financial crisis, but to a varying extent. Denmark was hit hardest of the three countries, and as in the US, the problems begun in the real estate market. The Danish institutions expanded their balance sheets up to the 2007, and when the markets begun to cool down, it hit the institutions negatively. At the same time, there had been a real estate bubble bursting in the market which further worsened the conditions for the institutions exposed to this segment. The first bank to face severe financial problems was Bank Trelleborg acquired by Sydbank in January 2008. This was not the only institution to suffer from the constrained market conditions, and the following two years were prevailed by mergers and acquisitions and bankruptcies. In 2008, the Danish government established a new state owned company, “Financial Stability”, responsible for taking over and

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\(^4\) pp 12-27, M Brunnermeier, *Deciphering the Liquidity and Credit Crunch 2007-2008*


\(^7\) pp 12-27, M Brunnermeier, *Deciphering the Liquidity and Credit Crunch 2007-2008*
unwinding the activities of troubled institutions\textsuperscript{8}.

In Sweden, the only institution facing problems was Swedbank due to their extensive exposure to the Baltic countries. Norway was not affected by the financial turmoil, but rather negative movements in the oil prices. There were no financial institutions that faced difficulties following the negative development on the financial markets. However, the three governments decided to provide the banks with capital injections, and all banks but Handelsbanken accepted the possibility to improve their capital base.

The Scandinavian bank market will be accounted for in the following section.

3.2 The Scandinavian Bank Market

The Scandinavian bank market is highly integrated and concentrated; 90\% of the assets held by the Nordic public listed banks are compromised by only six banks\textsuperscript{1}, and it amounts to approximately 185\% of the combined regional GDP\textsuperscript{9}. These same banks held credit portfolios worth EUR 1.7 trillion in 2012 in the region. Thus, the three markets are characterised by a few large players and many smaller institutions. These banks are primarily savings or commercial banks.

Scandinavia’s largest players operate across the region, and the low cultural barriers in the region have enabled the institutions to seek new business opportunities in the other countries. The banking groups are present outside its domestic markets, and also outside the region, and the bank sector has become integrated. These institutions are often active across the client segments and products; from retail to investment bank and offers credit to complex financial solutions. There is high competition in the market, and the large commercial players compete with the domestic banks for the local market shares. At the same time, the institutions compete with other foreign players outside the region. Despite their significant size and importance in the region, they are only considered mid-size institutions from a European perspective.

The Scandinavian financial sectors are large in relation to the countries’ GDP, and grew continuously from 2001 to 2007 in the three countries as seen in Figure 3.2.1 Scandinavian Bank Assets in Relation to GDP. This growth was supported by the favourable macroeconomic environment and stable political situation that prevailed the region\textsuperscript{10}. The large financial sectors

\textsuperscript{8} pp 26-29, Danmarks Nationalbank, Finansiel Stabilitet 2009:1, 2009
\textsuperscript{1} The six banks are DNB, Danske Bank, Nordea Bank, SEB, Svenska Handelsbanken and Swedbank.
\textsuperscript{10} pp 12, 25-30, Nordic Central Bank, Nordic Banking Structures Report, 2006
make the system more vulnerable to external shocks, and it is therefore important for the supervisory bodies to stabilise the market.

**Figure 3.2.1 Scandinavian Bank Assets in Relation to GDP**

The picture visualises the Scandinavian bank assets in relation to the domestic GDP. It is interesting to note that while the Danish market had a negative growth, both the Swedish and Norwegian ditto grew. This is primarily explained by the number of defaulted institutions, where the banks were taken over by *Financial Stability* and the number of mergers taking place in Denmark.

Next, the characteristics of the three bank markets will be accounted for.

**Denmark.** The Danish bank market is dominated by commercial and mortgage banks\(^{11}\), and is characterised by many small and a few large institutions\(^{12}\).

When breaking down the group’s internal market shares, Danske Bank holds approximately half of the assets and Nordea Bank Denmark 15%. Thus, the Danish bank market is highly concentrated among few institutions with a global presence. The banks in Group 1 hold approximately 81% of the commercial bank asset.

As seen in **Figure 3.2.1 Scandinavian Bank Assets in Relation to GDP** the bank market, measured as ratio of GDP, is among the largest in Europe\(^{13}\). It amounts to 240% of the GDP, and of this, Danske Bank has the single largest holding amounting to 200% of GDP (2012). If including the non-listed mortgage bank Nykredit, the sector is approximately 360% of the Danish GDP. At a regional level, Danske Bank\(^{1}\) holds approximately 50% of the Nordic region’s collected GDP\(^{14}\).

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\(^{13}\) Danmarks Nationalbank, The Danish Financial Sector, [http://www.nationalbanken.dk/en/financialstability/danish_financial_sector/Pages/default.aspx](http://www.nationalbanken.dk/en/financialstability/danish_financial_sector/Pages/default.aspx)

\(^{1}\) Including credit portfolio in Baltics and Poland, Denmark, Finland, Norway, Sweden, and other Europe.

Denmark was hit by the financial crisis half a year before Norway and Sweden when Bank Trelleborg was acquired by Sydbank in 2008\(^\text{15}\). After Denmark’s eight largest bank, Roskilde Bank, was declared bankrupt later the same year, the internal bank market froze and several smaller financial market players faced severe problems accessing funding. The price of funding increased, leading to further bankruptcies and acquisitions\(^\text{16}\). In the time period 2001–2014, approximately 90 financial intuitions disappeared from the market which amounts to approximately 46% of the market players\(^\text{17}\).

The Danish state had to establish Financial Stability in 2008 with the aim of overtaking bad assets from defaulting banks and unwinding activities. This was followed by the first Bank Rescue package, the Stability Package, aiming at providing liquidity for the banks. During the following years, four additional bank packages were implemented in the market in order to calm down the distressed market. The stability packages provided the central bank with a certain set of tools to counteract further scenarios similar to the Roskilde Bank by utilising Financial Stability. The bank packages will not be further elaborated on in this project\(^\text{18}\).

**Norway.** There are 117 banks on the market, and most of them are small players active on a regional level only. Out of these are 108 savings banks. These savings banks have an extensive co-operation in order to be able to provide their clients with a wide scope of services. The two main savings bank alliances are Eika Gruppen (76 banks) and Sparebank 1 (17 banks)\(^\text{19}\). Since 2007 the mortgages institutions have started to become important actors when distributing credit in the real estate market. Five years later, these institutions account for half of the new mortgage loans issued to Norwegian house buyers\(^\text{20}\).

DNB Bank is the largest bank, and according to IMF, the bank has assets worth approximately 90% of the Norwegian GDP. It is the only bank with a significant foreign exposure, but the bank is a small player at a pan-Nordic level with assets amounting only to 11% of the collected GDP.

Approximately 60% of the Norwegian bank operations are undertaken by foreign banks, and the other five large banks are highly active on the market\(^\text{21}\). For example Nordea is the second largest bank in the country. The Norwegian bank market is prevailed by a large proportion of banks with a domestic exposure, often with a local client base.

\(^{15}\) J Høberg, J Hansen, *Den amerikanske syge*, Jyllands-Posten 18/1 2009

\(^{16}\) Høberg, J Hansen, J, *Da krisen kom til Danmark*, Jyllands-Posten 19/1 2009

\(^{17}\) pp 19-20, Danmarks Nationalbank, *Finansiel Stabilitet* 2012, 2013


One difference among the three countries is that the Norwegian FSA has had higher Core Equity Tier 1 Capital requirements on domestic banks. This made the institutions more robust when the liquidity shrunk in 2008, and for the Norwegian banks 2008 was mostly a liquidity crisis\textsuperscript{22}. Despite a low exposure to toxic assets and US subprime mortgagees, the Norwegian banks were affected by the financial distress following the crisis starting in October 2008. Norwegian banks rely on USD interbank markets, and therefore these institutions faced a significant decline in funding following the Lehman Brothers bankruptcy. Due to the distressed conditions at the financial markets, a lot of institutions withdrew their assets from the Norwegian bank market. At the same time, the domestic corporate bond market became illiquid. These corporate bonds have been an important source of funding for Norwegian corporations since regulation began to allow them in 2007.

The Norwegian Central Bank, Norges Bank, eased the liquidity at the market by implementing direct provision of loans denoted in foreign currencies, a swap program exchanging covered bonds for government bonds and decreased collateral requirements for loans from the central bank. These implementations, in combination with similar operations in several similar economies lead to a stabilised financial market in 2009\textsuperscript{23}.

\textit{Sweden.} There are four types of banks operating in Sweden; Swedish bank corporations, co-operative banks, saving banks and foreign banks. It is only the bank corporations and savings banks that will be covered in this project.

The market has been growing during the last decade, and in the time period 2000-2012, the number of bank corporations grew by 36\%. At the same time, the total number of banks decreased with 6\% due to a decrease in the number of savings banks\textsuperscript{24}. The Swedish bank market is dominated by four large banks holding approximately 85\% of the total assets on the market. These assets in turn amount to 360\% of the Swedish GDP, and this makes the Swedish bank market one of the largest in the world according to IMF (2013)\textsuperscript{25}. Nordea is the largest bank with assets value amounting to approximately 160\% of the economy’s GDP. At a regional level, the bank’s share of the total credit portfolio is 32\% that amounts to EUR 54.4bn\textsuperscript{26}. The four banks have a heavy exposure to the region as 80\% of the credit extended goes to firms in the other Nordic countries\textsuperscript{27}.

\textsuperscript{22} pp 14-16, Norges Bank Finansiell Stabilitet 2/2009, 2010
\textsuperscript{23} pp 10-11, IMF Norway Staff Report for the 2009 Article IV Consultation, 2010
\textsuperscript{24} Svenska Bankföreningen, http://www.swedishbankers.se/web/bf.nsf/all/3EB3F41103785D17C12576180044EBF3?open
\textsuperscript{25} p 10, IMF, Sweden Staff Report For the 2013 Article IV Consultation, 2014
\textsuperscript{26} p 49, IMF, Nordic Regional Report – Staff Report for the 2013 Cluster Consultation, 2013
\textsuperscript{27} p 10, IMF, Sweden Staff Report For the 2013 Article IV Consultation, 2014
As mentioned, the Swedish banks were not hit by the financial crisis to the extent that any of them was declared bankrupt. The only bank expiring problems was Swedbank due to its exposure to the Baltic countries but after the government had approved deposit guarantees and provided state loans, the rumours about a bank run disappeared from the market. An already existing deposit guarantee was doubled and extended to cover all types of deposits in order to avoid a bank run and stabilise the market.

3.3 Development in the Scandinavian Banks 2001-2014

The aim of this chapter is to provide an overview of the Scandinavian banks’ performance and development from 2001 to 2014. This section will not provide longer comments as this will be provided in the next section and the aim of this section is purely to visualise the varying development across the three bank sectors. In order to undertake a cross-market analysis, key ratios will be used. These ratios aim for capturing the banks stability, liquidity and performance. There are different types of risks associated with these three areas and it is important to understand them when analysing a financial institution. The primary risks for a bank are interest rate risk, insolvency risk, operational risk, market risk, liquidity risk and credit risk. However, the latter is considered to be the most important. It can be difficult to assess a bank’s risk in a risk oriented environment, and the ratios used in this section are just an indication of potential risks.

One limitation of the ratios is that they are dependent on the definition the institutions use internally to calculate this for their annual reports. Another limitation is that the pan-Nordic institutions’ ratios are based on their activities outside their domestic market.

A bank’s balance sheet differs from a non-financial institutions ditto as the assets typically have a longer maturity than the liabilities.

The two graphs below illustrate all the Scandinavian bank loans during the time period.

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28 p 13, IMF Sweden 2010 Article IV Consultation Staff Report, 2010
It is interesting to note that the highest lending growth is among the Swedish institutions, both among the individual banks and at an aggregated sector level. One explanation for this might be that the four Swedish institutions are large on all three markets, and might have been able to absorb more of the total loans at a regional level. The Swedish market also recovered at a higher pace than the Danish ditto, and the demand for loans from corporations and households picked up already in 2009. It is also worth mentioning, that the highest lending growth in Denmark was in the small to medium institutions, and this is not fully visualised in the aggregated sector as their total balances are small.

For the banks it is also important to have assets of high quality. The graphs below highlight the development in the institutions and sectors growth in total assets. Again, the highest growth pace is within the Swedish institutions and the explanations are in line with those provided for the loan growth. It is interesting to note that while the Norwegian banks’ asset level has been stable, the Danish dipped after the crisis. The explanation for this might have been the need to cover losses.
3.3.1 Profitability Ratios

These ratios enable a comparison across the three countries’ banks and visualises the institutions’ efficiency and profitability.

3.3.1.1 Return on Equity and Return on Assets

When analysing a bank's performance, it is important to see what return the bank is able to generate to shareholders and on its assets. These measurements have some weaknesses as it does not take into account differences in national taxes or large one-time losses or profits. Despite this, it is widely used ratio and gives an indication of the bank's performance.

This ratio is especially interesting for the shareholders as it indicates the institution’s ability to generate a positive return.\(^\text{29}\).

The return on assets is a profitability measurement showing the bank's profitability relative to its total assets.

\(^{29}\) http://www.investopedia.com/terms/r/returnonassets.asp
**Formula 3.3.1a Return on Assets**

\[
\text{Return on Assets (ROA)} = \frac{\text{Net Income before Extraordinary Items} - \text{Minority Interests}}{\text{Average Total Assets}}
\]

**Formula 3.3.1b Return on Equity**

\[
\text{Return on Equity (ROE)} = \frac{\text{Net Income} - \text{Preferred Dividends}}{\text{Average Total Common Equity}}
\]

**Formula 3.3.1c Return on Assets to Return on Equity**

\[
\text{Return on Equity to Assets on Equity} = \frac{\text{Return on Assets}}{\text{Return on Equity}}
\]

Source: Bloomberg

Figure 3.1.1a ROE to ROE Individual Banks and 3.1.1.1b ROE to ROE at a Country Level highlight the development in the Scandinavian banks, first in the individual institutions and second at an aggregated bank market level. These display the banks faced difficulties in creating returns on equity in ratio to their assets from mid-2007. It is interesting all banks have the same development, and it is driven by the increased cost of funding, change of regulations and lowered risk appetite. The Swedish banks have been able to generate a higher return on assets than both the Norwegian and Danish peers. It is interesting to note that the Danish bank sector on average has been able to generate a higher return than the Norwegian peers. As this ratio indicates the return the bank generates the shareholders, there is a willingness to have a ratio. At the same time, a higher ratio means higher risks in the balance sheet.

Figure 3.3.1.1a ROA to ROE Individual Banks

Source: Bloomberg
This ratio shall also be seen in comparison with the growth in total assets, which have grown at a high pace, making it more difficult to maintain high return to the shareholders.

### 3.3.1.2 Net Interest Margin

A bank’s largest profit driver is the lending rates. This measurement gives an indication of the bank’s ability to make investment decisions in comparison to its debt situation. If the ratio is negative, the bank has not been able to allocate its investments optimally as the expenses exceed the return\(^{30}\).

#### Formula 3.3.1.2 Net Interest Margin

\[
\text{Net Interest Margin} = \frac{\text{Net Interest Income} + \text{Other Investments and Asset Sales}}{\left(\text{Earnings Assets} + \text{Prior Year Earning Assets}\right) / 2}
\]

Source: Bloomberg

*Figure 3.3.1.2 Net Interest Margin Individual Banks* and *Figure 3.3.1.2b Net Interest Margin at a Country Level* reflects the development in the Scandinavian banks’ net interest margin. It is interesting to note that in the beginning of the period, the ratio is flat but quickly begins to decrease for all institutions.

Despite having the most stable banks in the region, the Swedish banks have the lowest net interest margin at an industry level. It might be driven by the high competition in the country which limits the bank’s ability to increase the interest. This is also reflected in *Figure 3.3.1.2a Net Interest Margin Individual Banks* where the individual Swedish banks are in the lower region of the chart.

---

3.3.2 Capital

It is important for a bank to have sufficient capital on their books according to the financial legislation. The aim of the capital is to cover unexpected losses, such as non-performing loans, and to ensure depositors security\(^ {31} \).

3.3.2.1 Common Equity Tier 1 Capital Ratio

This capital has the highest quality, and shall be a buffer to cover the risks taken by the bank. In order to calculate the ratio, an institution's capital is calculated against risk-weighted assets. These standards come from the BIS and an institution shall have a ratio above $8\%$\(^ {32} \). For commercial banks, Tier 1 capital is used and for savings banks, Tier Core capital is used.

---


**Formula 3.3.1.1 Tier 1 Capital Ratio**

\[
Tier \ 1 \ Capital \ Ratio = \frac{Tier \ 1 \ Capital}{Risk \ - \ weighted \ assets}
\]

*Source: Bloomberg*

It is interesting to note the individual banks follow the same pattern throughout the time period. At an aggregated level, the Swedish banks have had a higher Tier 1 ratio compared to its Scandinavian peers since 2007. One explanation for the shared increase in Tier 1 capital is the new regulation implemented requiring more capital to be held by the individual institutions. After the crisis all the larger banks but Handelsbanken issued new stocks and thereby boosted their Tier 1 ratio and this is also part of the explanation of the graphs below.

**Figure 3.3.1.1a Tier 1 Capital Ratio Individual Banks**

![Tier 1 Capital Ratio Individual Banks](Source: Bloomberg)

**Figure 3.3.1.1a Tier 1 Capital Ratio at Country Level**

![Tier 1 Capital Ratio at Country Level](Source: Bloomberg)
3.3.1 Credit Quality

A bank’s largest risk is the credit risk and the lending activity has a low liquidity. When lending money to clients, the bank expects a positive cash flow but must calculate with a certain percentage of the loan might default. Therefore it is important to have high quality assets on the books\(^{33}\).

3.3.1.1 Non-performing Loans

These loans can either be default, or close to be, and is a sum of money owed by the debtor to the bank. If the debtor begins to repay the loan, it becomes a re-performing loan. These loans can be sold by the bank to other institutions in order to reduce the risks on their books\(^{34}\). The ratio compares a bank’s non-performing loans to the total outstanding loans.

**Formula 3.3.1.1 Non-Performing Loans**

\[
\text{Non – Performing Loans to Total Loans} = \frac{\text{Non – performing loans}}{\text{Total Loans}}
\]

*Source: Bloomberg*

This is the ratio that visualises the differences in the three countries bank markets. Except for Jyske Bank, Figure 2.2a shows the banks had a low ratio of non-performing loans up to 2007. The problems begun slightly earlier for the Danish banks compared to the Norwegian or Swedish peers, as reflected in Figure 2.2b. However, Norway had a stable development throughout the period, with just a slight increase in 2007. It is interesting to note that Handelsbanken does not face an increase in their non-performing loans during the period, which can be compared to Danske Bank where the ratio was close to 10% at worst.

**Figure 3.3.1.1a Non-Performing Loans Individual Banks**


\(^{34}\) Non-performing loans, http://www.investopedia.com/terms/n/nonperformingloan.asp
Figure 3.3.1.1b Non-Performing Loans at a Country Level

Source: Bloomberg
4. WHAT HAS DRIVEN THE PERFORMANCE IN THE BANKS?

The aim of this section is to provide an overview of the drivers and factors behind the Scandinavian banks’ performance during the period 2001-2014.

Banks have been important for the economic growth in the Scandinavian region, both for households and corporations. Therefore it is important for the authorities to maintain a stable sector. The financial sector is large, both at a regional and domestic level, and it has become integrated due to the limited organic growth. This has led to a high level of competition among the institutions. Thus, as the largest institutions are active across the domestic borders, it could be expected that the three countries should have a similar development also after 2008. As this has not been the case, it is interesting to see if it is possible to identify the drivers and factors behind their market development. This sector will take both internal and external market factors into account while combining a top-down and bottom-up approach.

The macroeconomic environment has been supportive for the banks growth across the region during the first years of the time period analysed. Low interest rates and inflation combined with a high economic growth increased the demand for the banks products. In order to capture the macroeconomic development, six indicators have been chosen.

Even though the major institutions are active across the three markets, it is interesting to analyse the domestic bank markets and the conditions prevailing here for the institutions. As also the larger institutions have faced varying performance, the domestic domicile can be the driver behind. It is especially the integrated bank market structure and the institutions’ funding structure that will be of interest.

The corporate governance in the institutions is also considered to impact the banks’ performance. Due to the low cultural barriers in the region, it could be assumed that the corporate governance would be similar in the three countries. However, it is interesting to further review the ownership structures and internationalisation of the larger banks as this might drive the performance of the institutions.

Without clients, the banks would have any activity and it is therefore interesting to analyse the institutions’ client base. Both the households and the corporations will be taken into account as these have different relations with the banks, and varying impact on the credit risk. The following sections will follow the same structure; first the empirical research will be accounted for and the section will be wrapped up in analytical discussion.
4.1 Development in the Macroeconomic Environment

The aim of this chapter is to provide an overview of the development in a selected number of macroeconomic indicators.

According to Inter-American Development Bank, worsened macroeconomic conditions almost always precede a crisis in the banking sector. Any type of imbalance in the real economy can lead to insolvency in a bank due to its vulnerability to the external environment and illiquid balance sheets, but the macroeconomic policies in place determine the probability.

There are several ways, indirectly and directly, the macroeconomic environment is important for the bank’s performance and operations. First, it has an impact on the banks funding as an increased instability can lead to a depositors redeem their money as they might be afraid of losing it or the interbank market freezes due to lack of trust among the institutions. Second, it influences the bank clients’ possibility to repay their debt and the need for the services provided. Third, it can have an impact on the quality of the assets the banks have invested in or contribute to losses as the prices of the assets fall.35

The Scandinavian countries have had a similar macroeconomic development up to 2007. During this time the bank’s performance grew in tandem across the three markets, but after 2007, the synchronised growth stopped. It is therefore interesting to analyse the impact of the macroeconomics on the banks’ stability and results. Economic growth, low inflation and interest rate combined with growing export industries and domestic demand had a positive impact on the banking industry. The banks extended their balance sheets on the lending side to benefit from the increased client demand.

The following part of the section will look further into development of GDP, real foreign exchange rate, inflation, unemployment, and interest rates.

4.1.1 Gross Domestic Product (GDP)

The GDP reflects the value of all services and goods produced in an economy, including government spending, export, investments, public and private consumption.36

It provides an insight into the business cycles and there is a proved correlation between the economic development and the probability of defaulted loans. When the economy is growing, the risk is low but during recessions, as seen after 2008, the probability of default increases.37

The Scandinavian GDP is driven by exports of goods and services, and therefore the devel-

36 Definition of Gross Domestic Product (GDP) (http://www.investopedia.com/terms/g/gdp.asp)
37 p 10, Dietrich A, Wunderlin C, What drives the margins of mortgage loans? 2010
opment in this indicator is dependent on the global markets to a certain extent. Based on the improving global markets, the three economies saw an increase in their GDP during the years up to 2007.

**Figure 4.1.1 Growth in GDP per capita 2001-2014**

![GDP per capita chart](image_url)

Source: OECD

The Danish and Swedish GDP was driven by domestic demand up to 2007, but the export industry is also an import contributor to the growth. In Denmark, the shipping industry faced favourable conditions during this time. When these drivers slowed down in 2007, the economies GDP shrunk even though both countries’ indicators picked up again.

Norway’s growth in GDP has been based in the oil industry rather than any other sector. The country is Western Europe’s largest oil producer, and the GDP is more sensitive to movements in oil prices than the financial shocks seen in 2008.

### 4.1.2 Inflation

Inflation is when the price of goods and services increases in an economy, and is measured as a difference in the consumer price index (CPI). Monetary stability, having low inflation, is an important element in the Scandinavian countries due to their dependence on trade.

The inflation rate has an impact on a bank’s operations only if the operating expenses and wages increase at a higher rate than the inflation. If an institution has not forecasted an increase in the inflation rate, it can have a negative impact on the bank’s profitability.

Denmark operates with a fixed exchange rate policy (see Foreign Exchange Rates), and this impacts the central bank’s monetary tools in order to maintain price stability. Norway has an...
operational target for the inflation policy based in CPI that amounts to 2.5% per year since 2007\(^{44}\). The Swedish inflation target is set by *Act on Central Bank Actions*, and the interpretation made by the Swedish Central Bank is that CPI shall amount to 2%\(^{45}\).

**Figure 4.1.2 Growth in Inflation 2001-2014**

![Graph showing growth in inflation from 2001 to 2014 for Denmark, Norway, and Sweden.](source: Norden Statistical Bank)

In 2005, the Danish inflation started to grow at a steady rate due to increases in the prices of energy and food combined with increased imports and private consumption\(^{46}\). After 2008 the inflation picked up again, and in 2010 the Danish government implemented a tax reform that had a positive impact on the inflation. Increased unemployment and modest growth balanced the growth in energy prices also impacted the inflation\(^{47}\). Despite the growth in the Norwegian economy, the inflation was low due to falling import prices and increased domestic productivity and competition\(^{48}\). The peak in 2007 was due to surging commodity prices and overall wage growth combined with a thriving global economy where exports increased\(^{49}\). After 2008, the wage pressure fell due to the slowdown in the economy\(^{50}\) and transitory effects from volatile electricity prices combined with an appreciation in the exchange rate lowering the prices of imported goods\(^{51}\).

The Swedish inflation has been driven by a strong domestic purchasing power, both from corporations and households, up to the beginning of 2008\(^{52}\). Thereafter it was lowered due to

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\(^{45}\) Ekonomifakta, [http://www.ekonomifakta.se/sv/Fakta/Ekonomi/Finansiell-utveckling/Inflationen/](http://www.ekonomifakta.se/sv/Fakta/Ekonomi/Finansiell-utveckling/Inflationen/)

\(^{46}\) p 6, 10 and 26, IMF, *Denmark, Staff Report for the 2006 Article IV Consultation*, 2006

\(^{47}\) pp 12-15, Danske Bank, *Nordic Outlook 2008*


\(^{49}\) p 6, IMF, *Norway Staff Report for the 2013 Article IV Consultation*, 2013


\(^{51}\) pp 10-11, IMF *Norway 2011 Article IV Consultation Staff Report*, 2012

\(^{52}\) p 11, IMF, *Norway Staff Report for the 2013 Article IV Consultation*, 2013
the decline in the economic growth, and the impact of the appreciation in the foreign exchange movements. The lowered import prices also contributed to a low inflation rate.\textsuperscript{53}

4.1.3 Interest Rates

The interbank market is an important source of funding for the Scandinavian and European banks, and therefore its development is important for the banks' performance. During the first years, it became easier for the banks to finance their banking activities outside the interbank market and this explains the fall in the prices quoted for the four rates in 2004. In 2006 the financial environment begun to reverse and it is reflected in Figure 4.1.3.

**Figure 4.1.3 Interbank Overnight Rates 2001-2014**

In October 2008, the liquidity on the domestic markets froze due to reduced trust in the market and several large institutional defaults. The result was few players wanted to use this unsecured funding and a negative impact on the rates charged.

After 2008, the Danish and European banks followed the same patterns, and this is explained by the unstable market conditions in these economies. Sweden and Norway had a quick recovery from the recessions in 2008. From 2010 several Swedish and Norwegian banks choose to rely on the interbank market for funding which had a positive impact on these market rates.\textsuperscript{54}

\textsuperscript{53} P 20, Danske Bank Nordic Outlook 2008
\textsuperscript{54} pp 9-16, IMF Norway Staff Report for the 2009 Article IV Consultation, 2010
4.1.4 Foreign Exchange Rate

Foreign exchange refers to the market where currencies are exchanged, and is the price of exchanging one currency for another\textsuperscript{55}. For small open economies dependent on trade it is very important to have a stable foreign exchange rate as it affects inflation and the development in the real economy\textsuperscript{56}. The development in the foreign exchange rate impacts banks directly or indirectly. In the former situation, the banks have exposures or holds assets nominated in another currency. The indirect impact comes from the banks’ clients as their profitability might vary with the movements on the foreign exchange market\textsuperscript{57}. The Danish krone is pegged to the Euro at a central rate amounting to DKK 746.038 per EUR 100\textsuperscript{58}. Both Sweden and Norway operates with floating exchange rates, and the monetary actions performed by respective central bank aims for stable rates against the major currencies\textsuperscript{59}.

Figure 4.1.4 Effective Foreign Exchange Rates 2001-2014

\begin{center}
\includegraphics[width=\textwidth]{Figure414.png}
\end{center}

\textit{Source: Nordic Statistical Yearbook}

Small independent currencies had a weaker development during financial crisis\textsuperscript{60} as seen in Figure 4.14 Foreign Exchange Rates 2001-2014. Especially Sweden, most dependent on exporting goods of the three economies, had a volatile development during the crisis. During the years up to 2008, the pegged currency served the Danish economy well but after 2009 the country faced increased inflows which forced the Central Bank to apply several macroeconomic policies in order to defend the peg. According to IMF, the Danish krona

\textsuperscript{56} pp 54-57 Sveriges Riksbank, Monetary Policy Report July 2013, 2014
\textsuperscript{57} Federal Reserve Bank of San Francisco, Banks and Foreign Exchange Exposure, 1996
\textsuperscript{58} Danmarks Nationalbank, Kort om Penge og valutapolitik. [www.nationalbanken.dk](http://www.nationalbanken.dk)
\textsuperscript{59} p 6 IMF, Norway Staff Report for the 2013 Article IV Consultation, 2013
\textsuperscript{60} Ekonomifakta, [http://www.ekonomifakta.se/sv/Fakta/Ekonomia/Finansiell-utveckling/Vaxelkursutveckling/](http://www.ekonomifakta.se/sv/Fakta/Ekonomia/Finansiell-utveckling/Vaxelkursutveckling/)
could have appreciated with approximately 20% during this time period\textsuperscript{61}. The depreciation in the Norwegian krone in the end of the period was due to foreign investors selling off Norwegian assets post-Lehman in order to obtain liquidity in combination with falling oil prices\textsuperscript{62}. Swedish foreign exchange movements were driven by the development in the inflation as discussed.

4.1.5 Trade Balance

Balance of trade is the difference in value between goods and services imported into a country and the value of goods exported out from the country. Officially the balance of trade is separated into merchantised goods and services\textsuperscript{63}. The total trade, exports and imports, accounted for over 60\% of the GDP in the three countries (2012) and their main exports are highly specialised final goods and raw-material based goods\textsuperscript{64}. As the three countries are small open economies, it means that a large share of the banks’ corporate clients have exports and imports as a driver in their business area.

As seen in Figure 4.5 Trade Balance 2001-2014, the three Scandinavian countries had stable trade balances compared to the Eurozone. The three countries export and import balances have not been impacted by the financial crisis to the same extent as the Eurozone’s. One explanation for this is that the three countries had strong macroeconomic fundamentals allowing both imports and exports to pick up already in 2009 when the European countries suffered from weak state performance due to bailing out nonperforming loans.

Figure 4.1.5 Trade Balance 2001-2014

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure415.png}
\caption{Trade Balance 2001-2014}
\end{figure}

\textsuperscript{61}p 3, IMF, Denmark 2010 Article IV Consultation Staff Report, 2010
\textsuperscript{62}p 9, IMF Norway Staff Report for the 2009 Article IV Consultation, 2010
\textsuperscript{64}pp 6-8, IMF, Nordic Regional Report: Selected Issues 2013 Cluster Consultation, 2013
The three countries benefitted from the increased demand for their products, especially from the main trading partners. In 2007, the slow-down in the global economy had a negative impact on the economies exports and imports, and on average, the three countries lost market shares in the core export areas. Sweden and Norway recovered in the beginning of 2009, and especially the exports benefitted from the foreign exchange movements. Norway faced a decrease in their exports of oil and hydrocarbon products.65

4.1.6 Unemployment

The Scandinavian countries have a high share of public employment, and are well above the OECD average at approximately 18%. Norway has the highest proportion (30%) with Sweden just after (29%) and then Denmark (28%). This makes the labour markets stable and less sensitive to global movements as it is not affected to the same extent as the demand side.66

The unemployment rate has an impact on the banks' performance as an increase in the indicator will lead to a higher proportion of non-performing loans. Also a smaller increase in the unemployment can have a negative impact as the demand for new loans will decrease. Also the corporations can contribute negatively on the banks' performance if there is an increase in the unemployment if they see a falling demand for their products leading to reduced revenue. In this way it influences both the domestic and international banks in the region.67

The three Scandinavian countries have had a lower unemployment than the European average, as seen in Figure 4.6. In 2007-2008 there was an increase in the unemployment rate, and it is explained by weakening exports.

**Figure 4.1.6 Unemployment Rate 2001-2014**

![Unemployment Rate Graph](Source: Nordic Statistical Yearbook)

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65 Norden, Näringsliv och ekonomi, [www.norden.org](http://www.norden.org)
In 2001, the Danish economy was affected by the dot-com crisis and the declines in their exports, but the economy picked up quickly and in line with the economic growth the unemployment decreased steadily up to 2008 to historically low levels. The Danish labour market was hit severely by the financial crisis, and the increase of unemployed was due to the decline in the output as a consequence of the lowered demand for Danish exports. Norway had the lowest unemployment rate of the countries, and it is partly explained by their stronger public sector employment structure. The economy was not hit by the financial crisis as its Scandinavian neighbours, and the strong oil positions kept the labour market positive.

4.1.7 How Does the Macroeconomic Environment Impact the Banks?

The macroeconomic indicators are interesting for the commercial and savings banks, even though the type of institution might have an impact on its sensitivity to the various indicators. The Scandinavian countries had a similar development in the macroeconomic indicators but also bank's performance up to 2007. Hereafter the development varies and so do the bank's profitability. Norway and Sweden had a more stable development in the real economy, and as seen in the previous sector, they recovered from the recession after less than a year. The banks in these two economies had a stable development with no bankruptcies or defaulted institutions. Denmark, on the other hand, had a weaker development and was hit harder by the negative global development. Several banks of varying sizes defaulted and the following years were prevailed by defaults and mergers of financial institutions. Thus, the Norwegian and Swedish banks had a more favourable real economic environment and their clients did not have the same challenges as the Danish corporations and households did. However, the institutions are also dependent on their counterparties and clients’ performance as defaulted obligations will mean losses for the institution. Thus, it is not only the domestic macroeconomic development that is of importance, but their counterparties’ domestic domicile.

The GDP is interesting for both commercial and savings banks. It reflects the development in the real economy, and is therefore also an indication for the performance of the banks clients. A decline in the GDP can be an indication of reduced quality of the banks’ exposures, both to households and corporations; negative economic growth can lead to reduced domestic demand and productivity leading to worsened market conditions. The households reduced demand leads to negative profit for the corporations that in turn have a lower ability to repay their debt. It can also be an indication of reduced economic activity and thereby reduced de-

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68 IMF, Denmark 2010 Article IV Consultation Staff Report, 2010
69 IMF Norway 2011 Article IV Consultation Staff Report, 2012
mand for the banks services.
The Norwegian GDP had a strong development over the time analysed, and the financial sector has also been robust with no bank failures and lower impaired loans. It is important to remember that the economy is heavily dependent on oil compared to Denmark and Sweden. This means the Norwegian GDP is less sensitivity to the movements in the global markets but rather the oil market. It can indicate the Norwegian banks have a concentration risk to the oil industry, but during this period it had a positive impact on the banks performance.

Denmark and Sweden had a more volatile development in their GDP and follow each other during the entire time period. This is very interesting considering the varying development in the institutions’ performance. The development in the GDP can be seen as an indication of the performance of the banks underlying exposure, and this indicates that the banks should have a similar performance based on this indicator alone. One explanation for this not being the case can be the Swedish banks have been more successful in diversifying their client base. If the Danish banks have had a higher concentration to segments that were hit negatively by the financial crisis, it would face an increase in impaired loans and losses. It can also be that the underlying explanations of the GDP have been different in the two economies, despite the main drivers mentioned before. Even though the growth in GDP has been driven by exports and consumption in both economies, it can be that the composition of the GDP is different.

For the banks, this would mean that they underlying clients’ exposures vary and therefore the shared development in GDP has different impacts on the banks.

Volatile inflation has an impact on the prices of goods and services produced. Movements in the inflation can lead to unexpected losses for the banks; directly due to changes in the value of assets and indirectly for the corporations due to the increased operational expenses.

None of the countries had large movements in the inflation, but the Norwegian inflation had sharper peaks compared to Denmark and Sweden. The three countries had low inflation during the first years of the period which was beneficial for the banks operations and performance. Corporations could plan their expenses with low volatility estimations and it was easier for the banks to evaluate their credit score.

During the first years, the value of collaterals from counterparties was high while the losses on the financial activities low. This might lead to the banks became too generous with their credit as it seemed as if the stability of the producers and purchasing power of the households would remain unchanged for a long time period. When these conditions changed, it can have contributed negatively to the banks performance. For the Norwegian and Swedish banks it might have had a very low impact on the operations and performance as the average client
still had a high credit score. In Denmark, on the other hand, it had a negative impact as it further reduced the value of the assets held and the clients’ exposures at the same time as the demand for credit was reduced.

During the recession, the Danish inflation decreased more than the Norwegian and Swedish ditto. In 2009, the Danish inflation was half of the Swedish which means that the prices did not develop as fast in Denmark. If it would be possible to isolate the impact of the inflation on the banks, this would have meant an increased insecurity for the corporations and households. Deflation means that the products and services become cheaper and the consumption is reduced as the consumers understand their purchase can become cheaper tomorrow. It also has an impact on the banks interest margins as it means that the general cost level in the economy is falling. The inflation and interest rates have a high correlation, and it is not possible to analyse one without taking the other into consideration.

When the unemployment increases, there is a risk for a decrease in the credit quality and the percentage of impaired loans increases while the demand for new credit falls. Increased unemployment can lead to a general instability in the economy, meaning, it impacts the institutions from several angles.

Denmark’s low unemployment during the first years was positive for the banks. The demand for credit was positive; the corporations expanded following the positive macroeconomic environment and the households saw favourable terms of investment. The banks’ profits increased and the credit risk was low, and the banks expanded their portfolios. This also meant increased risks, but during the stable years up to 2008. The increase in unemployment in 2007-2008 had a negative impact on the Danish institutions, independent of size. This meant a reduction in the households’ ability to repay their debt, combined with a decrease in the demand for new credit; current clients faced problems with repaying debt while new clients were not interested in obtaining more debt. Sweden and Norway faced a moderate increase in their unemployment rates. Thus, the clients were not negatively hit by the global recession to the same extent as the Danish households. There was a temporary increase in the impaired loans, but this was not significant for their performance as will be further discussed in Scandinavian Households and Corporations. The banks are also affected by the development in the foreign exchange market. This goes for both the larger and smaller institutions. The larger institutions are exposed due to their close relationship with larger corporations and their own international structures. Domestic banks are also exposed through operations and their need for funding outside the home market.

The Scandinavian banks are dependent on the international markets and it is difficult for the
institutions to obtain funding in their domestic currencies. Thus, the banks and their clients are dependent on the global markets both from a financial and a goods perspective. Indirectly, this means, the institutions are also sensitive to the movements in the currencies but to a varying degree depending on the size of the institution. It might be more expensive for the smaller institutions to hedge their foreign exposures due to their size.

For the Danish banks, there is no conversion risk to the European financial institutions and the fixed exchange rate was beneficial for the institutions during the years up to the financial crisis. The stable institutions provided good investment opportunities across the region. This was also favourable for the export corporations, which also had an indirect positive impact on the banks performance. After 2008, the increased investments into the domestic sector had a negative impact on the institutions. The Central Bank had to maintain the peg using the policy tools available, namely adjusting the repo-rate, until it was negative. For the banks, this means decreased margins, i.e. profitability, and further pressure on the already stressed institutions. Further, it was negative for the banks operations as it further reduced the clients demand for banks services as the yield the banks can offer is lower. Thus, the clients start to look for investment opportunities providing better return.

The Swedish foreign exchange rate was more stable compared to the Norwegian krone during the years up to 2007. However, the development in the Norwegian krone was unchanged after 2008 and thus, the exchange rate had the same impact on the banks during the entire period. The depreciation in the Swedish krona was beneficial for the Swedish banks as it supported the exporters and was favourable for the corporations in general. Thus, the foreign exchange rate only had a positive impact on the Swedish banks.

As mentioned, the low inflation rate is linked to the development in the interest rate. When the interest rate falls, the banks margin decrease and this has a negative impact on the banks performance.

Up to 2007, the three economies had stable interest rates and this is linked to the development in the inflation and foreign exchange market. The cost for the financial institutions to use the interbank market decreased up to 2006 as the trust among the institutions was high at the same time as the banks had several opportunities to fund themselves in the market. In 2007, when the financial market distress became visible, the cost term of short term funding increased. This development made it difficult for the Danish banks to fund themselves in the market while the cost of funding increased. As seen the Danish institutions had a decline in their asset level which might indicate the institutions had to use their capital buffers to cover the losses. For some institutions the quality of the assets might not have been high enough to
cover unexpected losses and the bankruptcy was a consequence.
Neither the Norwegian nor the Swedish banks faced the same difficulties despite a similar
development in the short term interest rate. In these countries, interbank market recovered
less than a year after the liquidity crisis and the trust was back in the market.
One difference between the Scandinavian institutions can be that the Danish institutions re-
lied more on the interbank funding and the imbalances became larger in these institutions.
The Danish institutions were distressed from the real estate crisis, and the breakdown of the
interbank market might have been a trigger for further problems in already vulnerable institu-
tions. It might have been the trust among the institutions in the Danish market was lower, and
they could not monitor each other’s risks, and therefore it the funding problems hit the Dan-
ish banks harder. Maybe, if Swedbank had been declared bankrupt, the Swedish interbank
market had faced the same development with a banking crisis as a result.

Sub-Conclusion. Despite the similar development in the three countries macroeconomic de-
velopment, it can be concluded that the environment was more favourable for the Danish
banks up to 2008. The indicators seem to impact the banks performance, both directly and
indirectly. These indicators provide an explanation to both industry specific drivers and the
external environment. It is not possible to conclude that one would be a stronger driver than
the others, but these have to be seen at an aggregated basis. The real economy has a direct
and indirect impact on the institutions’ performance and it seems like the macroeconomic in-
dicators have been drivers behind the varying results in the Scandinavian banks.

4.2 THE BANK MARKET STRUCTURES
The aim of this chapter is to provide an overview of the bank market structure in the Scandi-
avonian economies, both at a domestic level and a pan-Nordic.
At a first glance, the three economies seem to have similar structures with the approximately
the same distribution among the institutions based on size. When looking at them into more
detail, some interesting differences become visible. The first years of the time period ana-
lysed was prevailed by foreign banks entering the markets, mergers and international expan-
sion. Those banks that today are known as pan-Nordic were formed during the first years of
the time period. It begun with domestic acquisitions but due to the limited domestic growth
opportunities, the banks started to look for new mergers in the other Scandinavian countries
and outside the region.
The Norwegian bank market is dominated by small savings banks, and the larger players, but
DNB and the two saving banks conglomerates, are other Scandinavian players. Sweden also has many small banks, but these have the structure of limited liability companies. The two countries have in common that the smaller institutions are part of umbrella organisations. In Sweden, the four largest players dominate the markets with respect to deposits and lending while the smaller players have insignificant market shares. In Denmark, there are a handful of large institutions and the smaller players have small market shares\textsuperscript{70}.

The Scandinavian bank market is characterised by high market concentration and competition among the institutions. Smaller institutions do not only compete with each other but also with the larger banks targeting the same client base. This leads to an integrated market structure where the risks are more easily spread around the institutions.

The banks dependence on funding from financial intermediaries and interbank market has decreased over the time. Since the financial crisis, the banks depend more on covered bonds issued in foreign currencies. This makes the banks more dependent on the global markets than each other, and financial shocks from dominating economies have more impact on the institution's stability than a domestic banks bankruptcy.

The sector will first analyse the integrated bank structure, and next the capital structure in the institutions.

4.2.1 The Scandinavian Bank Market – An Integrated Bank Market

The Scandinavian bank market is integrated and prevailed by a few large institutions and many smaller domestic players. Also the domestic players are integrated with each other through the ownership structures (see Corporate Governance) where the larger players own shares in the smaller institutions\textsuperscript{71}. One reason for the expansion of the institutions has been economies of scale; by acquiring banks, domestic and abroad, the institutions have been able to increase their operations and acquire new market shares without increased costs. These mergers were a trend in smaller economies during the first years after 2001 as a bank needs a certain size to function optimally. In Scandinavia, it led to an integrated market where the risks are spread more easily while at the same time the institutions can diversify their credit risks across three economies\textsuperscript{72}.

In the beginning of the 2000s, a handful of institutions began expanding its operations into the other Scandinavian countries. Now Danske Bank and Nordea offer retail services in the three countries while SEB, DNB, Handelsbanken and Swedbank provide product and ser-

\textsuperscript{70} pp 10-14, Nordic Competition Authorities, *Competition in Nordic Retail Banking*, 2006

\textsuperscript{71} p 3-7, 11, Nordic Central Banks, *Nordic Banking Structure*, 2006

\textsuperscript{72} pp 8-9 Gjedrem S, *Developments in the Nordic financial industry – a central banker’s perspective*, 2000
vices to the corporations across the region. The organic growth opportunities were limited and the banks needed to find new business operations in order to capitalise on the regional economic growth

**Figure 4.2.1.1 Market Shares of the Largest Banks in Scandinavia (2012)**

Larger banks in concentrated markets have better opportunities to diversify their operations and exposures. According to the World Bank, a higher market concentration makes the institutions less vulnerable to negative market development. It is also favourable for the clients as the competition reduces prices while increasing the number of service providers. At the same time, if one large institution is declared bankrupt, it will have a larger impact on the market stability than if a small player goes down

The Nordic banking groups have larger market shares in each domestic market than any other foreign players, making the institutions important in every country. For the domestic banks, higher concentration means limited diversification as the three countries are small economies and offer limited natural diversification in the banks portfolios. The Danish bank market is less concentrated than the Norwegian or Swedish, with a higher proportion of small independent market players.

Despite the trade and financial links in the region, IMF concludes the variation in market returns among the institutions is driven rather by variation in global excess return that the regional or country specific ditto. The IMF developed a factor model illustrating the patterns of contagion in the region and it aims for providing the drivers to risk premia in the countries. These premia are summarised in **Table 4.2.2.1 Estimated Variance Decomposed Risk Premia**.

The regional factor is the excess return on the value of a weighted Nordic portfolio, capturing the co-movements in return by taking the financial market structure into account while the global factor is the same but on an international portfolio. The numbers in the table is an av-

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73 p 3-7, 11, Nordic Central Banks, Nordic Banking Structure, 2006
75 p 11, Nordic Central Banks, Nordic Banking Structure, 2006
76 p 2, T Beck, A Demirguc-Kunt and R Levine, Bank Concentration and Crises, 2003
77 Risk premia is defined as the excess return earned beyond the risk free asset.
verage, and from the beginning of the time period, the global factor was the primary driver while after 2008, it is rather country specific even though the importance of the global environment is again increasing\(^77\).

### Table 4.2.1 Estimated Variance Decomposed Risk Premia 2001-2014

<table>
<thead>
<tr>
<th>Stock Market Return</th>
<th>Bond Market Return</th>
<th>Money Market Return</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Country</td>
<td>Regional</td>
</tr>
<tr>
<td>Denmark</td>
<td>15%</td>
<td>12%</td>
</tr>
<tr>
<td>Norway</td>
<td>16%</td>
<td>12%</td>
</tr>
<tr>
<td>Sweden</td>
<td>13%</td>
<td>12%</td>
</tr>
<tr>
<td>Average</td>
<td>15%</td>
<td>12%</td>
</tr>
</tbody>
</table>

Source: F Vitek, Spillovers to and from the Nordic Economies: A Macroeconometric Model Based Analysis

The content in Table 4.2.2.1 highlights the bank markets are not exposed only to each other due to their geographical location but also shared external exposure via trade links and funding structure. It also reflects the institutions dependence on the global markets. The importance of systemic economies is a reflection of the high direct financial exposures, also through the funding\(^78\).

#### 4.2.2 The Institutions’ Business Models

The Scandinavian banks have some common traits in their business models and strategies; interest rates, fee structure, convenience, product range, service level, importance of reputation and customer relationship. However, there are differences in the balance among those values\(^79\). As mentioned, the domestic Norwegian bank market is dominated by savings banks. These institutions’ business models vary from the commercial banks primarily based on the width of products and services offered. A pure savings bank has a limited product range focusing on core banking products. However, many of these institutions are part of an umbrella organisation and can offer a broader product range to their clients through a larger partner\(^80\).

There has been a trend to increase the product offerings to the clients. By holding several types of credit institutions within the group, the banks can capture market shares within several areas and thereby increase the customer loyalty. This has increased the competition in the institutions core activity, namely the banking services. At the same time, while the banks aim for providing a wider range of products and services, other types of financial institutions have

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\(^77\) p 2, Vitek F, Spillovers to and from the Nordic Economies: A Macroeconometric Model Based Analysis, 2013
\(^79\) Nordic Competition Authorities, Competition in Nordic Retail Banking, 2006
started to provide banking services. During the last ten years, non-financial institutions have begun to provide banking solutions especially to households, which further increased the competition in this market segment.

For the Tier 1 banks, the cross-border operations increased the profitability among the banks up to 2007 as it gave access to larger lending volumes and a more diversified client base. In this way, the banks could benefit from economies of scale as the institutions could offer the same products and services across the region. At the same time, the similar business models increased the competition for all the banks as the services and products offered were of a similar character. The competition was both based on the prices offered to clients and the ability to provide new products and solutions. The Tier 2 banks, on the other hand, increased their activities by expanding their portfolios and balance sheets.

Both the Tier 1 and the Tier 2 banks offer retail banking with local filias. This has allowed the banks to build close relationships with the local clients, both households and smaller corporations. It has been especially important to build trust and form personal relationships with the clients. This has been especially important in the Danish bank market. However, the increased importance of internet and mobile banking has changed the distribution channels for the banks. Therefore, the banks have closed down filials and focused on a non-personal client communication with especially retail clients.

After the 2008 crisis, the banks business models changed as liquidity decreased in the market and banks started to focus on reducing the risk in their operations. The banks focus on cost savings and increased return on equity. This goes for all banks, independent of size, and is not based in their home country conditions. One trend seen across the banks is the focus on innovative solutions with focus on IT driven products and a decrease in the personal relations in the banking.

4.2.3 The Capital Structure in the Banks

The capital structure and funding is important for the banks, and the events in 2008 proved the liquidity risks associated with this. Both the financial market and the individual institutions proved this, in Europe and Scandinavia.

The Scandinavian banks' balance sheets are similar, independent of the size of the institution,
but there are some differences highlighted in this section\textsuperscript{85}.

In order to understand the banks’ capital structure, it is good to have an understanding of the capital requirements and guidelines in the three countries. The Scandinavian authorities have implemented slightly different capital requirements and standards, but the three countries follows the European Union’s financial legislation and the Basel requirements. During the time period of this project, the Basel requirements have been amended three times but the core focus has always been risk monitoring and capital adequacy. The capital legislation will not be further discussed.

Basel I, launched in 1988 and updated in 1996, focused on capital adequacy and credit risk. It was now it was established that banks shall have 8% capital adequacy to cover the credit risks. The regulation was extended with Basel II due to new financial instruments and an increased risk monitoring in the banks. New with the Basel II was that the legislation was divided in three pillars; the minimum capital requirements, a supervisory review and disclosures. It aimed for providing increased economic stability and enhances the quality of the capital. The regulatory framework was implemented differently in the larger and smaller institutions, and domestic or international banks. Larger institutions could use a more advance method for calculating their risk weighted assets and capital adequacy ratios. This made the smaller and domestic institutions more vulnerable to negative movements in 2008 and the following recession\textsuperscript{86}. Despite this, several larger institutions in Europe and Scandinavia were declared bankrupt during the crisis. Therefore, the Basel III regulation was developed. It will be fully implemented 2019 focusing on higher capital adequacy, what type of capital banks are allowed to include in the capital buffer plus a change in the calculation of the risk weighted assets. It will also implement two new liquidity ratios\textsuperscript{87}.

When analysing the banks performance, it is also important to consider the institutions’ capital structure and funding. The banks are exposed to a broad range for risks when they lend money to corporations and households, and balancing assets and liabilities is of importance. This part will analyse the banks’ capital structure, and Figure 4.2.3.1 A Bank’s Capital Structure shows a bank’s capital structure.

\textsuperscript{86} pp 5-9, Lind, G, Basel II – nytt regelverk för bankkapital, 2005
\textsuperscript{87} Sveriges Riksbank, Den nya bankregleringen Basel II, 2011
Tier 1 capital is the common equity and hybrid capital, and it shall be at least 8% of the institution's risk weighted assets. This capital shall be able to obtain any losses that might occur in the bank's operations. Tier 2 capital is the subordinated debt, and can be divided into lower and upper Tier 2 capital. The former is perpetual, cumulative and the interest can be written down. Upper Tier 2 capital is more standard and cheap for the banks to issue.

The Scandinavian banks’ business models lead to a similar structure of funding, shared counterparties and exposure to each other through interbank market lending. From a domestic bank market perspective, the banks share the geographical and sector exposures which make them vulnerable to the same risks.88

There are some differences across the type of institution, i.e. commercial banks and savings banks. The commercial banks have a tendency to have more risky assets on their books even though many banks have restructured their balance sheets during the years after 2008. Also, these institutions have a short term funding and rely more on market funding than the savings banks. Another difference between the two types of institution is that their type operational differences are also reflected in their capital structure. The commercial banks, both domestic and pan-Nordic, have become financial groups offering a wide range of products in order to diversify their operations. This means they have a larger proportion of fixed assets compared to the savings banks. The institutions also differ on the liability side based on their organisa-

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88 p 17, Finansinspektionen, Stabiliteten i det finansiella systemet, 2014
tional structure. One interesting thing is that also the savings banks rely less on deposits as their primary source of funding. However, these institutions rely less on interbank market lending than the larger banks. During the years up to the financial crisis in 2008, the commercial banks financed themselves with more equity and showed tendencies to be willing to take on more risk. In Denmark, there has been a difference between the largest and the small to medium banks funding strategies. While the former banks have been more dependent on international long term funding, the latter institutions relied more on the interbank market and short term funding.

Due to the stable market environment, and access to funding, many Scandinavian banks had an imbalance between their assets and liabilities. The funding strategy was often short term, and little attention was paid to the risks from the institutions and supervisory agencies. During the years after the financial crisis, the average maturity of the funding has increased and the banks have turned to longer terms investments in order to reduce the short term risk. In order to stabilise the bank markets, the three governments offered capital injections during The Scandinavian banks are dependent on the international market and funding outside their home market. This goes for both the larger institutions, with pan-Nordic operations, and the domestic banks. Therefore the institutions are sensitive to negative movements in the global markets as seen in 2008. Approximately 40-60% of the banks funding is nominated in US-dollar or euro, and this pattern has not changed significantly after the financial crisis.

Scandinavian banks have a high loan to deposit ratio as shown in Figure 4.2.3.2 Top 20 Loan to Deposit Ratios. The graph shows the loan to deposit rates across 120 international banks where the largest Scandinavian banks stand out with their low dependence on deposits. There are several explanations to this phenomenon. First, the savings are driven by mutual funds, real estate and equity investments. Second the price competition has characterised the market during the first years of the time period leading to an increase in the product development and thereby increasing the savings alternatives. Another angle of this explanation is the competition made the price more attractive to the clients, increasing their demand for credit. Third, the money market interest was low and making this savings form less attractive.

It makes the banks more dependent on market and wholesale funding, as it drives the banks need for funding outside the traditional deposits.

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91 p 31, Finansinspektionen, Stabiliteten i det finansiella systemet, 2014
92 pp 5, 12, Nordic Central Banks, Nordic Banking Structure, 2006
Interbank market lending is another important source of funding for the banks, and due to the banks international exposures, it is interesting to see the correlation among the countries rate. This is highlighted in Table 4.2.3.1a and Table 4.2.3.1b.

Table 4.2.3.1a Correlation Matrix Overnight Rates 2001-2008

<table>
<thead>
<tr>
<th></th>
<th>EURIBOR 3M</th>
<th>CIBOR 3M</th>
<th>STIBOR 3M</th>
<th>NIBOR 3M</th>
</tr>
</thead>
<tbody>
<tr>
<td>EURIBOR 3M</td>
<td>1.000</td>
<td>0.974</td>
<td>0.843</td>
<td>0.781</td>
</tr>
<tr>
<td>CIBOR 3M</td>
<td>0.974</td>
<td>1.000</td>
<td>0.828</td>
<td>0.786</td>
</tr>
<tr>
<td>STIBOR 3M</td>
<td>0.843</td>
<td>0.828</td>
<td>1.000</td>
<td>0.916</td>
</tr>
<tr>
<td>NIBOR 3M</td>
<td>0.781</td>
<td>0.786</td>
<td>0.916</td>
<td>1.000</td>
</tr>
</tbody>
</table>

Source: Bloomberg

Table 4.2.3.1b Correlation Matrix Overnight Rates 2009-2014

<table>
<thead>
<tr>
<th></th>
<th>EURIBOR 3M</th>
<th>CIBOR 3M</th>
<th>STIBOR 3M</th>
<th>NIBOR 3M</th>
</tr>
</thead>
<tbody>
<tr>
<td>EURIBOR 3M</td>
<td>1.000</td>
<td>0.833</td>
<td>0.459</td>
<td>0.905</td>
</tr>
<tr>
<td>CIBOR 3M</td>
<td>0.833</td>
<td>1.000</td>
<td>-0.023</td>
<td>0.673</td>
</tr>
<tr>
<td>STIBOR 3M</td>
<td>0.459</td>
<td>-0.023</td>
<td>1.000</td>
<td>0.526</td>
</tr>
<tr>
<td>NIBOR 3M</td>
<td>0.905</td>
<td>0.673</td>
<td>0.526</td>
<td>1.000</td>
</tr>
</tbody>
</table>

Source: Bloomberg

It is interesting to note that the correlation between the EURIBOR and the CIBOR and STIBOR has decreased over the two cycles, while the correlation between NIBOR and EURIBOR has increased. This might be explained by the varying macroeconomic environment and thereby drivers for funding among the banks.
4.2.4 How Impacts the Domestic Bank Market Structure the Institutions Performance?

At a first glance, the three markets seem to have a similar structure; few larger institutions and many small players. When scratching on the surface, some interesting differences are revealed. Denmark's small banks are independent of each other with no co-operation while the smaller Norwegian and Swedish banks are part of umbrella structures. The Danish and Norwegian bank markets are also less concentrated than the Swedish ditto.

The Scandinavian bank market is integrated, and the largest institutions are present on the three markets. Therefore it could be assumed that these banks are exposed to the same risks and opportunities. This has not been the case and it is interesting to see why. It might be that the explanation to the varying performance lay outside the market structure. However, the institutions are so large players in their domestic market that its structure probably has an influence on the banks. For example, Danske Bank is the largest bank in Denmark and potential structural imperfections in the market will influence its performance. At the same time, Nordea is also large in Denmark but have performed well.

Compared to the Swedish and Norwegian bank market, the Danish ditto has not been through the same process of concentrating the market to fewer large players. All three countries have had mergers and acquisitions, but the Danish bank market has neither seen the same increase of foreign players like Norway nor the increased concentration as in Sweden. This means the structure of the Danish market has been unchanged to a large extent during the years up to the financial crisis. It also might mean the Danish institutions were more vulnerable and sensitive to negative market movements. The bank market structure encouraged to some extent the small institutions to increase their risks in order to be able to compete with the larger banks. It can be argued that the mergers taking place especially in Norway and Sweden during the first years made the bank markets more robust than the Danish ditto. Thus, the two markets were through corrections making the institutions stronger. In Denmark, there have been several mergers after the financial crisis with the aim for making the institutions stronger, even though this development has been more driven by increasing the institution’s ability to meet capital requirements rather than increasing its market share. This is interesting from an outlook perspective as the drivers behind the acquisition differ and it might lead to transactions not seen otherwise.

The correlation numbers among the three Scandinavian interbank markets has, on average, fallen after the financial crisis. This is interesting and there is no direct explanation for this in the bank’s funding strategies. The explanation might be a reflection of the development on
the European bank market combined with strong Scandinavian banks. While the correlation between EURIBOR and CIBOR or STIBOR has fallen, it has increased with the NIBOR. It can be because the funding patterns in the Norwegian bank market changed, or an increase of foreign banks in Norway that are more dependent on the European bank market than seen before the crisis. Another aspect is that the Danish interbank market broke down, and has still not recovered, during the autumn 2008. As this was just a temporary problem in Norway and Sweden, where the interbank markets recovered when the financial industry stabilised, this might impact the correlation.

Independent of size and domestic domicile, the institutions have low dependence on deposits. The major outlier is the Norwegian savings bank where deposits have played an important role during the time period, even though at a decreasing rate. On average, the Scandinavian institutions are rather dependent on international markets making them vulnerable to the negative development seen in 2008. As mentioned, the larger Scandinavian banks had limited sources of funding in the region, but the smaller to medium institutions are more dependent on other institutions for their funding. This was often short term, and it also made the institutions more dependent on the interbank. When the trust among the institutions disappeared in Denmark, it became difficult for the banks to obtain the needed liquidity. The smaller banks in Norway and Sweden are part of the umbrella organisations which might have made them more stable as these institutions had access to each other for funding. Even though this increased the concentration risk, as many banks have the same counterparties, it can also increase the trust and reliability.

However, the three economies faced positive inflows after 2008 when the banks became safe havens for foreign investments. This was positive for the institutions, even though international inflows are less stable than domestic as the former is more dependent on the macroeconomic development and especially foreign exchange movements. The Danish banks were attractive as there was no conversion risk while the Norwegian and Swedish banks had faced no bankruptcies. For the banks it means a stable source of funding and buyers of covered bonds, an important source of funding.

The main difference in the business models are not across the countries but rather the organisational structure. Thus the commercial banks operate with similar structures in the three countries. As mentioned, these banks have also expanded their product offerings and added new credit institutions into their group structures. This has intensified the competition in the region, and might also have contributed to further expansion among the institutions in order to maintain loyal clients. However, this is trend across the region and not country specific.
Therefore it seems like this is not a primary driver behind the institutions’ performance. It has a certain impact on the development, as the business model also indicates what type of funding and client base the bank can attract, but it cannot be significant considering the varying results across the three countries. If it was a significant driver, it is possible the difference in performance would be more significant across the business models (savings banks and commercial banks) rather than across the countries. Thus the business model probably has an indirect impact rather than a direct, but cannot be seen in isolation due to the similarities.

Sub-Conclusion. Despite the integrated market, the domestic domicile seems to influence the Scandinavian institutions performance; not only the small to medium banks but also the pan-Nordic institutions. The business models are similar, and cannot be concluded to be a significant driver in the institution’s performance even though it has an impact on the funding and average risk appetite in the institution. However, it seems like the underlying market structure, with concentrated Swedish and Norwegian markets, have been part of the performance in the domestic institutions.

4.3 The Corporate Governance of Scandinavian Banks

The aim of this chapter is to analyse the management structure of the financial institutions and see if there are differences that can explain the varying development among the Scandinavian institutions. It has been difficult to find information focused on the corporate governance in the Scandinavian banks, and some of the sources have a global focus. Corporate governance aims for protecting the depositors, shareholders and creditors. Sound governance will contribute to a stable bank that is able to allocate capital efficiently. On the other hand, negative governance can contribute to increased risks and building relationships that have a negative impact on the institution’s credit risk. Weak corporate governance and management control can have a negative impact of the financial stability.

According to the IMF, the corporate governance depends more on the national and cultural foundation than type of institution. However, the Scandinavian countries form a close region with a similar history, culture and traditions. This means the corporate governance should be similar in the three countries and the only difference being type of institution. The corporate governance of the Scandinavian banks is based on domestic and European financial legislation, company and accounting acts, stock exchange rules, and acts governing

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94 p 66, Andersen Verner, J, *Corporate Governance in the Danish Financial Sector*
the securities markets. The corporate governance acts in Scandinavia is a consequence of the harmonisation that has taken place in the region based on the integrated market structure. Despite some national differences, they resemble each other in the fundamental structures. Scandinavian banks are primarily either saving banks or universal banks, and the main difference between the two types of institutions is the ownership structure. This also leads to varying corporate governance, more across the size of the institution rather than the country of origin. Commercial banks are typically jointly owned with shareholders, and the larger, pan-Nordic institutions are also listed on the stock exchanges. The difference in the institutional structure also has an impact on the objection of the bank; commercial banks aim for profit maximisation while savings bank has several focus areas. In Denmark and Sweden a majority of the banks are limited liability companies while a large proportion of the Norwegian banks are savings banks.

The following part of the section will analyse the banks ownership structure, management structure and internationalisation strategies.

4.3.1 The Ownership Structure

The ownership structure of the banks is important for the corporate governance as it has an impact on the risks the bank takes and its stability.

The ownership structure is determined by the institutional organisation, i.e. either savings bank or limited liability companies. Independent of this, a common trait among the banks is that a fund, owned by the bank itself, is the majority owner. Thus a majority of the commercial banks control themselves. Two exceptions are SEB that is owned by the Wallenberg family who own approximately 25% of the institution through Investor AB and DNB where the Norwegian state has a large proportion of the shares.

An organisation, corporate or financial, can either have majority owners or spread ownership. In the first case a few or one shareholder has the majority of the stocks and therefore also the voting power. This also impacts on the decision power of the bank's management. There can be two situations; a controlling owner (holds more than 20%) has a majority of the votes or the decision power or a larger shareholder (more than 5% but less than 20%) where the management has influence on the decision making. The stakeholders in this type of institution

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95p 4, Nordic Corporate Governance Boards, Corporate Governance in the Nordic Countries, 2009
96Palmberg J, Corporate Governance in the Swedish Banking Sector, 2010
98Nordic Corporate Governance Boards, Corporate Governance in the Nordic Countries, 2009
99pp 2-4, Palmberg J, Corporate Governance in the Swedish Banking Sector, 2010
100Nordic Corporate Governance Boards, Corporate Governance in the Nordic Countries, 2009
can be referred to as concentrated stakeholders. These stakeholders aim for ensuring the management does not deviate from the targets and typically require more information in order to efficiently use their votes on strategic decisions. The upside with this type of stakeholders is that they use their influence to support the managerial decisions but they can also use their influence to increase their own benefits; there is a tendency for larger investors to use their voting power on the expense of smaller investors\textsuperscript{101}.

One important trait of the Scandinavian corporate governance is the active role of major investors. There is a clear separation between the shareholders and the management, and a majority of the investors choose to exercise their power on the general meetings but few choose to take on board responsibilities\textsuperscript{102}. According to Bøhren and Josefsen (2007), the concentrated ownership structure will have a positive impact on the economic performance due to their operational targets\textsuperscript{103}.

Swedish banks are prevailed by concentrated ownership structures with controlling families and strong controlling owners. Due to the concentrated bank market structure, the ownership concentration is also high. For example, the largest owner controls on average one fourth of the cash flow rights and almost two fifths of the voting rights\textsuperscript{104}. Also the stability in these controlling families and banks is significant in Sweden. According to Habbard, an important feature of the Swedish corporate governance of banks is the use of controlling enhancing mechanisms allowing the controlling entities to impose their influence on the banks strategies. Further, cross-ownership is more evident in the Swedish financial market than in the Danish or Norwegian\textsuperscript{105}.

For the organisations with spread ownership, no investor holds more than 5% of the shares. In this case, no owner is large enough to influence the management's decisions and this gives the management a larger freedom\textsuperscript{106}. The shareholders in this institution are referred to as diffuse shareholders and use their influence by exercising their voting power even though their size limits their corporate control. These smaller shareholders typically lack the relevant experience and do not ask for information, and therefore, have limited opportunities to impact the managerial decisions and strategies implemented\textsuperscript{107}. One important trait of Scandinavian corporate governance is protection of the minority shareholders by reducing the larger inves-

\textsuperscript{101} p 5, Levine R, The Corporate Governance of Banks: A Concise Discussion of Concepts and Evidence, 2004
\textsuperscript{102} Nordic Corporate Governance Boards, Corporate Governance in the Nordic Countries, 2009
\textsuperscript{104} p 13, Palmberg I, Corporate Governance in the Swedish Banking Sector, 2010
\textsuperscript{105} p 10, Habbard P, Corporate Governance in Sweden – An international trade union perspective, 2008
\textsuperscript{106} Nordic Corporate Governance Boards, Corporate Governance in the Nordic Countries, 2009
\textsuperscript{107} p 5, Levine R, The Corporate Governance of Banks: A Concise Discussion of Concepts and Evidence, 2004
Danish banks are characterised by spread ownership structure and diffuse shareholders. In 2007, just 7% of the listed banks had a majority shareholder and 34% a majority shareholder among the owners. According to Raaballe and Bachman (2008), this gives the management freedom to take their own interests into account, especially compensation and bonus schemes, by increasing the bank's risks by expanding the portfolios and accept lower credit clients.

In Norway, where the market is dominated by savings banks, and the ownership structure is different. Here the banks are governed by funds and no direct shareholders. Thus the management has direct control of the bank but at the same time the object of the institution varies from the commercial banks. In these institutions, the stakeholders are also the employees and clients. According to Bøhren and Josefsen (2007), these institutions with no direct owners have a lower return but less aggressive growth and lower risks on their books.

One interesting feature when discussing the ownership structure of Scandinavian banks is the government intervention in the market. Both the Norwegian and Swedish governments have held larger positions in the pan-Nordic institutions as seen in Figure 4.3.1.1 Scandinavian Government-Bank Linkages. These ownership positions are partly a result of the financial crisis in the beginning of the 1990s where the governments decided to support the financial institutions by taking over control of the institution. For example the Swedish government has sold off some of its shares in Nordea during the recent years.

**Figure 4.3.1.1 Scandinavian Government-Bank Linkages**

![Graph showing government ownership in Scandinavian banks](source: IMF Nordic Regional Report Selected Issues 2013)

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108 Nordic Corporate Governance Boards, Corporate Governance in the Nordic Countries, 2009
The Danish government does not directly hold any shares of neither domestic nor international banks. Up to the financial crisis, the banks were left to the market forces but in October 2008 the private sector and government founded the public limited company Financial Stability. The aim of the company was to maintain the financial stability in the economy by overtaking troubled assets from defaulted banks and unwind its activities\textsuperscript{112}.

Another interesting ownership feature is that the institutions ownership in to each other. Picture X.Y only highlights the largest institutions bank-to-bank ownership, but this pattern is also visible on the domestic market level and through the banks’ funding via covered bond issuances and the interbank market. This contributes to the integrated bank market (see The Bank Market Structure) and a similar corporate governance structure across the institutions independent of country and type of institution.

\textbf{Figure 4.3.1.2 Scandinavian Bank-to-Bank Ownership}


Thus, despite the cultural similarities, the three countries have varying ownership structures based on their bank market structure despite the integrated market.

4.3.2 The Impact of the Management Structure

It could be argued that there is no difference for the management of a bank and a corporation but there are some differences in the type of company that is important to consider with respect to corporate governance. First, banks have more stakeholders than a non-financial institution. Second, banks operations are more complex and can change rapidly compared to a corporation. Third, banks are important for the financial stability and manage both corporations and households money\textsuperscript{113}. Fourth, banks is capital structure is different from corpora-

\textsuperscript{112} Finansiel Stabilitet, [https://www.finansielstabilitet.dk/Default.aspx?ID=750](https://www.finansielstabilitet.dk/Default.aspx?ID=750)

\textsuperscript{113} p 3, Mehran H, Morrison A, Shapiro J, Corporate Governance and Banks: What Have We Learned from the Financial Crisis?, 2011
tions; banks have little equity in relation to debt and the liabilities are in form of deposits while the assets have longer to maturity. This creates an imbalance in the balance sheet and can become a problem from the bank in a market environment as seen in 2007-2008\textsuperscript{114}. Fifth, banks are heavily regulated and in Scandinavia, the governments are shareholders in some of the largest institutions in the markets. Sixth, the banks operate with information asymmetry where it is difficult for creditors and shareholders to fully obtain an understanding of the banks risks and bad loans books\textsuperscript{115}.

It has been difficult to find research focused on Scandinavian management, and especially in the banks. Therefore it is difficult to analyse if the management style impacts the institution's performance. This would have been interesting to review as the three countries are considered to be culturally similar, but with some differences in their labour markets, i.e. protection of the employees and hire-and-fire policies that can influence management.

For a bank's management, there has been a change in the complexity of the decisions during the time period analysed in the project. First, during this time, the banks have expanded their product ranges and services provided. The institutions, domestic and international, have moved out from the traditional banking activities and into other credit distribution areas. This goes especially for the Danish and Swedish banks where the markets are dominated by financial groups and limited liability companies. Second, the models and technique used to monitor the new products and services are complex and have not worked satisfying during the recent years. Third, this implies and increased level of knowledge and experience imposed on the bank's management\textsuperscript{116}.

Raaballe and Bechmann (2008) accused the management of Danish banks for the weak performance following the events in 2008. According to their research the ownership structure, where 67% of the banks are not listed, combined with the management's willingness to build up risk in order to increase profits have been problematic\textsuperscript{117}. The same analysis is available for neither Norway nor Sweden, and it is therefore difficult to verify how the management style impact on the banks’ performance during booms and busts.

\textsuperscript{114} p 5, 7 Macey J R, O’Hara M, \textit{The Corporate Governance of Banks}, 2003
\textsuperscript{115} pp 3, 8 Levine R, \textit{The Corporate Governance of Banks: A Concise Discussion of Concepts and Evidence}, 2004
\textsuperscript{116} p 2, Mehran H, Morrison A, Shapiro J, \textit{Corporate Governance and Banks: What Have We Learned from the Financial Crisis?}, 2011
\textsuperscript{117} p 7, Raaballe J, Bechmann K L, \textit{Danske banker og finanskrisen}, 2008
4.3.3 Pan-Nordic Institutions’ Growth and Internationalisation

It is interesting to look further into the larger institution’s international strategies and how they have grown outside their domestic markets. There are several explanations for the internationalisation. First, it is a consequence of the Scandinavian companies expanding activities where the banks have chosen to follow their activities118. Second, it has been a question of diversifying operations and spread risk across industries and geographies, even though the region is similar from a cultural and trade perspective. Third, it has been part of a strategy where the institutions want to reduce foreign banks’ competition in the market. Fourth, by expanding their operations, the banks can reach new clients without increasing operations but benefit from economies of scale119. Despite the benefits for the banks it also means an increased risk as an increasing proportion of the revenue is obtained outside the core market and thereby more difficult to monitor from the group’s head quarter120. The benefits exceed the risk, and the cross-border operations make the institutions stable and improve profit.

The banks’ investment banking divisions have a global presence in order to be able to support global companies in various markets. In this context, DNB and Danske Bank are the exceptions where the Swedish banks have followed approximately the same strategies. DNB has Norway as its core market, and their international activities are based on fishing and energy sectors. It has a leading position within international ship finance, but, otherwise the institution has a limited international presence for its banking activities.

Danske Bank had an expanding strategy from mid-1990s where the institution acquired banks in Germany, Sweden, Poland and Norway. At the same time, the bank also established filials in the Nordic countries. The institution also bought three institutions in 2005 and 2006; Northern Bank and National Irish in Ireland and Sampo Bank in Finland. The latter acquisition gave Danske Bank exposure in the Baltics and Russia121. Also Jyske Bank and Sydbank have operations outside Denmark, primarily focused on Scandinavia.

The Swedish banks expanded in the mid-1990s, especially to the Baltics. Actually, it is only Svenska Handelsbanken that was not present in the region. The Swedish banks internationalisation strategy has been to acquire smaller units and increase the local activities by using capital from the core markets122.

118 pp 70-2, Riksbanken, Svenska bankers internationella expansion, 2002
119 p 8, Gjedrem S, Developments in the Nordic financial industry – a central banker’s perspective, 2000
120 pp 70-76, Riksbanken, Svenska bankers internationella expansion, 2002
121 p 8, Gjedrem S, Developments in the Nordic financial industry – a central banker’s perspective, 2000
122 pp 70-76, Riksbanken, Svenska bankers internationella expansion, 2002
4.3.4 What Is the Impact of the Institutions’ Corporate Governance?

The corporate governance is important to consider when analysing the banks varying performance. It has an impact on the decision making process in the bank and in the end, the level of risk the bank is willing to have on the books. A more prudent run bank will have less upside in the booms but also less downside in the bad times. Therefore the management can have incentives to increase the risks, and thereby the profit, during the good times in order to increase their own wealth.

The pan-Nordic banks do not only own share in each other but also in the smaller domestic institutions. It could be argued that this integrated market structure would lead to a more aligned corporate governance and thereby also management of the institutions. Therefore it is interesting to note this is not the case. One explanation for this can be the bank market structure and the differences in the organisational structure seen in the three countries. This has an impact on the ownership structure and in the end the bank's performance.

It is interesting to note the country difference in terms of government ownership of the banks. Denmark does not own any shares in a financial institution but has let the market govern itself from this perspective. Norway has chosen to own shares in all the major banks present in the economy, also those with a foreign domicile, and not only DNB. Sweden is in between with a smaller ownership in Nordea. It is, however, interesting to note that the Norwegian government has decided to have a passive management in the bank. The government is thus not directly involved in the daily operations of DNB despite its large stakeholder share. There are both pros and cons for the institutions where the government has decided to own shares. The benefit is the reduced risk the bank might be enforced to have on the books due to the government ownership imposing a more prudent management style. This becomes negative in booms where the bank cannot fully take part of the growth in the market and profit from higher yield investments and depositors. In the downturn on the other hand, the lower level of risk means the institution is less impacted by the negative development. This leads to more stable banks, but with lower profit. However, as mentioned, the Norwegian commercial banks, DNB included, shows a higher profit than the savings banks. Another benefit for these banks is that the government support proves the institution's stability and it can finance itself to a lower cost. Thus, despite a negative market development, other institutions are willing to provide funding as they assume the government will not let an institution they own go down. This is possible even though the Norwegian state does not own majority positions, and especially evident for DNB, where the government has a significant position.
The Danish bank market is prevailed by smaller institutions with diffuse shareholders. This means less external control, and as mentioned, a majority of the managements has influence on the bank through the funds owning the institution. This implies that the ownership structure allows more risk in the institutions in order for the management to improve their own compensation. The Nordic corporate governance aims for protecting the smaller investors, but in this case, it can be that these stakeholders lack the necessary experience and information to question the institution's strategy. By increasing the bank's credit risk, by increasing the portfolio, and also the banks product and services offered, the bank can increase its market share. This is, of course, beneficial when the market is in balance but as seen during the recession, it can turn out that the management lacked the relevant information to evaluate the strategies. When the ownership structure does not imply more control than it has been in Denmark, before and after 2008, it opens for a more vulnerable financial market. Of course the bank management will always be fired for bad decisions, but, it can still cost the bank its stability and as seen in Denmark, its survival.

The Norwegian bank market is prevailed by many smaller savings banks and two commercial banks. This implies a different ownership structure than in the Danish or Swedish banks. In the savings banks, the stakeholders have both a direct and indirect interest of the institution's stability. This means implies a more prudent management, with the benefits and costs following this. In the end it means a more stable institution that is less able to provide the stakeholders with a higher profit but stable performance. This, combined with the notable state presence as stakeholder, speaks for a more stable financial market.

The Swedish bank market is prevailed by a concentrated bank market structure with large, active stakeholders. There is stability in the ownership structure, which also caters for experience and knowledge among the shareholders. The larger shareholders are also more prone to intervene with the strategies, and do not leave the management to the decision making as seen in the Danish institutions. This should reduce the risk among the institutions but supporting the performance as the risks might be more balanced.

It seems like the ownership structure of the institutions are important for the institutions' performance and stability. The Danish structure seems to have favoured the banks during the good years, while it might have held the Norwegian and Swedish institutions back. On the other hand, it supported both these institutions during the recession where the banks had to rely on their own quality.

It is more difficult to analyse the impact of the management due to the lack of research. The cultural similarities prevail the region imply there should be a similar management structure
among the three countries. However, the ownership structure gives an indication of the management’s freedom. Compared to Denmark, both the Norwegian and Swedish management are controlled to a larger extent. These banks are dominated by large owners with strong insight and are willing to influence the strategy and decision making. In Denmark, the management in a majority of the institutions has been isolated from large owners and had a high degree of freedom. During the boom, the management of these banks lacked someone who applied the brakes and questioned the development in these banks. As seen in section X, the banks that did not survive the financial turmoil in 2008 had a high concentration in their mortgage portfolio and a lending pace above the sector average. It is also interesting to note that the small to medium banks had a higher lending growth than the largest banks in Denmark. This might be explained by more controlling entities in the latter institution, and these did not approve of the increased risks. In the smaller banks where the management had a higher degree of freedom, the higher profit and thereby compensation, seems to have been too tempting. It can also be that the freedom in these institutions appealed a certain type of management that were willing to take on risks.

Therefore, it is interesting to play with the thought, that the management structure in Denmark has had a direct negative impact on the institutions’ performance.

In Norway, there are three types of management based on the types of banks; DNB, the limited liability savings banks included in the umbrella organisations and the independent savings banks. As mentioned, the government ownership in DNB might have an impact on the management and they might be less prone to take on risks. It cannot be excluded that the bank, due to its close link to the government, has only attracted management with a lower taste for risk. The same might go for the savings banks where the management is also employees and risk their own private wealth if the bank is underperforming. A majority of the Norwegian and Swedish smaller institutions are part of umbrella organisations. This might impact the management and reduce the risks taken in the organisation. These institutions are independent to some extent, but they are surely also regulated from the “mother bank” setting the level of risk and management freedom. Even though no research has been undertaken on this area, it is interesting to think that these structures are contagious across the organisation. This means, the smaller institutions inherit the large bank’s behaviour in order to smooth the operations and stability, which is what benefit the smaller banks.

Swedish banks have a concentrated ownership compared to the Danish and Norwegian peers. These owners like insights into the organisation, decisions and strategy planning. This leaves the management with less freedom, especially compared to the Danish small to medium insti-
tutions. It has a positive impact on the banks risks and concentration to various client segments as the owners of the organisation has no interest in increasing the risks. Thus, despite the lack of research on this field, it seems like the management in the various institutions have had an impact on the performance of the Scandinavian banks. The more freedom the management had the higher risks and exposure to segments performing well during the boom but were hit hard in the crisis. In the banks where the owners had more control, the growth was moderate but the profit stable also during the downturn. It seems like the management in the larger banks are similar across the three countries, and the difference is among the small to medium banks. If playing with the thought, that both Norway and Sweden were hit by falling house prices, which was primarily what hurt the Danish banks, it seems unlikely it would have the same effect on the banks as it did in Denmark. The limited freedom for the management combined with the strong owner control in these banks indicates the institutions are more robust and stable.

Sub-Conclusion. Due to the limited information on the Scandinavian bank management, it is difficult to conclude on its importance for the performance. From a corporate governance perspective, the ownership structure seems to be the primarily driver. This impacts the freedom of the management and the risks the bank is willing to undertake. The spread ownership in Denmark led to few controlling bodies and the banks could increase their lending without being questioned. In Norway and Sweden, the owners have a better insight in the operations and can thereby reduce the risks taken. Thus, it seems like the ownership structure is important for the banks’ performance.

4.4 Scandinavian Households and Corporations

The aim of this section is to provide an overview of the Scandinavian bank clients, both corporations and households.

During the first years of the time period, the macroeconomics supported the Scandinavian bank clients and benefitted the banking industry that saw an increase in the lending and profits. This goes across the sectors in the three countries. The low inflation, economic growth, increasing GDP and low interest rates made the clients confident with obtaining credit to make their investments, such as buying a home or increasing the corporation’s activities. Banks have traditionally been important sources of credit, but the development on the financial market have opened new doors for the clients to obtain loans and savings products. In

123 p 8, Nordic Central Banks, Nordic Banking Structure, 2006
Norway, for example, the banks account for 80% of the credit obtained by the households and corporations. Debt is natural in the society as both households and corporations need to finance their consumption and investments without having the capital. The credit risk is the largest risk for the Scandinavian institutions, and at the same time, the lending volume has a direct impact on the institutions’ performance and funding.\(^{124}\)

Due to the liberalisation of the financial and securities markets the clients’ dependence on banks for credit has decreased. Instead of deposits, equity and fund investments have become important savings alternatives. This is positive for both the corporations and households; the first group can obtain a broader range of financing alternatives while the second group gets access to more savings alternatives. The Scandinavian bank market is, as mentioned, concentrated with a high degree of competition across the region. This is positive for the clients as the prices are lower and the product development high.

According to BIS, the corporate client base has driven the bank market structures. Denmark is characterised by agriculture, transport and shipping, Norway has its fish and oil while Sweden has an exporting manufacturing industry and natural resources with correlated export industries such as pulp. These companies activities have driven the development of the banks as it is has been important for the institutions to follow the corporations on their international expansion. The competition about large corporate clients has primarily been among the largest banks and international players as the smaller institutions do not have the ability to provide complex financial solutions and a broad product range. Instead, the smaller institutions compete for smaller corporations and households.\(^{125}\)

As seen in Figure 3.3.1a (see page 24), there was a significant difference in the three countries’ non-performing loans. It is not possible to get an aggregated overview of the Danish households and corporations share of bad loans. Therefore, it is not possible to make a comparison across the three countries what type of loans has been driving the numbers in the graph. It is not possible to identify what clients attracted most attention from the banks during the good years up to 2007. However, the Danish Central bank’s research shows a small to medium Danish bank had a 50% larger credit risk than an average large bank. The Danish Central Bank’s analysis shows it was especially the medium size banks that faced the highest lending growth. For example in 2005, the medium Danish banks had a lending pace exceeding the largest institutions with approximately 7%. During the same time, the pattern of lending exceeds the deposit growth which made the banks more vulnerable to the market devel-

\(^{124}\) p 37, Sveriges Riksbank, *Finansiell Stabilitet 2010:2*, 2011

\(^{125}\) pp 8-9, Gjedrem S, *Developments in the Nordic financial industry – a central banker’s perspective*, 2000
development. For the banks, this means increased risk as the banks might experience cost of funding\textsuperscript{126}. The same information is not available from the Norwegian and Swedish authorities. Therefore it is not possible to make a comparison across the three countries. This section is divided into two where the first part will focus on the households’ relations to the banks and the second part will analyse the corporations’ bank relations.

4.4.1 Scandinavian households’ and the banks

The aim of this chapter is to provide an overview of the Scandinavian households’ impact on the banks performance.

A bank’s activities focused on households are usually referred to as retail banking and the primary services are payment intermediation, payment card services, savings and lending. When the banks compete about the Scandinavian households, they focus on interest rates, fee level, product range, service levels, convenience, reputation and customer relations. During the recent years, the internet and mobile banking services also have become important\textsuperscript{127}. On average, the Scandinavian households have a low probability of default and the credit risk is low. After 2008, the Danish households weakened following the falling house prices combined with a fall in stock prices, an important source for savings. It was especially the small to medium banks that were hit by this development with a negative impact on profits\textsuperscript{128}. Scandinavian households’ primary debt is related to real estate investments and mortgage loans. Households’ level of debt is important for the economy’s recovery; the more debt the households accumulate, the weaker the recovery process will be as the households’ ability to repay might decrease during the recession\textsuperscript{129}. The large financial sector supports the high level of debt in the region\textsuperscript{130} but high levels of debt in the society means higher risk for the institutions and the financial stability. According to Moody’s and the Swedish FSA, it is not the level of debt that is important. Moody’s sees it from the institution perspective where the banks’ ability to refinance the debt is most important but also the households’ interest rate sensitivity. Further, the households’ level of assets is also of importance as it tells something about the client’s robustness\textsuperscript{131}. The Scandinavian households have a lower ratio of assets in relation to their disposable income compared to the OECD average, but at the same time, the households’ total assets are higher than their gross liabilities. One drawback is these are illiq-

\textsuperscript{126} pp 19-24, 45, Danmarks Nationalbank, Finansiel Stabilitet 2.halvår 2008, 2009
\textsuperscript{127} pp10-1, Nordic Competition Authorities, Competition in Nordic Retail Banking, 2006
\textsuperscript{128} pp 18-19, Danmarks Nationalbank, Finansiel Stabilitet 2.halvår 2008, 2009
\textsuperscript{129} IMF, Household Debt Holds Back Recoveries but Restructuring Can Help, 2012
\textsuperscript{130} p 7, IMF, Nordic Regional Report: Selected Issues 2013 Cluster Consultation, 2013
\textsuperscript{131} pp 3-4, Moodys, Household debt in Scandinavia. Household debt and Moody’s ratings. 2014
uid; non-financial assets are usually property while the financial ditto are pension and fund savings, which cannot be accessed without incurring additional taxation. This means the assets cannot readily be used to pay back debt their current debt and lower their gross liabilities. However, if pension assets are excluded, net liquid assets as share of disposable income are low in Sweden and negative in both Denmark and Norway\textsuperscript{132}. From the Swedish FSA’s perspective it is rather the reasons behind the debt that is of importance. If the level of debt is driven by slow factors, it will not have an impact on the banks performance in a stressed market environment\textsuperscript{133}. Figure 4.4.1.1 highlights the development in the level of households’ debt in relation to their disposable income.

**Figure 4.4.1.1 Level of Household Debt in Relation to Disposable Income**

Scandinavian households primarily use their debt for financing their home and independent of the size of the institution, this will be the primary relationship with the client\textsuperscript{134}. The Scandinavian savings do not come accrue to the banks in the shape of deposits, but rather their asset management and pension savings arms. As discussed, this has contributed to the banks expanding their operations and capture as much as possible of the households’ financial needs\textsuperscript{135}. For the clients, the increased competition in the bank markets has been positive. It has not only driven the product development and reduced prices, but it also contributes to the market stability. A single institution impacts less on the average credit distribution in the market the more players there are\textsuperscript{136}.

A correction of the house market prices can have a negative impact on the banks operations,

\textsuperscript{133} p 39, Finansinspektionen, Stabiliteten i det finansiella systemet, 2014  
\textsuperscript{135} p 6 Gjedrem S, Developments in the Nordic financial industry – a central banker’s perspective, 2000  
\textsuperscript{136} p 13, Norges Bank, Finansiell Stabilitet 1:2011, 2011
indirectly and directly, as it can impact investment, growth and consumption. It will also have an impact on banks’ lending as it can lead to disruption in funding and have negative balance sheet effects. Falling house prices are also correlated with increased bank losses as the households tend to have the real estate property as the collateral for the loans. Institutions with a high mortgage concentration can also risk an increase in the funding costs. Therefore the financial institutions’ capacity to absorb falls in the real estate prices is very important. According to the IMF, a country will face a longer and deeper recession in an advanced economy if it coincides with credit crunches and house price busts.

During the period 1995-2007, the house prices across the region grew in tandem with approximately 120%. The household debt increased by more than 60% during 2000-2011, indicating a correlation between rising house prices and increased private debt. Especially Denmark faced a strong growth in private debt, and the level of household debt is among the highest in the OECD with debt being more than 300% of the disposable income. In Norway, the disposable income grew at the same pace as the house prices but it was outpaced in Sweden. Swedish and Danish house prices increased with approximately 65% during the years 2000-2007, in Norway, the pace was almost 10% lower. Danish disposable income growth was only 20% while the highest pace was in Norway with almost 50%. Sweden is in between with a growth pace amounting to 40%.

The Scandinavian countries begun to practice more liberal use of flexible and interest-only loans during the first years of the 21st century. According to the IMF, this has contributed to an increasing demand, and prices, for houses, in Denmark. It is interesting to note that the Danish banks that were taken over by Financial Stability during 2008-2009, had a mortgage exposure up to four times above the sector average. These institutions also had a higher exposure to the construction sector. In addition, their lending growth was up to five times the sector average.

*Figure 4.4.1.2 Real House Prices* shows the development in real house prices in Scandinavia plus the US. It is interesting to note how the countries house prices rise in tandem up to 2007, but thereafter there is no co-movement. For example, Norway had a 10% growth while Denmark had a fall of 30% but Sweden had the same growth rate also after 2007. One explanation for this is that the Norwegian and Swedish banks could continue to fund new mortgage lending. In addition, during the years up to the recession, there was a low growth in real es-

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tate investments meaning the demand and supply in the house market was balanced\textsuperscript{140}. It is worth mentioning that there was a large spread among the Danish institutions; while some of the small to medium banks had a negative growth, other continued to see positive growth also during 2007-2008\footnote{141}.

**Figure 4.4.1.2 Real House Prices**

![Real House Prices Graph](image)

*Source: Nordic Regional Report: Selected Issues 2013 Cluster Consultation 13/275*

These numbers are seen on aggregated basis for each country, but the capital regions have seen the largest increases, and falls, in the house prices. Denmark had a real estate crisis in 2007 and this had a negative impact on the bank’s performance, and especially the smaller institutions with a domestic focus.

After 2008 more and more domestic Norwegian banks created their own mortgage institutions and these took over the mortgage exposures. As seen in the graph, the Norwegian house prices have been increasing steadily since 1994 and entail a large credit risk for the institutions. Therefore the development in the house prices is important for the stability in the market. Approximately 80\% of the households’ have their home as the collateral for their loans\footnote{142}.

Denmark has a large, developed, mortgage bond system and the banks have been active players in this market. When the prices corrected, this had a negative impact on these bonds\footnote{143}.

\textsuperscript{140} p 38, Sveriges Riksbank, *Finansiell Stabilitet 2010:2*, 2011
\textsuperscript{141} p 24, Danmarks Nationalbank, *Finansiel Stabilitet 2.halvår 2008*, 2009
\textsuperscript{143} pp 19-25, Danmarks Nationalbank, *Finansiel Stabilitet 2.halvår 2008*, 2009
4.4.2 Scandinavian corporations and the banks

The aim of this chapter is to provide an overview of the Scandinavian corporations’, from small to international, relations with the banks.

It has been difficult to find empirical research and statistics on the corporations relations with their banks. The central banks and data bases do not provide detailed information on the sectors the banks are exposed to and how it influences the banks’ performance. The information was especially difficult to obtain for the Norwegian and Swedish sectors, maybe because these remained stable and did not attract the same attention as the Danish peers.

Almost all Scandinavian banks have both households and corporations as clients, even though the size of the client will drive the product and services provided. For the banks, exposure to corporations implies a bigger credit event risk than lending money to households where the loss per loan is relative low. Before 2008, when the macroeconomic environment was supportive, the banks were more generous with their corporate exposures\textsuperscript{144}. Compared to the Danish and Swedish market, the Norwegian domestic institutions have a low exposure to corporations. Instead it is the foreign institutions, including the larger Swedish and Danish banks, attracting these clients\textsuperscript{145}. For the pan-Nordic banks, the credit losses on corporate loans primary came from their Danish books. Neither the Norwegian nor the Swedish corporations faced the same downturn and difficulties, and there was a limited increase in the number of bankruptcies in the two countries. For the banks, it means there was a limited increase in the defaulted corporate loans\textsuperscript{146}.

The industry structure has also been a driver in the development of the bank market; Denmark, Norway and Sweden are small open economies with strong export sectors. Therefore, the weakening export market had a negative impact on the corporations and thereby also the bank’s performance due to higher risks associated with this lending activity. In Denmark, the negative development on the real house estate market contributed negatively on the growth in especially the construction sector as it was affected by the real estate crisis\textsuperscript{147}.

It was primarily the small to medium corporations that were hit by the crisis, and there are three explanations to this development. First, during the boom years, many new companies were established and these are usually more vulnerable to negative market development. Second, the companies rely to a higher degree on debt finance. Third, the both the domestic purchasing power and the export industry has declined so that the companies face a negative

\textsuperscript{144} pp 3-8 Gjedrem S, *Developments in the Nordic financial industry – a central banker’s perspective*, 2000
\textsuperscript{145} P 13, Norges Bank, *Finansiell Stabilitet 1:2011, 2012*
\textsuperscript{146} p 40, Sveriges Riksbank, *Finansiell Stabilitet 2010:2*, 2011
\textsuperscript{147} p 18, Danmarks Nationalbank, *Finansiel Stabilitet 2.halvår 2008, 2009*
revenue. It has been especially the small to medium banks that have been exposed to these corporations during the years 2002-2007. During this time period, the smaller institutions’ exposure have been approximately twice the large institutions, expect for 2005-2006 where it was more than three times larger. Also the Norwegian Central Bank acknowledges that the institutions’ non-performing loans were from corporations. Especially the institutions focused on shipping and industrial corporations faced an increase in their bad loans. For Norway this is unusual as the shipping industry is considered very stable and this industry is often below average in the defaulted loans statistics. However, as the markets stabilised in the beginning of 2009 the defaulted loans decreased which lowered the bank’s credit risk.

According to the IMF, the macroeconomic environment and financial chocks have been drivers for the cyclical output in the three countries. As mentioned, the three countries are small open economies with export to output ratios of approximately 50%. This export is primarily driven by close geographical bilateral trade agreements, especially within the Nordic region and Eurozone. Thus, when the demand declined from the trade partners and the domestic market, it harmed the Scandinavian corporations significantly.

The Danish and Swedish economies are dominated by few large and many small to medium companies. In Sweden, the latter category prevails by suppliers to the larger companies. A majority of the Scandinavian corporations are small to medium enterprises with less than fifty employees. In Sweden, the hundred largest corporations have 70% of the export shares. The industrial sector is dominated by corporations with zero to 250 employees, and these account for approximately 99% of the registered companies. Of these, the majority, more than 70%, have no more employees but the owner. There is a difference in these two types of corporations’ relationship with their bank. Small to medium enterprises are more reliant on debt financing while the larger companies can issue corporate bonds and obtain equity financing. Therefore, the smaller corporations entail a larger credit risk. These companies attracted the banks during the years up to 2007, but since then, the institutions have allocated less capital to them due to increased risk and capital cost due to new regulation.

In 2011 the corporate sector had high debt in percentage of GDP; Sweden the highest with 150% and Denmark the lowest with approximately 100%.

150 Pp 11-14, Vittek F, Spillovers to and from the Nordic Economies: A Macroeconometric Model Based Analysis, 2013
151 p 3, Gjedrem S, Developments in the Nordic financial industry – a central banker’s perspective, 2000
152 Export Kredit Nämnden, Årsredovisning 2011, 2011
153 Finansrådet, Tal og Fakta – Bankerne og vækst
4.4.3 What Is the Impact of Scandinavian Clients?

The largest risk for the banks is the credit risk coming from the lending portfolio. Domestic banks primarily have households and smaller corporations as clients, while the pan-Nordic institutions also cover larger corporations and high-net worth clients. Scandinavian households are safe, and have gained increased interest from the banks after the financial crisis. These clients traditionally have a low ratio of defaulted loans, and have been able to obtain credit to favourable prices during the years up to 2008. Despite the high saving ratios in the region, the banks have high deposits to loans ratios. This increases the risks for the institutions, as discussed, and it is not only the level of debt that can make the institutions more vulnerable to negative market movements but also how the institutions fund their lending portfolios. As discussed, the Danish banks have financed themselves with short-term liabilities to a higher extent than the Norwegian and Swedish peers. At the same time, the deposits are long-term assets creating imbalances in their balance sheets. For the banks it means increased risks. When the institutions faced an increase in non-performing loans it was negative for the banks as the imbalances grew.

Due to the low deposit ratios, the banks have increased their operations in order to maintain their client relationships. As the households tend to save in equity and funds, this services are also provided by the banks. At the same time, many banks have increased their operations to become a group structure covering everything from savings to insurance via payment services. These services are also provided to the corporations. By providing a broad range of products, the banks can tie the clients closer by providing cheaper prices the more the client purchase from the bank. This makes the clients more loyal, even if the bank performs bad or gets a bad reputation. It can also be expensive for the clients to change bank, especially if the institution has been able to provide a broad range of services. At the same time, the clients are price sensitive and can be aware of this strategy which leads to more than one bank covers the same client. The banks aim for increasing their market shares by attracting clients. These institutions do not only compete with their product development and service offerings, but also reputation and prices. During the good years leading up to the financial crisis, there were no bank failures in Scandinavia and the institutions competed on prices.

For households, the largest relationship with the bank is when financing their home. This is the same across the three countries, but in Denmark it has been a particular source of growth for the small to medium institutions. As seen, in the defaulted institutions a higher proportion of the lending books were concentrated on mortgage exposures. During the boom, when the
house prices and demand grew at a higher pace than disposable income, these institutions saw a good opportunity for increasing their profit. It was a low risk concentration, and the probability of defaulted loans was low. If few clients would be unable to repay their debt, it would not impact the institution's performance. The problems did not become visible until a larger proportion of the households could not pay. It can also be that the low probability of default made the institutions approve loans to clients with a low credit score that would not otherwise attract them. During the good years, when the unemployment rate was low, a majority of the clients were able to repay their debt and thereby the risk was considered to be low. It can also be that the risk models used by in order to evaluate the credit risks were not accurate, not used correctly in the organisation or the management could not evaluate the results. This can lead to the increase in their lending portfolio seen in the small to medium institutions with low quality collateral.

The low bank concentration in the Danish bank market leaves the domestic banks with low competition. Their primary competition comes from the larger and pan-Nordic institutions. The local presence can be positive but at the same time, these institutions operate with higher expenses as they cannot operate with economies of scale. At the same time, they need to be able to provide the same products and services as the larger institutions as the close relationship is not enough to compete with. As seen, the Danish banks have also closed down filials during the years after the crisis, and increased their focus on the online services which indicates the clients demand a new model of coverage.

The Norwegian and Swedish smaller banks benefit from the economies of scale as they can use the services provided by the umbrella organisation. Instead of developing this internally, they can access a broad range of services that can attract the clients. Even though they might pay a fee to the umbrella organisation for this, it will still be cheaper than having the employees internally or buy it from an outside provider as the Danish banks might do.

In Norway and Sweden, the house prices have grown in tandem with the disposable income and therefore the households have not been forced to loan as much as the Danish peers in order to be able to afford a home. This makes both the households and institutions less vulnerable to negative market movements and potential price drops. During the time frame analysed in this project, neither the Norwegian nor the Swedish house prices have declined, but there is a future risk for the banks if they continue to expand their mortgage books.

The domestic banks cover small corporations while the larger institutions have the resources to cover also the largest companies. By having a more complex product and service range, the pan-Nordic banks can follow the international companies also at a global scale. Therefore
the larger banks can diversify their operations both across sectors and geography, not only in the region but also outside. At the same time, the small to medium banks can only cover smaller organisations requiring less complex services. This goes also for the Norwegian and Swedish institutions that are part of the umbrella organisation as these institutions, despite the co-operation, are too small to attract people with the right experience and knowledge to advice the largest corporations. It might be that the small to medium banks in Denmark felt less freedom when they wanted to increase their domestic market shares. During the years from 2001 to 2007, the Danish economy boomed and many corporations also wanted to benefit from the improved environment. Therefore, there was a combination of many new organisations and expansion of current operations. Both needed bank services, from venture capital to advice on the financial planning. A smaller institution with ambitious growth plans might not want to turn down this client as there was a positive future cash flow. Again the probability of default was low among the corporations, even though higher than among the households. However, higher risks mean higher return and if the new corporation or expansion was successful, the bank would benefit from increased credit demand. Thus, the management might decide the pros exceed the cons. It can also be, as with the households, the risk models were not accurate as these were rather new due to the progressive product development.

Can it be that the Norwegian and Swedish banks were more prudent in their corporate lending portfolio? Or were the Danish banks hit harder as the construction sector, closely linked to the real estate market, slowed down at a faster pace than anticipated? The three countries are small open economies, and the industries are dependent on the global market development. There are limited natural diversification opportunities for the banks, even for the pan-Nordic institutions. However, the economic market structures differ among the three countries and the Swedish and Norwegian trade was hit to a lower extent than the Danish ditto.

For the banks this means the weakening environment for the corporations was temporary, and the non-performing loans decline. As the Danish banks had higher concentration in their books, these institutions were more sensitive to the decline in the demand for the goods and in the end their clients' services. Again, the Danish domestic banks faced lower competitions in their local markets and it can have been tempting to increase the lending to the corporations as this would have a positive impact on the results.

It can also be that the small to medium banks in Norway and Sweden to a larger extent have mature corporations as clients. These are not as sensitive as new organisations to negative market movements. The companies are also less dependent on bank debt, and their relationship to the bank might be different than a new corporation. This can contribute positively to
the non-performing loans statistics.
At the same time, DNB is focused on shipping, an industry with higher than normal defaulted loans. Despite this, the bank did not face extraordinary high non-performing loan ratio. The explanation for this might be that the institution might have a lower risk, letting the foreign players take the risky clients, and being more prudent in their lending portfolio.

Sub-conclusion. The households and corporations have had an impact on the banks performance, both directly and indirectly. For the Danish institutions, the house prices seem to be the largest source of losses. As neither Norway nor Sweden faced the same development, the households seem to contribute positively only. On the corporate side, it has been the Danish organisations that have been the driver behind the losses. Thus, the domestic Norwegian and Swedish banks have not seen an increase in their credit risk as their corporate exposure remains stable.
5. CONCLUDING DISCUSSION

There is not one explanation behind the performance in the Scandinavian banks, and the impact of the drivers might also vary across the size of the institutions. Instead, it seems like the explanations are linked to each other.

The Scandinavian bank sector is large in relation to the GDP and the six largest institutions have significant market shares across the markets. Thus, it could be concluded the pan-Nordic institutions should have the same development, and the difference would rather be with respect to size or business model. Instead, the primary driver seems to be found in the institution’s domestic domicile.

The macroeconomic development has been important for the Scandinavian banks, both before and after the financial crisis. As mentioned, the low inflation, stable interest rates, and economic growth was beneficial for both the households and corporations. These clients became more confident with financing themselves with credit during the first years of the crisis. It seems to have been primarily the Danish clients that indebted themselves during this time, even though, both Norway and Sweden have high debt ratios in the private sector. Despite the increased demand for credit, the possibilities for organic growth at the domestic markets have been limited and the institutions we know as pan-Nordic today were all formed during these first years. This growth was supported by the mentioned supportive macroeconomic indicators.

The macroeconomic indicators provide an explanation to both industry specific drivers and the external environment, but cannot be seen in isolation from the other explanations identified in the project. Further, it is not possible to conclude that one indicator would be a stronger driver than the others, but these have to be seen at an aggregated basis. For example, the foreign exchange rate, inflation and interest rate movements are closely linked to each other but impact the banks’ performance in various ways. Thus, the real economy has a direct and indirect impact on the institutions’ performance and it seems like the macroeconomic indicators have been drivers behind the varying results in the Scandinavian banks.

Despite the integrated market, the domestic domicile seems to influence the Scandinavian institutions performance; not only the small to medium banks but also the pan-Nordic institutions. This is interesting as one might think these institutions would be too large across the markets to be vulnerable to one market. However, part of the explanation might be that they are so large players in their home markets that structural weaknesses influence. The business models are similar, and cannot be concluded to be a significant driver in the institution’s per-
formance. Having said this, it is worth mentioning the influence the business model has on the funding structures. The more stable Norwegian savings banks are funded with long-term liquid capital while the Danish small to medium banks were exposed to each other through interbank market lending. When the short-term funding froze, the Danish institutions had more risk on their books, and their capital was of a lower quality leading to a liquidity crisis. The domestic market structures seem similar at the first glance, few large and many small players, but their internal organisation differs. While the Norwegian and Swedish institutions are part of umbrella organisations, the Danish banks are independent players. This led to a less concentrated Danish market, but it seems like the concentration was beneficial for its Scandinavian peers. With fewer competitors, the banks can diversify their operations and client base to a larger extent and thereby reducing their risks. Even though the Norwegian and Swedish smaller banks also just cover their local market, the umbrella structure allows a diversification through the group structure. In addition, they can benefit from product development and a broader range of services than the Danish peers.

Taking the integrated market, funding and business models into account at an aggregated level, it seems like the market structure has been a driver in the varying performance among the institutions. Due to the limited information on the Scandinavian bank management, it is difficult to conclude on its importance for the performance. From a corporate governance perspective, the ownership structure seems to be the primarily driver. This impacts the freedom of the management and the risks the bank is willing to undertake. The spread ownership in Denmark led to few controlling bodies and the banks could increase their lending without being questioned. In Norway and Sweden, the owners have a better insight in the daily operations and can thereby monitor the risks taken. Thus, it seems like the ownership structure is important for the banks’ performance.

The households and corporations have had an impact on the banks performance, both directly and indirectly. For the Danish institutions, it is the house prices that have been the largest source of losses. As neither Norway nor Sweden faced the same development, the households seem to contribute positively only. On the corporate side, it has been the Danish organisations that have been the driver behind the losses. Again, the domestic Norwegian and Swedish banks have not seen an increase in their credit risk as their corporate exposure remains stable. Thus, taking all these drivers and explanations into account it seems like the Danish banks have been more willing to take on risks during the good years and thereby these institutions were hit harder compared to the Scandinavian peers when the markets turned.
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