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The Capital Structure of Swedish banks

- Developments after a financial crisis

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Abstract

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Title: The Capital Structure of Swedish Banks

Background and problem: This study investigates the effects of the financial crisis of 2007-2008, a crisis partly caused by mortgage backed securities. Banks had a large part in the developments taking place in the years after the outbreak of the crisis in 2007, as many banks had an excessively low capital base, involving too much risk in its businesses. The bankruptcy of Lehman Brothers and other crises of American banks caused the ripples of the crisis to spread throughout the market, and in 2009 difficulties hit the international banking sector. Changes can be seen in the management of banks; however there are still questions regarding the stability of the banking sector. This study will investigate the changes in capital structure and liquidity that can be found throughout and after the financial crisis.

Aim of study: The aim of the study is to understand what the changes made in capital structure and liquidity of banks would mean for the stability and trust. This is seen through the perspective of the financial crisis of 2007-2008, investigating the changes that have been made and the motivation behind them.

Methodology: The study was done with a qualitative method, using two techniques; interviews and source analysis. In this study, the largest four banks in Sweden have been investigated, Handelsbanken, Nordea, SEB and Swedbank. From each of these banks, a representative have been selected from the Investor Relation section, as an individual in this position have the appropriate overview and knowledge of the bank to provide the information needed for this study. In the source analysis financial reports from 2007-2008 have been utilised.

Analysis and conclusion: The financial crisis affected the banks differently, depending on the markets of expansion. Excessive risk-taking has been found, where one bank expanded aggressively into new markets and did not appreciate the risks on these new markets. CEO compensation and risk seeking boards are factors that might have caused such behaviour. All of the banks have made noticeable changes to their capital structure, increasing it annually, accompanied by a risk-reduction movement in their assets to improve the stability in most of the banks. The new regulation's focus on both quality and quantity is in accordance with the views that are expressed in the framework. The banks have altered their goals to levels several per cent above the regulations, in contrast to before the crisis when they were often as close as possible. The impact of the new liquidity regulations has been limited, as the banks continue to work with their internal measures. The banks have all changed their view of capital ratio and liquidity, where many of the banks have doubled the amount of these posts and now find these measures to be both beneficial and a way to gain trust and stability.

Keywords: Basel Accords, Basel Committee, Capital structure, Financial crisis, Liquidity, Management Control.

Table of Contents

1. Background and Problem Discussion	1
1. 1 Aim of Study	2
2. Frame of References.....	3
2.1 The Basel Committee	3
2.2 Banking Regulation.....	4
2.3 Global Financial Crisis.....	5
2.4 Management	6
2.5 Capital Structure.....	6
2.6 Liquidity	7
2.7 Theoretical Outline.....	10
3. Methodology	12
3.1 Research Approach	12
3.2 Selection	12
3.3 Data Collection.....	13
3.3.1 Financial Reports.....	13
3.3.2 Interviews	13
3.3.3 Frame of References.....	14
3.4 Credibility.....	14
3.5 Delimitations	15
4. Results	16
4.1 Interviewee Introduction	16
4.2 Handelsbanken	16
4.2.1 Interview Response	16
4.2.2 Annual reports	16
4.3 Nordea	18
4.3.1 Interview Response	20
4.3.2 Annual Reports.....	22
4.4 Skandinaviska Enskilda Banken (SEB)	24
4.4.1 Interview Response	24
4.4.2 Annual Reports.....	25
4.5 Swedbank	26
4.5.1 Interview Response	27
4.5.2 Annual Reports.....	27
5. Analysis	30
5.1 Banking Regulation.....	30
5.2 Global Financial Crisis.....	30

5.3 Management	31
5.4 Capital Structure.....	31
5.5 Liquidity	33
6. Conclusion.....	35
6.1 Further Research	36
7. References	37
Appendix I; Figures.....	40
Appendix II; Interviews	40

1. Background and Problem Discussion

The financial crisis of 2007-2008 had a great impact on banks through the mortgage backed securities which had undergone excessive securitization. These assets made the banks' capital position even weaker than it already was, as the assets did not live up to the returns that had been promised. The credit-rating agencies did not investigate these assets, and many banks and other institutions, as well as companies, trusted these overly positively rated mortgage bonds, which gave them a big hole in their balance sheets when the truth was revealed. The banking sector had a serious crisis closing in, and it was not ready for a test of financial strength during that time. Pre-crisis leveraging was very common, which meant that at the start of the financial crisis the banks did not have a capital base close to stable levels. Instead, the capital base was reduced to the lowest amount possible for the sake of increasing the leverage and to make the bank more attractive for investments.

Many banks operated to a high-risk involved strategy, perhaps sometimes not considered as overly risky. But as the financial crisis hit the industry, these risks were made visible. The following developments lead up to the bankruptcy and crises of many banks, first in America, with the ripples in the market caused by this development reaching the whole international market in a few months' time. This led to a discussion of how the banks manage themselves, and handle their financing and capital structure, which will be the focus of this paper. How banks managed their businesses will be investigated, which in many cases meant a very high debt-equity ratio and a low liquidity buffer on the limits of the banks internal system. This development caused many to speak for another harsh regulation of the banking market (Dewatripont et al, 2010, p. 3). The balance sheet did not receive the attention it needed, and many risks were overlooked in the years leading up to the financial crisis. This caused a turbulence not seen for a very long time, forcing the various countries to stabilise their banks with their taxpayers' money, something that has caused a severe distrust of the banking sector.

While this extreme high risk-high return way of banking has changed, it is still important to measure the actions taken and if this has actually reduced the risk and converted the capital structure and liquidity of the banking business. The banking industry has received much of attention after the financial crisis, with many new regulatory changes, and the pressure to stay liquid and have a stable capital ratio is more important than ever. This movement has been brought up partly because the banking sector got part of the blame for the financial crisis, with for example the bankruptcy of Lehman Brothers. The bankruptcy augmented the ongoing crisis, pulling the world economy further into recession. This study will question whether banks have taken an active position in improving the stability after 2007 and 2008, trying to change the earlier risk-filled environment. Other recent developments in the banking business to improve banking, either from regulatory institutions or states, will be discussed. If this approach is applicable, did the changes come from within the bank or did pressure from institutions and perhaps even the governments ensuring the safety of the banks in the various countries cause these changes?

This study includes the four largest Swedish banks, Nordea, SEB, Swedbank and Handelsbanken, as these banks has 75 % of the market in Sweden (Swedish bankers' association, 2013). The effects that the financial crisis has had on the view of capital structure within the banks, as well as how their financial strategy evolved after the changes in the banking sector, will be investigated. The process of the possible change of view concerning capital structure and liquidity from 2007 until now in 2013 will be investigated. If there is a visible change, what changes has been made through these years. In addition to this, whether the current outlook on capital structure and liquidity has changed to a more risk-averse way of conducting business will be included in the paper. Furthermore, the challenges that the banks have faced after the crisis, and whether they have achieved the goals which they might have set up to handle the pressure on the banking business as a whole will be looked into. In the occurrence of changes that has been implemented by the banks after the financial crisis by the Swedish banks, the development and implementation of these changes will be reviewed.

“To what extent did the financial crisis affect the Swedish banking business?”

“If the financial crisis caused any changes, how did the banks adjust to these changes?”

“What were the banks' responses to the revised banking regulation?”

“Is there a difference in the view of capital structure and liquidity within the Swedish banks?”

1. 1 Aim of Study

The aim of this study is to increase our understanding of what changes in the capital structure and liquidity of banks would mean for the stability and trust in the banking business and what in reality have been done after an event such as international financial crisis. How the view of capital structure have changed, and if no change can be perceived why nothing has changed. The study will investigate the motivation behind these actions, and what can be understood from the alterations made in the banking business.

2. Frame of References

In this section available research contributing to the analysis will be reviewed. The section will start with an introduction to the banking regulation from the Basel Committee and its Accords, with the effects and impression of this regulation concluding this chapter. Following this chapter research concerning the global financial crisis of 2007-2008 and the following developments will be reviewed. Banking management in relation to the financial crisis and possible relations to the trigger of this crisis is focus of the next chapter. After this the main subject of investigation, capital structure and the research is reviewed. Lastly the theories available concerning liquidity of the banks concludes the section.

2.1 The Basel Committee

The Basel Committee was formed in 1974 by Governors of central banks. It has grown to include 27 countries, and the Chairman of the committee is the governor of the Swedish Riksbank Stefan Ingves (History of the Basel Committee and its Membership, 2013). The purpose of the committee is to set standards for the regulation of banks as well as to improve the cooperation of supervising banking. The committee does not have any legal authority, so it relies on its members to set aside their national interests and work together to enforce the standards of the committee (Charter, 2013).

The Basel Capital Accord (also referred to as Basel I) was introduced in 1988. The Accord stated that the banks were to hold a minimum capital of 8 % of its assets. Basel II was proposed in 1999 and after being revised it was taken in use in 2004. This accord expanded on the first to contain three pillars. The first was an expansion of the capital requirements of Basel I. The second was an improved role for supervisors, and the third was an attempt to improve the market discipline by increasing transparency. After the financial crisis in 2008 the committee began developing another update to the Accords. The content will be phased in gradually and is set to be completely in use by 2019 (History of the Basel Committee and its Membership, 2013).

In Basel III the capital requirement has been adjusted to deal with the lack of high quality capital during the crisis. Therefore, in the new Accords the emphasis is on the highest quality of capital, common equity, also known as core equity. The total capital can be split up into tier 1 and tier 2, with the former consisting of common equity and additional tier 1 capital. Three ratio restrictions are outlined in Basel III: A global regulatory framework for more resilient banks and banking systems (2013, p.12):

- Common Equity Tier 1 must be at least 4.5 % of risk-weighted assets at all times
- Tier 1 Capital must be at least 6.0 % of risk-weighted assets at all times
- Total Capital (Tier 1 Capital plus Tier 2 Capital) must be at least 8.0 % of risk-weighted assets at all times

Another issue brought to attention during the crisis was the leverage that had been built up in the banks. This was done even though the risk based capital ratios were strong. As a solution Basel III includes a leverage ratio to complement the capital requirements. The ratio will be tested from 2013 till 2017, with a minimum of 3 % tier 1 leverage ratio (Basel Committee on Banking Supervision, 2010).

2.2 Banking Regulation

Lilico (2012) analyses the changes made to banking regulation after the financial crisis and what further improvements that can be made. Many countries bailed out financial institutions that were deemed too important to fail. He argues that to avoid this scenario in the future the regulation needs to focus on reforms that increases the reliability of governments to not bail out banks. In the reforms that have taken place so far, five key areas can be identified. In addition the reforms already in action, Lilico insists that there is need for further development.

One problem is the view that fractional reserve banking is without risk. The author argues that there is indeed risk and that the depositors' interest is a compensation for the risk they take. However, it is problematic that there is no viable option besides having all one's money physically. One possible solution is for banks to offer a "storage deposit", which would be 100 % backed up by government bonds. Since these deposits would be less risky the interest rate would be significantly lower than regular deposits. Further, even though there is risk, the risk of losing the whole deposit is limited. The recovery rate for deposit during the 1930s bank runs were above 80 %. These recoveries, however, can be lengthy procedures. Hence, the issue is not if the depositors will lose their capital but the liquidity issues during the process of regaining the capital. A solution to this problem is a Deposit Access Fund, owned by the government. This enables withdrawals from banks in administration as usual, up to a limited percentage. If the bank is liquidated and its assets cover the deposits the depositor is unaffected, otherwise it will be owned to the state as a tax liability. By offering a less risky alternative there will be less sympathy to losses and the public will be less likely to favour a bail out (Lilico, 2012).

One criticism of Basel III is that there is no penalty for portfolio concentration in Pillar 1. By failing to diversify their portfolio banks will increase their risk. The suggested solution to this is setting a benchmark for a diversified portfolio where the minimum leverage ratio is in effect. If a bank deviates from this benchmark they require more capital the further they stray from it. Another criticism is towards the risk-weighting approach. Banks can use complete markets to shift risks and thus their leverage can be expanded. There is also scepticism of the view that the quality of capital was more important in the crisis than quantity. Though a higher quality of capital will be helpful in the reduction of risk, there needs to be a higher level of the required capital (Blundell-Wignall & Atkinson, 2010).

A discussion on how banks react to the regulation and other research on the subject can be found in the article by Van Hoose (2007). The author brings a more critical view of the at the time available literature and interprets the effects Basel II has had on banks in correlation with the literature on capital regulation. The regulation of Basel I and II, and the effects that these

have brought to the banking business, where the literature often interprets these regulations as negative effects on the risk-taking of banks. Van Hoose finds that even though there are cases where positive effects of using capital requirements can be found, which may result in reduction of risk-taking in banks, further this could possibly lead to a reduced amount of lending and higher rates. The discussion proceeds to whether the capital requirement regulation has the desired effect or not, as the results found in literature on the subject changes, depending on what is emphasised within the paper. In the case of banks as portfolio managers it supports the idea of capital regulation, even though there is no way of telling if it truly makes the banking system safer in terms of overall risk. Lastly the paper brings up that regulation should be more focused on safety instead of a more complex capital requirement, a most accurate view as this article was written at the end of 2006 a year ahead of the financial crisis.

2.3 Global Financial Crisis

The deregulation of banks that allows them to participate in non-traditional banking has been accused of being a major part in the failure of many banks during the financial crisis. DeYoung & Torna (2012) investigates how income from these activities affected US commercial banks during the financial crisis. By making the distinction between three types of activities, they get a more in depth look at what role deregulation played in the problems banks faced during the crisis. They found that banks that engaged in high risk activities, such as investment banking and venture capital, also took more risks in their more traditional banking activities. Banks performing other activities such as insurance sales showed to have a lower probability of failing. The distinction of these types of activities can be taken into consideration when forming supervision of the banks, making it more efficient.

The structure of banks can be a factor in how well they are able to cope with crises. The trend among banks is toward a more local presence. Banks can be categorized into two classes, international and multinational, by how their business in foreign markets is conducted. International banks have a strong base in their home country and rely heavily on cross-border business. In contrast multinational banks tend to let their foreign offices or branches operate more autonomously. Banks can also be categorized by centralization or decentralization, where multinational banks can be put in either category and international banks are mostly centralized. During the crisis multinational and decentralized banks are assessed to have been more stable, in part due to the stability of local assets compared to cross-border liabilities. The upcoming LCR regulations with a local liquidity requirement may be a factor that drives more banks towards a decentralized structure (McCauley et al, 2012).

Barr (2012) analyses the Dodd-Frank reform that was implemented in the US during 2010 as a response to the financial crisis and what needs to be done both in the US and internationally moving forward. He argues that the required capital needs to improve in both quantity and quality, and for an improved supervision of systemically important financial institutions (SIFIs). The calculation of risk-weighted assets is problematic as calculation differs between countries as well as between financial firms. Unless these are homogenized this may affect

competition of global banks. To be able to supervise SIFIs, cooperation across countries needs to improve. A way of achieving this is by pre-crisis planning where regulators of the different nations agree to share information and agree resolution plans. Today this is problematic due to confidentiality and other constraints.

2.4 Management

The relation between bank board structure and bank risk-taking in an agency theory perspective is useful concerning the financial crisis of 2007-2008. In a study on this subject, the results shows that risk-taking in banks is positively related to strong boards, with small boards and less restrictive boards as definition of strong boards (Pathan, 2009). These result supports the idea that a strong board will further the interest of the shareholders, as they prefer a higher amount of risk. In terms of CEO power to risk-taking the relationship is negatively related, this may depend on the relatively low fixed salary, the un-diversifiable wealth that they may have as compensation and as such, CEOs may seek a lower risk. The authors conclude that since bank board structure is an important factor of bank risk-taking, regulators should give this are more attention.

Ownership by management and board-members impacts profitability in three different types of European banks, traditional, non-traditional and diversified. The results of a study included in this paper support earlier studies concluding that management and board ownership improves profitability. Where a positive effect in non-traditional banks exists for management ownership, there is the same effect on board ownership in traditional banks. The author concludes that management ownership is important for banks that are non-transparent, where it is difficult for outsiders to monitor them. Board ownership has an incentive to monitor banks due to a safety net and as such there is not the same need for management ownership (Westman, 2011).

Whether there is a correlation between compensation structure and the excessive risk-taking that may have contributed to the financial crisis effects is something that has been brought up many times in media. That fact has given compensation structure a lot of attention due to public outrage at the compensation found in some banks. A paper about this well-known subject finds that while there is some slight evidence to this, the CEO compensation was not the cause of the financial crisis and does not explain bank risk-taking (Acrey et. al 2010).

Sallie Krawcheck (2012) brings up four ideas to further the responsible risk-taking and a more sustainable banking industry. One is to compensate executives with more varied options and bank debt, the second one is to stay away from the set amount for dividends and use a percentage of the bank's earnings instead, thirdly for determining bank performance, net interest income importance should be lessened and customer satisfaction and other non-qualitative metrics should be given more of the focus. The final idea propagates that focus should not be at the part of the business that is performing worse, but on those that are using the most capital, even though they may be the most profitable. The first idea brings up that while stock compensation can be effective as an incentive, it brings about too much risk. An

occurrence that could be seen as some of the members with the highest stock compensation had high positions in the banks at the centre of the financial crisis.

2.5 Capital Structure

Credit risk exposure is of utmost importance for a bank, and how it manages its loans is one way of managing such risk. Cebenoyan & Strahan (2004) test how interactions with the loan sales market affect the capital structure of banks. They find evidence for that banks that are active and relatively more effective in trading credit risks on the loan sales market, both selling and buying, have less assets deemed at risk. However, this is not the only difference caused by this as the banks that are more active also reduce their held capital, compared to banks that are only active on either the buying or selling side in the loan market. These banks tend to have the highest levels of risky loans in comparison to the less active banks on the loan market. Larger bank size and affiliation with Bank Holding Companies correlates with a smaller capital base. These results come from numbers of banks during the period 1988-1994 and these will only be used as a reference point to how business was conducted before the crisis.

Bank strategy concerning capital ratio and what banks use to adjust their capital ratio is an area of research that can further the capital structure discussion and secondly why banks choose certain setups in their capital structures. A paper on this subject (Memmel & Raupach, 2010) discusses a few questions concerning capital structure ratio and the management associated with it. The starting question is for investigating however banks are using capital ratio targets, and how and in what way they respond to changes in market climate and shocks. The second question brings up which characteristics that identify banks that use such adjustments and lastly probability of failing to meet capital regulation targets and what it depends on. The authors found that mostly, banks use a certain target that they wish to achieve. To achieve these targets they use either the liability side or buying or selling assets, with a more effective change for the former and a faster change for the latter. They also found that banks with a higher target tend to have a higher asset risk or higher adjustment speed, for the sake of meeting the regulatory targets.

Why financial institutions have such a high leverage compared to the non-financial companies is a question brought up by Inderst & Mueller (2008). They contribute to this subject with reasons to why banks and other financial institutions should have such a high leverage, and even above their level of received deposits. The authors argue for that leverage gives positive effects, up to a certain level. Their findings show that instead of only making banks to take excessive risks they show that leverage is necessary to be able to give first-best incentive for risk-taking. The reason is to provide the banks with the possibility to make new risky loans through the optimal capital structure developed in the paper.

A combined paper by Allen, Fulghieri and Mehran (2011) brings up results from papers on different subjects in the banking sector. The first subject is bank capital, where the study found that there is an optimal capital structure for every bank. In the paper they find that concerning bank capital, value is increasing in capital, however this is in the cross-section of

banks. There also seems that a positive effect can be observed between total bank value and bank capital. Another subject concerns the financial crisis and contagion, on how one bank's failure impacts other banks' performance. The authors found that higher exposure between banks leads to higher deposit withdrawals, with the exposure as the reason behind this and not other factors correlated to withdrawals. The linkage between the banks also furthers the spreading of shocks during crises. Weaker banks with less capital, smaller sizes suffer more from contagion from other banks. As a last result banks with higher exposure may find a reduction in loan growth and profitability, while some banks have unaffected profitability because an increased amount of deposits due to the withdrawals.

Whether bank capital structure has any effect at all, and if it does how it should be adjusted, is a question brought up in a paper by Diamond and Rajan (2000). With the main points being what role capital has for a bank, giving the result that capital helps in a bank's liquidity and credit, while adding to the stability of the bank. The optimal capital structure for a bank in this paper comes down to three effects, increased capital increases the rent absorbed by the banker, while increasing the buffer against shocks and changes the amount that can be extracted from borrowers. While this article contains many interesting parts, it develops a model for further research.

A different opinion on the financial crisis of 2007-2008 can be found in a paper by Akhigbe et al. (2012). This view contains how the investor perspective of bank risk in financial and market data affected their actions during the crisis, and how bank managers and regulators of banks can prevent the same kind of event with huge shocks to bank stock prices, accompanied by the lack of availability of new capital when needed. Something they found was that banks with more capital, a larger "cushion", got a more negative impact during the crisis, with the reason being that assets held by these banks had a lower quality especially during a financial crisis. The higher risk found brought about a huge shock when frightened investors left the banks expecting the unknown assets being of lower quality. The investors conclude this from the fact that a bank that keeps a higher level of capital during the crisis most likely has a higher level of risk in its assets. The result being that even though a greater capital pool could have been an efficient help against the effects of the crisis, it simply is not enough to handle the market panic that broke out. The ending discussion brings up a more long-term solution for executive compensation, and with this keep banks from having a higher asset risk together with the higher capital in case of possible losses.

A study investigates the effects capital has on survival and market shares for banks, with banking and market crises and during more stabilized situations. They find that for small banks, during any type of the given situations, capital gives improved survival rate and increased market shares. (Berger and Bouwman, 2013) This is not the case with medium to large banks (small banks with gross total assets of up to \$1 billion, medium exceeding \$1 billion up to \$3 billion and large banks exceeding \$3 billion), that only gains something from a higher capital ratio during financial crises. Small banks also have a higher profitability with a higher amount of capital, as well as other benefits such as: Better growth in non-core funding, on-balance-sheet relationship loans and off-balance-sheet guarantees. The relationship between the small banks and larger banks holds true here as well, where the

larger sized banks only have these benefits during the crises. They discuss the possibility that to larger banks, size has an impact on their economic strength, while smaller banks need a larger amount of capital to achieve the same strength in such terms.

What will cause certain effects on capital structure is a subject brought forth by Harding et al. (2013). The authors use a few characteristics that banks inherit to investigate these effects on capital, the first being that banks can issue federally insured debt. Secondly, suffer the threat of being placed in receivership from regulators and thirdly that they manage financial assets instead of physical, lowering the bankruptcy costs. The paper findings include that banks with deposit insurance, a minimum capital ratio and a bank franchise value choose to have excess capital higher than the regulatory minimum. Which they conclude does not mean that the regulation is without effects as banks would still choose a corner solution if there were no minimum capital requirement. The threat of liquidation also contributes to banks taking up a capital cushion, which cannot completely be done the same way with regulation as they cannot investigate all the risks concerning that single bank.

2.6 Liquidity

During the financial crisis banks struggled despite having sufficient capital structure, due to a lack of liquidity. Therefore, in Basel III liquidity was added as one of the main components of the regulations, in the form of Liquidity Coverage Ratio (LCR). The ratios purpose is to secure that banks can remain liquid for a stress period of 30 days. To be able to withstand the 30 day period the bank need adequate levels of High Quality Liquid Assets (HQLA). The HQLA is compared to a calculated net total cash outflows and is required to match or exceed these outflows. During crises the banks are expected to liquidate these assets and thus temporarily falling below 100 % LCR is in order. The start of these new rules will be 1 January 2015 with a minimum of 60 % LCR. The required ratio will be increased annually by 10 % culminating in 2019 with 100 % (Basel III: The Liquidity Coverage Ratio and liquidity risk monitoring tools, 2013). In Sweden the regulations were applied on January 1, 2013 with a requirement of 100 % LCR. (FFFS 2012:6)

The LCR has received criticism from several authors. Valladares (2013) argues that by trying to make it fit too many countries, cultures and political systems the content gets too thin. He argues that the change to a less strict implementation of LCR lessens the benefit of the regulation. The widening of the assets included in the LCR numerator is also criticized. It is questioned how liquid these assets really are when the crisis hits. The author also highlights the risk that the regulations will keep being watered down and further delayed as the banks keep arguing against them.

Another criticism of the LCR is that when the banks are required to hold more liquidity it may affect their returns. A possible side effect is taking higher risks in other areas to compensate. Another possible issue is the one-size-fits-all rules, as the quality of sovereign bonds varies and may in fact be risky assets (Blundell-Wignall & Atkinson, 2010).

It is not only a lack of liquidity that can be troublesome. It has also been shown that during the financial crisis banks hoarded liquidity as a safety move when the liquidity risk began to rise. Bank lending decreased during the crisis and 25 % of this reduction can be explained by precautionary liquidity hoarding. The effect of this hoarding can be a disrupted interbank market (Berrospide, 2013).

Banks may also hoard liquidity to be prepared to take advantage if other banks fail and the opportunity to purchase assets for fire-sale prices. The bailout policy will have consequences here, if the government is willing to assist failing banks the motivation to hold more liquidity gets weaker (Acharya et al, 2011).

Ratnovski (2013) argues for two key components for dealing with liquidity risk and the connection between them. The first one is a liquidity buffer, which in case of a small shock will work as perfect cover. For large shocks the importance of transparency increases as a way of securing refinancing. Uncertainty over solvency played a crucial part in recent liquidity crises. By being transparent the banks can lower the uncertainty and thereby make refinancing available. Without adequate transparency bank can be subject to liquidity risk even though they are solvent. These two factors work as complements and by managing them well the banks stand a good chance of dealing with crises. While regulation of a liquidity buffer is rather straightforward, transparency is more difficult and harder to verify. The implementations of liquidity requirements can decrease transparency and as a result risk will be increased. Consequently, Ratnovski argues that the liquidity requirement needs to be supplemented, for example by better corporate governance.

Globalization is another factor to consider when forming rules and regulations for the banking industry. Global banks are less susceptible to changes in monetary policy compared to banks operating within more limited areas. With more banks being global, investigating liquidity shocks on a domestic level might be less significant. The shocks will be transmitted internationally to a larger extent than previously, due to the global banks' ability to transfer funds between their foreign branches. This calls for a better collaboration between nations as individual country policies have limited effect (Cetorelli & Goldberg, 2012).

2.7 Theoretical Outline

In the literature concerning the management of banks, the main discussion is risk-taking, both from the bank itself and its CEO and board. The studies reviewed on this subject bring up various structures for banks as well as the correlation between compensation of CEOs and excessive risk-taking. There is no consensus between the papers, as there is research that argues that CEO compensation was one of the causes of the financial crisis due to the excessive risk-taking, and others that state that there is no such connection and CEO might even seek lower risk.

The studies reviewed about capital structure all relate to the topic of different aspects that affect the capital ratio of the banks. One subject that is common within the papers is the optimal capital structure for financial institutions, i.e. banks. This is a subject that would ease

some of the worries concerning the safety and stability of the banking sector if a solution was found. Different results can be found in the papers reviewed, however there is no aligned opinion concerning the optimal capital structure of banks. The effects of the financial crisis and what would cause banks to choose various capital ratios is discussed and there is no conclusion in the available literature to whatever ratio that would be most successful.

The search for literature on liquidity revealed several critical views, primarily with LCR being questioned for its attempt to fit too many countries and cultures. It also showed signs that banks not only suffered from a lack of liquidity, but also tendencies of holding on to extra amounts when the crisis hit. The need to improve the banks liquidity is connected with the need for an improved regulation. Several suggestions for improvement were found, including rules for diversified portfolios and increasing the level of required capital.

The research on the financial crisis showed that the banks' structure and activities affected the ability of the bank to cope with the environment changes. Banks' with investment banking departments and other high risk activities tended to take more risks in their traditional banking. Banks with a decentralised structure were more likely to remain stable during the crisis.

3. Methodology

In this section the methods used for reporting, planning and execution in this study will be reviewed. The selection and collection of data and the credibility of the paper will be presented.

3.1 Research Approach

The study was done with a qualitative method, to fit with the aim of the study of improving understanding of the changes the banks have made. The main purpose of the qualitative method is to contribute to a deeper understanding of the studied area. One of the strengths of the method is the possibility of creating an overview of the studied subject (Holme & Solvang, 1997). The study was performed by combining two qualitative techniques; interviews and source analysis.

Qualitative interviews are mostly characterised by a low degree of structuring. This study uses a semi structured form of interviews. The researcher prepares a set of topics that he wishes to discuss, but the respondent is allowed some liberty to digress (Patel & Davidson, 2011). The traits of the semi-structured form fit well with the approach of this study, as a too rigid structure would limit the nuances that can be received through follow-up questions. Another trait of the qualitative interview is the need for the interviewer to support the interviewee in creating argument about the research area. This forces the interviewer to have adequate knowledge on the subject (Patel & Davidson, 2011). Therefore, in the early stages of this study the emphasis was on reading previous research, before contact was made with the interviewees. One advantage of the method is the similarity to a regular conversation, and as a result the respondent will be under little control (Holme & Solvang, 1997).

The other technique used in this paper is the analysis of financial reports. When the analysis is based on documents it is important to approach them critically and consider who have produced them and to what purpose (Patel & Davidson, 2011). When basing a study on analysis of other sources you will depend on what is included in them and what they wish to communicate to the reader (Holme & Solvang, 1997). The annual reports often address the shareholders and thus needs to maintain a positive outlook, even when the company is experiencing rough times. This affected the analysis of the CEO letters, although since the analysis also contains measures that have been standardised through the Basel Accords (See figure 1:1-3), some part of this positive presentation have been avoided. One advantage of this method is the availability of the documents at the banks' websites.

3.2 Selection

When selecting interviewees for qualitative research there is a systematic approach, as the selected persons needs to fit certain criteria in terms of their knowledge. The selection requires knowledge from the researcher concerning who will possess adequate understanding of the investigated problem. To make certain that information gathered from the interviews

will be sufficient, people who can be assumed to have full understanding of the subject area are chosen. This selection can be problematic with the possibility of the respondents adapting their responses to fit with the image they want to present (Holme & Solvang, 1997). The ideal profession of the interviewee was deemed to be Head of Investor Relations, as their unique position allows the insight and overview of the bank required for this study. The reason for this choice is also based on a personal conversation with the CEO of SEB, Annika Falkengren, who visited the School of Business in Gothenburg for a presentation. When inquired to whom would be appropriate to answer questions related to our study, she referred to the Head of Investor Relations of her company. With this reference in mind, it further encouraged the selection of the Investor Relations department for the study.

3.3 Data Collection

The necessary information and data was collected from the financial reports and statements of the four largest banks in Sweden, starting before the crisis and leading up to the present situation. As a supplement to this data from the financial reports, interviews were conducted with representatives of Handelsbanken, Nordea, SEB and Swedbank. Literature concerning the financial crisis of 2007-2008 was used to accompany these interviews, covering the development during the period and the banks' financial reports showing their view of the situation. A problem with these two sources of information is that they are not objective in their form, because of the obvious wish to promote the own bank and their business.

3.3.1 Financial Reports

To gather information from the annual reports the CEO letters were read, as well as the sections that regarded strategy and financial targets. The reports were also searched for a set of predetermined key ratios and figures, or comparable if these were not available. There might be a slight impact on what set of capital and liquidity ratios the banks have chosen to focus on, as they can differ according to what the banks has deemed most important.

3.3.2 Interviews

The interviews were the compliment for the financial reports, improving the insight to the banks and the developments during the financial crisis. The alternative methods, such as surveys and mail contact, could not compare to the overall view the interviews achieved. The interview method was by phone, due to the placement of the main offices and the resourceful staff members needed to achieve the aim. The main offices are all placed in Stockholm and the ideal personnel have a profession that requires a great amount of their available time, making interviews in person a very complicated matter. With this in mind, conducting the interview by phone was the best option available. Interviews by phone lose some of the connection that can be achieved in person through for example body-language, which is beneficial due to the additional information that can be gained through such a connection. Contact was initiated by email, sent out to the respective departments of the banks. With their profession in mind, if no communication had been established within 2 weeks, contact by phone would be used. The first inquire when performing the interviews was whether recording was acceptable. If approved, the interview would be recorded and later transcribed.

In the results section this paper have deviated from the structure used in the theory and analysis sections. This choice was made to ease the understanding of development over time in each bank, something that might not have been as visible in separate titles such as capital structure. This concerns in particular the financial reports part of the result section, as these have been introduced on an annual basis to promote the progression of the banks.

3.3.3 Frame of References

The databases used to acquire the articles and papers are Business Source Premier and Science Direct. Keywords used for the search-engines were capital structure, liquidity, banking, banking management, financial crisis, Basel Accords and bank capital. GUNDA was used to search for books, with the search-words banks and financial crisis. The financial reports of the four banks can be acquired through their respective websites under investor relations.

3.4 Credibility

For the different measures of capital structure and liquidity the first conclusion was to use the financial information from the reports and calculate the key-measures. However, the measures proved to be meaningless in the banking sector. Due to regulation these have been replaced by more complicated and customised financial aspects. The used measures are based on regulation by the Basel Committee, although they have changed because of the turbulent financial situation. Through the different Accords, Basel I, II and III, the regulation has changed with each update of the framework. This has caused several problems as this study investigates change over time. The different methods of calculation for the key-measures complicate comparison, both between banks and over time.

In qualitative research low validity is less of a problem than in quantitative, but there is still factors that needs to be taken into consideration. One factor can be whether to be active or passive during the interview, another is to make sure that the interviewee does not adapt the answers to fit with the perceived expectation (Holme & Solvang, 1997). In this study the choice was made to take a passive approach, with the intention of giving the respondent time to elaborate the answers.

When transcribing interviews it is important to be aware that some nuances often falls away, such as the tone of voice in the statements. Therefore, the researcher needs to consider the handling carefully (Patel & Davidson, 2011). This was of additional importance in this study, as the phone interviews removed the body language of the interviewee.

3.5 Delimitations

The study's focus is on the major banks and the minor ones were excluded. This limitation was made since the difference in size makes the demands on the capital structure differ widely, and similarities between major and minor banks will be insufficient for comparison. The major banks also have a large foreign presence, which makes them more susceptible to international crises.

The analysis will begin with the annual reports from 2007; with the purpose of examine how the capital structure was before the crisis, how it was affected by the crisis, and if any changes have been made going forward.

4. Results

In this section the empiric findings will be reviewed, which contains four interviews of the four largest banks of Sweden and a summary of the annual reports from 2007-2012.

4.1 Interviewee Introduction

- *Mikael Hallåker of Handelsbanken*
Head of Investor Relations
- *Ulf Grunnesjö of SEB*
Head of Investor Relations
- *Andreas Larsson of Nordea*
Senior Investor Relations Officer
- *Johannes Rudbeck of Swedbank*
Head of Investor Relations

4.2 Handelsbanken

Handelsbanken was established in 1871 and has grown to include Norway, Denmark Finland, Great Britain and the Netherlands as their home markets. The bank employs over 11 000 people in 24 countries around the world. Handelsbanken's target is to achieve a higher return on equity than the average of comparable banks, through a higher customer satisfaction and lower costs (Handelsbanken, 2013).

4.2.1 Interview Response

Mikael Hallåker, Head of Investor Relations at Handelsbanken deems that the bank has all capital it needs, perhaps even more than what is needed to balance the risks in the bank. In terms of the Basel II regulation the Tier 1 capital ratio have increased from about 9-11 % to 20 % today. The bank managed the last 5 years without trouble, to such an extent that Handelsbanken did not have any need for changes in their capital planning. In truth, the old minimum capital requirement was lower than the bank's internally calculated capital need, and as such, did not lead to any changes. However, the new level of capital requirement set by the regulators will now force the bank to have more capital than the amount perceived adequate by the bank. The changes that have taken place after the financial crisis are extensive in terms of capital adequacy.

During the Basel I regulation period, most banks sought to stay at about 6.5 % for their capital ratio, to the extent that if it exceeded 7 % a stock repurchase would be issued to return to the former ratio. After the financial crisis it suddenly became harder to gain liquidity, which in

turn meant both short and long-term loans. Because of this change, the connection between capital ratio and borrowing costs became much stronger, as before the crisis most banks had about the same costs for their borrowing. It now turned out to be the prime reason for the lack of liquidity. Handelsbanken has one of the lowest borrowing costs in Europe, due to its stable position and performance. The bank's position has remained unchanged, because of its solid capitalisation and large liquidity reserves. Handelsbanken's performance was largely unaffected by the financial crisis, supported by the bank's low risk-tolerance, stable capital ratio and strong liquidity position.

During the crisis Handelsbanken was one of the few banks that was actually able to take new loans, with the market practically sealed off because of the extremely unstable lending market and financial situation. The development has led up to a more complex environment, where lowered capital might legally and juridically be possible to change without any damage to the bank, however with the consequence of a higher price required on the interest market. Regarding the changes that took place during the crisis Handelsbanken did not require any liquidity support from the central banks; instead it provided the Swedish Riksbank with 100 billion SEK for the liquidity needs of other banks and institutions. During the crisis Handelsbanken did experience a slightly higher borrowing cost, although still much lower than for other banks in the market. Handelsbanken was also the only large Swedish bank that did not need to perform a rights issue, as the situation turned to the worst during 2009 they were still stable and in good condition, and as such, did not need assistance from its shareholders.

Handelsbanken did manage itself very well during the financial crisis and the years after, but there were still changes to be made. Now they have extended their refinancing with bonds that has a future maturity date, and because of this the bank have already received the cash ahead of the maturity date. The bank is now pre-financed until June 2014 and as they have improved their liquidity buffer they can now manage to survive two years on their own, without any new loans being made. This serves as a signal from the bank that they are stable and can provide when it is needed, and allows them to remain as a trusted bank. During the crisis many institutions such as central banks and insurance companies had to limit the number of banks where they placed their liquidity, as many banks were not deemed secure anymore. Handelsbanken, as described earlier, was still very stable and showed good numbers, and remained as one of those banks for liquidity placement.

Regulation has never been thought of as a path for banking, instead they have based their way of doing business on the banks own model, and kept doing so for over 40 years. The recent changes in the Basel Accords is more focused on the capital requirements for the trading portfolio, something that is good from the banks point of view, as it deemed the rules being too soft in the earlier regulation. Some of the changes in the Basel III for trading involves higher capital requirement for derivatives for example, for some banks these changes would mean some of their products might become too expensive and not be viable any longer. This does not apply to Handelsbanken that held true to its basic banking model and low-risk profile.

Something the bank heavily emphasises is its decentralisation, which differentiates them from the other banks. This way decisions can be made close to the customers, something the bank view as a highly important factor in achieving lower credit losses than their competitors during an extended period of time. By giving the employees responsibility they can also be held accountable for their actions when results are not satisfactory. They found this structure to be beneficial in dealing with the financial crisis.

The introduction of LCR in Sweden has not affected their day-to-day operations, where they continue to work with their own liquidity measurements on a daily basis. The ratio is perceived to contain some irregularities where it does not reflect the real security of investments, something they are sure will be addressed in upcoming revisions. Another perception is that a 30 day interval can be misleading, however the intent of the ratio is accepted as it will alarm the authorities in advance when banks have trouble with liquidity.

4.2.2 Annual reports

Handelsbanken does not use a budget and does not use any incentives, giving the bank a unique style of banking. The bank started the pre-crisis years with good results as most other banks, opening up new offices and increased their presence at international locations. When the first signs of the financial crisis appeared during the end of summer in 2007, market turbulence could be observed, but with a conservative view of banking and a low-risk strategy the initial effect was lessened. A goal was set by the Handelsbanken board for tier 1 capital for Basel II, was to be at least 6 % for the rules active at the time, and long-term in 2010 between 9 % and 11 %. A goal that Handelsbanken had for many years is having a return of equity higher than the average of comparable banks, which they achieved for the 36th time 2007. The assessment of the financial situation was the problem of subprime loans bringing a more unstable market situation for the banks, although there was such a situation, the crisis was not seen as something as threatening as it would become.

In 2008 effects of the financial crisis could be felt around the world, however Handelsbanken showed growth in customers and lending, explained in the report by the trust for the stability of Handelsbanken. The bank also improved its liquidity reserves, at the time of 2008 a high amount for the industry. With a short-term liquidity reserve of 300 billion SEK at the end of 2008, this was deemed enough to finance the bank during at least one year. The bank argues that the trust it has received has helped it improve its numbers even during the negative market developments, achieving its long-term goal of return on equity for the 37th time in 2008. The impression of the crisis was no longer in the shape of a recession and was now seen as a financial crisis with challenges ahead. The tier 1 capital relation in terms of Basel II was now set at the 2007 long-term goal of between 9 % and 11 %, with the 2008 tier 1 capital relation at 10.5 %. One change was the improved position at the interbank market in America, with borrowing in USD becoming more attractive, lowering financing costs.

The financial crisis was the main focus in 2009, with a steady growth still active and positive results kept improving. However, increased credit losses darkened the positive view of the year. As the global situation had moved into a longer period of recession and financial crisis,

Handelsbanken improved its liquidity reserve to an amount above the total deposit of private customers. Other measures were also taken to improve the stability and ensure the trust from their clients, prolonging funding and establishing various capital market programs to improve the mobility of the bank. Handelsbanken provided the Swedish Riksbank with net lending throughout 2009 and did not receive any assistance itself or accept any government programs for bank stability. The capital base was at 20.2 % of risk-weighted assets in terms of Basel II. The long-term goal of having a higher return on equity was again achieved at 12.6% with a much lower number for the comparable banks due to the financial crisis. The long-term goal for tier 1 capital relation was still at 9-11 % but the level of 2009 was at 14.2 % Basel II, an increase they based on the work to improve the stability and lowering of risks in the bank. The credit losses was caused by the recession and was as stated worse than the bank hoped for. The liquidity reserve contained 450 billion SEK at the end of 2009 and 152 billion of that was placed at central banks.

The turbulence in the market turned from the financial crisis of 2007-2008 and moved into the debt crisis in the European economies. Handelsbanken predicted that these problems would remain for a long time during their 2010 annual report. This also comes with the introduction of the new regulatory changes in Basel III, with these two developments bringing about a lack of long-term capital availability. The bank retained its movement towards stability and liquidity, creating new available funding in the US and in Asia. The borrowing costs remained low thanks to good rating and stability ranked higher than many other banks, without needing assistance from the government and central banks. The equity growth had been about 15 % a year for Handelsbanken and it reached the goal of having higher return on equity than average of other comparable banks. In 2010 the bank reached a ROE of 12.9 % compared to the average of comparable banks with 8.7 %. The tier 1 capital relation increased to 16.5 % with the goal still being between 9 % and 11 %. The reason for the improved capital ratio being a stable increase in profit and the work of reducing risk that was still ongoing during 2010. The liquidity reserve moved up to 500 billion SEK which of 107 billion placed in central banks.

The European debt crisis increased its presence in 2011 and showed a great impact in the financial and capital markets of the world. For Handelsbanken the year passed safely and the bank kept doing its business the way it had for many years, explaining the stable growth through the opening of new Handelsbanken offices. It discusses the problem of trust for banks as many have failed to handle the new regulation in 2011 with the coming of Basel III. Handelsbanken proceeded with its low-risk profile and avoided business it deemed too risky, even though the compensation could be very high at that moment. Handelsbanken bases some of its progress through its availability to liquidity and profitability while retaining this during turbulent times. The liquidity reserve exceeded 700 billion SEK, and most of this increase can be found in the amount placed in central banks, which was 376 billion in 2011. The bank had a positive view of the future in 2011, maintaining good performance with a stable financial situation and low risk. For the straight 40th year Handelsbanken had a higher return on equity than the average of comparable banks with 13.5 % compared to the average of 9.7 %. The tier 1 capital relation for Basel II reached 18.4 % the goal remaining at 9-11 % for tier 1 capital, the higher capitalization explained by the coming stricter Basel III regulation.

In 2012 the bank retained its stable growth, moving forward with organic growth in a low-risk environment, but with a global economy that still is very uncertain. There were many attempts to improve the financial situation by central banks and politicians but the effects are not visible yet as the market turbulence is still present. The bank discusses that the profitability of the bank depends on the ability to produce good growth in long-term value, no matter the condition of the global financial market. The bank still has low borrowing costs, giving it a better availability to financing and liquidity. The bank fulfilled its goal of having a higher return on equity 2012 as well, this year with 14.7 % to the average of 10.4 %. Handelsbanken is still improving its tier 1 capital ratio, in 2012 at 21 %, removing its long-term goal in wait for the new strict regulatory changes. In Basel III terms the tier 1 capital relation reached 16.4 %, also with effects of the new IAS 19 in effect, although Basel III is still not implemented, this number gives a good reference to what should be expected. The liquidity reserve reached 750 billion SEK at the end of 2012. The amount of liquidity placed in central banks was at 246 billion SEK and is a bit lower compared to 2011. LCR reached 136 % in Swedish definition, in USD 174 % and in Euro 301 %. A stabilisation of the long- and short-term market could be observed in the fourth quarter of 2012, with many banks being active on the lending market. Bringing the risk premium down and due to a high issuance activity at the start of 2012 the need of funding in the last quarter was lessened.

4.3 Nordea

Nordea is the largest of the four banks, with over 31 000 employees. The bank has nine home markets including the Nordic countries bordering to Sweden, the Baltic States, Poland and Russia. They have 10,4 million private customers and 0,6 million corporate clients (Nordea, 2013).

4.3.1 Interview Response

Andreas Larsson, Senior Investor Relations Officer at Nordea describes that the bank was able to manage the situation caused by financial crisis very well. The bank had no greater investments in any of the subprime papers that were one of the reasons behind the crisis, which effectively meant that the market risk for the bank was low during this point of time. Nordea is the largest market trader in the Nordic region, however the market that it focuses on is with clients and because of this focus the bank had no trouble managing the effects of the subprime papers. The Baltic countries are a part of Nordea's markets, but as the bank is larger than for example Swedbank and SEB, the market share of Nordea's business in the area is not as large for the bank, at the time about 3 %. This means that the problems taking place in the Baltic region during 2007-2008 did not affect Nordea in a wider perspective, giving the bank a stable situation during the first part of the financial crisis period. The bank has never had below 8% return on equity quarterly, and during a whole year 11 %. Credit losses has been stable, although a period it amounted to about 55 basis points, a little more than double the normal credit risk appetite at 25 basis points. Some of these effects came from the problems

surfacing in Denmark during 2008, causing Nordea worry, but the effects did not escalate and the bank came away unscathed due to its size and diversification on the Nordic markets.

In terms of strategic changes Nordea issued new strategic plans during 2007 and changed the direction slightly throughout the financial crisis. The first plan was called “profitable organic growth”, stemming from the change of CEO, which led to a change from cost reduction to organic growth while remaining profitable. This would be achieved without acquiring any other companies on a larger scale for the sake of growth, which means full organic growth. When the crisis hit the Baltic countries and Denmark in 2008, the bank changed this strategic movement to a more balanced strategy called “middle of the road”. This caused the growth to slow down, but the profit stayed on the same course during this plan’s life span. In 2010, when the financial turbulence had been reduced, a movement called “prudent growth” was introduced, which was only a part of this second strategy but was there to show that growth was still attainable. In 2011 the third and last plan “new normal plan” arrived, which were the banks adjustment plans to the new regulation that was coming with Basel III. The bank felt the need to adapt to the new situation, to possible new markets and so forth, which led to the introduction of this strategy. This plan involved a main focus on the measure return on equity, at about 15 % during normal rates, unchanged costs and risk-weighted assets. Together with this focus the bank was going proceed with the income growth without increasing the balance sheet volumes too much. During the latest years the focus has been on the return on equity measure and keeping the capital levels low and stable, without increasing working capital. The cost focus was abandoned after the change in top management, but recently this focus has come back with the unchanged costs requirement in the strategic goals.

For the capital discussion Nordea had the double A rating in 2007, which it deems as a strong position, but the core tier 1 was 7 % back then, compared to the 13 % the bank has now. The bank had a stable capital base, but changed their goals for capital during the years of the financial crisis. At the start of the crisis the bank had a goal of 6.5 %, which was increased to 9 % tier 1 capital, a goal which they held onto for many years. The changes made in calculation of risk-weighted assets have changed, so the older numbers might not be comparable to the new, but it is a good indication of the different levels of capital structure. During the “middle of the road” strategy Nordea made a move to strengthen its capital base, issuing equity in March 2009, enforcing the core tier 1 capital by 3 billion EUR, however 0,5 billion of that increase came from a reduction in dividends. The rights issuance was motivated by three reasons, the first was that the bank wanted to be ready for unforeseen market developments, the second was that it was needed to ensure its financial strength and the last reason being possibility for growth. This increased capital ratio helped the bank grow and gain new clients in 2009. The focus has in recent years changed from the tier 1 capital measure to the core tier 1, which has grown more important throughout the financial crisis of 2007-2008 and the debt crisis of Europe. In 2012-2013 Nordea has changed its goal for core tier 1 to 13 %, which it reached in 2012. The yearly increase is at an average of 1 % a year, which has been achieved by increased profits without increasing dividends. This change means that the bank will be able to stay above the capital requirement that will be put into

place in 2015. The movement towards an increased capital base has been changed in line with the requirements from regulation and the markets.

Nordea did not change particularly compared to the other Swedish banks during the financial crisis, as all the banks have improved their capital position in these turbulent years. On paper Nordea has a slightly lower capital ratio than the other three banks, however the bank argues that this is compensated by their size and the diversification it has.

The introduction of LCR did not involve any changes for Nordea, the liquidity goals have grown more important, however the new regulatory measures for liquidity have not changed much in terms of internal structure. The liquidity buffer of Nordea has been more than doubled throughout the crisis, from 25 billion EUR to about 60 billion now.

4.3.2 Annual Reports

In 2007 Nordea met its goals set for the year, with a return of equity reaching 19.7 % and the difference between income and cost growth at 2 % and an income growth of 8 %. The coming of the financial crisis brought some exposure to Nordea, but not as heavy as many other banks during the latter half of 2007. The bank's liquidity reserve remained strong during the year due to a good funding base, and emphasises its good credit portfolio. This was reinforced by recognition of Nordea as one of the most low risk bank stocks in the Nordic region during 2007. The bank had a target of being above 6.5 % for tier 1 capital, which was successful in 2007 with a ratio at 7 % in accordance with the Basel II regulation, which at the time was being implemented.

Nordea's tier 1 capital ratio goal was set at 9 % in 2008, a move to strengthen the bank's capital position in the coming years. The bank had a liquidity buffer between 20 and 40 billion EUR, which is seen as a strong position even when the market situation has turned for the worse with the coming of a recession and the financial crisis. It credits its good position and rating for the still good availability for the bank to acquire new capital and proceed with its borrowing. It deems its credit portfolio to be low-risk although there was more of the clients whose rating went down compared to those who gained a higher credit rating. Nordea also brings 2008 up as the year of the financial crisis, giving a negative outlook on the coming years. The bank was able to keep up its short-term borrowing as usual, due to the availability of secured bonds on the markets of Sweden and Denmark. It also made a move to increase its tier 1 capital and reached a level of 9.3 %, slightly higher than the goal set for the year. The bank wanted to improve its position even further and proceeded with a rights issue and lowered the dividends.

Nordea's strategic goal is growth and to be the best relationship bank in its markets, with a foundation in one operating model. The bank's tier 1 capital ratio in 2009 was at 11.4 %, where the regulatory target is 9 % over a business cycle. Nordea also had a rights issue in February in 2009, improving its core tier 1 capital with 3 billion EUR. The bank improved its liquidity situation throughout the year, moving between 35 to 59 billion EUR, moving towards a more safe position and promoting the conservative attitude towards liquidity risk of the bank. Though many banks experienced the effects of the financial crisis in 2009, Nordea

had a good funding position, keeping its rating with good capital and liquidity bases. The bank also promotes its credit portfolio, meaning it is well-diversified and in accordance with their low-risk profile. Despite the trouble-filled market situation the bank had an 11 % increase in total income, keeping growth in total expenses at 4 %. The new regulations from the Basel Committee, Basel III, was proposed and Nordea deemed itself ready to move in accordance with a stable capital and liquidity position. The bank expects the economic recovery to keep on going during the coming year, responding with new initiatives for a strengthened financial position.

In 2010 Nordea describes its position as stabilised and that it emerged stronger from the financial crisis. Profit and income levels reached records during the year and capital and liquidity reserves have been further improved to handle the new Basel III. Credit losses have been heavily reduced, but costs have increased due to growth initiatives within the bank. Nordea states that its capital position in 2010 was one of the strongest in comparison to the larger banks of the world. The bank senses the changes Basel III will incur with the higher capital requirement in the low capital, high leverage banking sector. Nordea states that in 2010 it had a tier 1 capital relation higher than the new requirement, a good return on equity compared to the market average and a stable liquidity situation. The bank had 11.4 % tier 1 capital, with the goal remaining at staying above 9 % during a cycle. The liquidity reserve was 61 billion EUR at the end of 2010, viable for the Basel III regulation.

Nordea started 2011 with strong performance, later used for adaptation for the new regulatory changes that was coming. A re-organisation was issued to improve the organisation to be more customer-oriented. Many initiatives were announced after the introduction of the new structure, with the banks financial goal changing to having a return on equity of 15 % in a stable macroeconomic situation, with the capital requirement being 11 %. It had already been set higher in Sweden, but without knowing the impact of the changes in the other European countries the financial goal will remain as it was. The tier 1 capital ratio in 2011 was at 12.2 %, with good preparation for the new regulation in Basel III. The liquidity reserve was between 51 and 61 billion EUR during the year with an average of 59 billion.

For Nordea the year of 2012 came with another recession from the European debt crisis, stirring up problems in the capital market. This made 2012 a year of trouble, but the bank kept on to the goal of growth, which it succeeded with because of its business model, that is stability, diversification and the sheer size of the bank. The goal of having 15 % return on equity remains but a new policy will bring up the tier 1 capital ratio to over 13 % for the goal. The financial situation is still deemed as unstable and still not able to withdraw from a recession, the central banks measures to improve the situation is the main reason for the positive part of the developments. The tier 1 capital relation increased to 13.1 %, up to over the new policy limit. A new view of liquidity has been introduced with the coming of LCR, while the bank is using a new measure called survival horizon. The survival horizon defines the risk appetite through certain scenarios. During 2012 the survival horizon was between 23.2 and 68 billion EUR, with an average of 47.2 billion. LCR was at 127 % at the end of 2012.

4.4 Skandinaviska Enskilda Banken (SEB)

SEB was established in 1856 and today they have 16 500 employees and are present in 20 countries. Their main focus is corporate banking and long term commitment to the customers. The bank has 4 million private customers and 0.4 million corporate clients (SEB, 2013).

4.4.1 Interview Response

When asked about the effects from the financial crisis of 2007-2008 on the bank SEB the Head of Investor relations Ulf Grunnesjö points out two things of importance. When the first warning signs of insecurity showed up in American banks during 2007, SEB had investments in one of the causes of the financial collapse, a structured credits portfolio with ABS (asset backed securities), CLOs (collateralised loan obligations), the CDOs (collateralised debt obligation) etc. Because of this there was a lot of worry about the future value of these obligations and the bank felt the effect of this uncertainty during this early period. At the same time the crisis affected the already existing worries at markets of the Baltic countries, which at the time constituted over 10 per cent of SEB's total activity. These two things caused concerns in the market, however this situation led to more worry than actual problems for the bank. Even as SEB had a stable profit, a rights issue took place in early 2009 to buffer up, any potential serious problems. In terms of the Basel regulation the tier 1 capital relation was at 10 % before and 12 % after the rights issue. The main problem was the uncertainty concerning the Baltic countries and what losses this could possibly incur, but the bank stayed close to its safe strategic choices and got away without experiencing any losses.

Compared to pre-crisis, the amount of capital in SEB is much higher, though the bank points out that many of the changes made concerning these levels of capital as well as the levels of liquidity, had more to do with SEB strategy than Basel regulation. Many changes were made to improve the balance sheet, one of them to increase the volume and duration of long-term financing and considerably increase liquidity reserves. The difference in the balance sheet and available liquidity is very easy to spot from before to after the crisis and it really shows a stronger and more stable situation.

Liquidity reserves are at about the same, but with the exception of the possibility to gain short-term liquidity at about 25 % of their balance sheet. This number was at about 10 % before the crisis so this is one of the greater changes that took place during and after the crisis. SEB made these changes as it realised the dangers of having lower liquidity reserves than the market thought appropriate, because when market opinion changes, things happen at a fast pace. If you start experience trouble gaining new liquidity you will soon be in a dangerous situation, even if you have a high amount of capital.

Something that has changed a lot from before the crisis and which is of some importance for the capital discussion, relates to the composition of the tier 1 capital and some forms of equity changes. Before the crisis showed its first signs, the financial situation was positive and many banks employed a strategy of getting the highest possible leverage from the balance sheet through capital related securities such as subordinated debt, something that changed when the

crisis hit the global banking market. Equity gained importance, as many banks experienced negative numbers in their income statements, and the weight placed on a good equity base or replacements for this turned into a discussion. Today, in all banks as well as SEB, equity is a much larger part of their tier 1 capital. Capital has continued to strengthen, and in SEB, the core tier 1 ratio was above 15 per cent at the end of 2012.

Having a low-risk capital structure and having earnings stability adds to other things as well, as general funding becomes much easier to achieve, reaching more markets that might not accept lower tier 1 capital balance or low-quality equity. Because of this there are positive effects of having higher capital, however it suffers from diminishing returns after reaching a certain level of capitalisation.

Many banks have tried to move their focus to the capital requirement, not necessarily based on the Basel regulation but the banks own capital situation, and during the crisis most of the Swedish banks issued equity, one exception being Handelsbanken.

The banks opinion is that LCR has had an effect on the bank, although work had already started on increasing liquidity before the regulations was introduced. SEB argues that the early introduction of the rules in Sweden may be due to the earlier lack of minimum requirements for liquidity, something several other European countries already had in place. One issue with the banking industry building liquidity is which securities are considered low risk and which are truly liquid when it matters. Before the crisis treasuries would be considered safe, but with countries now in huge debts this is questioned. The present situation is described it as a race for banks to invest their money in central banks.

Another way the LCR have affected SEB is the view on corporate deposits, where SEB do not agree with the regulations. This stems from a difference between Sweden and the rest of the world, where SEB has seen an increase in deposit volumes when the market has experienced trouble. In contrast, often in the rest of the world corporations have been quick to withdraw their money. The regulations values private loans as significantly more stable than corporate loans. For a corporate oriented bank such as SEB the demand for liquidity is therefore at a level that is considerable higher than they deem appropriate.

4.4.2 Annual Reports

SEB describes 2007 as a good year for the bank, with a 19.3 % return on equity. The target for core 1 capital ratio was at least 7 % according to Basel II with transitional rules. The target was reached and at the end of the year the ratio was 8.63 %. The bank's strategy for growth included a purchase of 97.25 % in a Ukrainian bank. The current uncertainty in the market led to a focus on keeping the capital base strong and the liquidity high. The bank's policy is to keep the ratio of stable liabilities, including equity, to illiquid assets in excess of 70 %, something they achieved during the year with an average of 102 %.

As the crisis starts to affect the market in 2008, SEB decides to take proactive actions. They strengthen their capital base by suggesting a right issue for SEK 15 billion to be completed in 2009 and by not paying dividend for the year. The core capital ratio for the year was 8.36 %,

below the new long term target of 10 %. The suggested measures, however, would result in a ratio of 12.1 %. The bank maintained a ratio for their stable liabilities above the goal, with an average ratio of 108 %.

In 2009 the effects of the crisis shows, as SEB's return on equity falls to 1.2 %. The drop was largely due to the unstable market in the Baltic countries; however the bank remains committed to stay in the countries. Ukraine was another of SEB:s markets that were severely hit by the crisis. The bank decided to halt its expansion there and to close down some of its branches. The strengthening of the capital base and liquidity is prioritized, as the right issue suggested the previous year is finalised. Another measure is a EUR 500 million hybrid capital issue. These steps help increasing the core tier 1 capital ratio to 11.7 % according to Basel II without transitional rules, above the maintained target of 10 %. The bank expresses the goal of keeping liquidity reserves above or equal to 5 % of total assets. At the end of the year the ratio was 10 %.

The core capital ratio was slightly increased in 2010, to 12.2 %. Trust is a keyword for the bank as their strategy continues to focus on being the relationship bank. The bank anticipates the new regulations to be completed in 2011 and highlights the importance that the regulation is supplemented by other factors such as better governance and risk management. SEB also states the need for the regulation to increase the stability without hampering the financial institutions ability to serve the needs of the wider economy. At the end of the year the liquidity reserve was above 10 % of total assets. The policy for stable liabilities was increased to a ratio in excess of 90 %, with the level ending up at 109 %.

In 2011 SEB continues to decrease its Ukrainian presence by divesting the retail operations. The core tier 1 capital ratio is increased to 13.7 %, and the long term target is updated to 10-12 % in accordance to Basel III rules. The liquidity reserve is increased to SEK 377 billion from SEK 229 billion the previous year. As LCR is introduced and revealed to be taken into effect by 2013 it is estimated to 95 % at the end of the year. The ratio for stable liabilities is slightly increased to 108 %.

With the new regulations being implemented at the start of 2013, SEB decides to update their financial goals. The new target for Basel III core tier 1 capital ratio is 13 %, with the outcome being 13.1 %. This is stated as one of the highest in Europe. Their goal for return on equity is also updated to be competitive, with a view of 15 % long term. SEB:s aggregate LCR increased to 113 % and the average stable liabilities ratio for the year was 115 %.

4.5 Swedbank

Swedbank have a history reaching back to 1820, although the name Swedbank was established in 2006 after a change from Förenings-sparbanken. The bank has over 14 500 employees, 7,8 million private customers and 0,6 million corporate clients (Swedbank, 2013).

4.5.1 Interview Response

Johannes Rudbeck, Head of Investor Relations for Swedbank describes that there were many factors affecting the bank during the financial crisis of 2007-2008. Sometimes it is hard to define the releasing factor for what caused the financial crisis, since many things depend on each other in a financial system. For Swedbank there were a few factors that were easy to point out. Firstly the fast paced growth the bank had during 2006-2007, which kept going on through 2008. This growth came mainly from new markets, the Baltic countries, Ukraine and Russia. This development of the bank involved substantial risks, which might not have been properly considered at the time of the investment. The risks involved with this investment, not only the developments of the economic market situation in the world and these countries, but how the system works and the risk of that system collapsing should also have been considered. The growth in especially the Baltic countries was very high, and looking back it was too high to be sustainable. During the time of investment the risk of it not being sustainable had been taken into account; however the forecast indicated more of a slowdown than the extreme effects that really took place.

As stated, Swedbank had expected a downturn in the economic situation, and as the build-up for the financial crisis started, the Baltic countries moved closer to a recession. When the effects from both the recession and the financial crisis started to affect the bank, it came at the same time, making the situation uncertain. When the financial crisis hit the availability of liquidity and capital became very strained, markets closed and the bank felt this lack of liquidity heavily, as it had moved a lot of its available resources into its new markets. The rescue came from the Swedish National Debt Office, which was slightly earlier than the central bank of Sweden, the Riksbank, to issue reverse repos for the banks in crisis. For Swedbank this solved the urgent need of liquidity, but that was scratching the surface of the problem that the bank faced. There was a structural problem in Swedbank at the time, the system for borrowing was lacking and changes to extend the borrowing period was needed. This meant that the bank had to move out on the market, something that was not possible in the closed market situation of the financial crisis. A stabilisation program was issued and among the large Swedish banks Swedbank and SEB choose to enter this program, although Swedbank was alone in its purchase of state guarantees from the Swedish National Debt office.

From the crisis to present, the tier 1 capital of Swedbank has increased with about 40 billion SEK, almost double the amount of 2008. The lending in the Baltic countries has been about halved and there is almost no lending in Russia and Ukraine. The increase of lending has come from mainly Swedish mortgage loans, which is deemed as one of the safest forms of lending. This means the asset risks has been heavily reduced, and moreover the capital stock has almost been doubled, further reducing risk.

Swedbank experienced a very uncertain period, with a change of the senior management of the bank in March 2009. Because of this change in leadership, new initiatives was being issued as the crisis awareness was imposing and the bank had realised that it needed to change

for the changed economic environment. The bank understood that it was not only a crisis of liquidity but also lending, in terms of leveraging. Much effort was made for the sake of improving the state of the balance sheet of the bank, reducing risk and moving in capital to stabilise the crisis affected bank. It now deems itself one of the best banks on these improved areas, something it mentions is confirmed by the recent stability report from the Swedish Riksbank. Since many of its competitors have a history of delivering good results for 30 years and above, Swedbank has made moves to gain trust through transparency, working hard to show the low risk it has today, even on the areas it might be weaker compared to other banks.

For Swedbank, the introduction of LCR did not bring many changes, as it has its own way of controlling and checking liquidity. The bank now uses something called survival horizon, where a limiter is placed internally and it is used as the main measure for liquidity control. The Basel III introduced both LCR and NSFR (Net stable funding ratio) which measures liquidity for 30 days or a year in the future. These measures fulfil their purposes, but Swedbank has only followed the same principles and have issued their own measures for the same purpose. The bank performs stress-tests on liquidity and credit quality, trying different scenarios for these tests to try to find possible weaknesses and effects of risk.

4.5.2 Annual Reports

As the turbulence in the financial markets was starting to show in 2007, the bank was still firm in its strategy and positioning. Continued growth in the Baltic States was seen as a sign of a successful strategy, and the Ukrainian and Russian markets were looked upon as sources for further growth. The bank had a clear vision of itself as a market leader in its home markets of Sweden, Lithuania, Estonia and Latvia, by having the best profitability and the highest customer satisfaction. The way to reach this goal is to achieve a low risk through diversification of the banks' credit portfolio. The company is operated with a decentralized structure. The target for tier 1 capital ratio is to be close to 6.5 %, and according to Basel II it is 8.5 % in 2007.

In 2008 the crisis starts to affect Swedbank, although a strong start to the year helped the bank stay profitable. The decision was made to pay no dividend and thereby strengthening the capital base to stand strong for the future. The bank made a rights issue for 12.4 billion SEK, finalized in January 2009. The Chairman of the Board addresses the need for global cooperation in forming a new stable framework. The tier 1 capital ratio was 11.1 % for the year, exceeding the updated goal of being within 8.5-9.0 %. A new CEO was introduced and was set to take his new position officially in March 2009.

2009 the financial crisis hits Swedbank with full force, with the bank making a loss of 10 511 million SEK. To strengthen the capital base the bank initiated another rights issue, this time for 15,1 billion SEK in the second half of the year. For the second consecutive year there was no dividend to shareholders. Another measure to increase the capital ratio was a decrease of risk-weighted assets by 13 %, leading to an increase in tier 1 capital ratio to 13.5 %. In response to the difficult financial times the financial objectives was removed except for the dividend policy. The CEO highlighted the need for a structural change in the financial

industry, as well as changes in regulations and control, with an increased transparency one of the points made. Reductions were made to liquidity risk and to reduce overall risk level was a priority.

In 2010 the banks situation stabilized and it returned to making a profit. The goals for the bank were revised. Core tier 1 capital ratio was set to continue to stay above 13 % until 2013, and to not fall below 10 % in the following years. At the end of the year the ratio had increased to 13.9 %. This was a result of sustained reduction of the risk-weighted assets, this year by 10 %, as well as the year's net profit. With a feeling of coming out of the crisis stronger the bank developed new values and visions going forward. There would be more focus on long term financing, as opposed to maximizing the short term profits. The bank also calls for an increase in transparency and stability in the banking sector.

The trend for the core tier 1 capital ratio continues in 2011 as it rose to 15.7 %. Part of this was due to the continued decrease of risk-weighted assets, this year by 9 %. The target from the previous year was withdrawn, as the bank wants to wait for the regulatory environment to stabilize before setting any further goals. The executive management, however, expresses the opinion that at this time the long-term need is between 13.5-14.5 %. The bank cites the Riksbank stability report to state that improvements have been made, to a point where the capitalisation and liquidity is the strongest of the major Swedish banks, as well as among the strongest in Europe.

The Board of Directors decides to keep on working without an established goal for capital in 2012, but the executive management's opinion is that the core tier 1 ratio is required to be 13-15 %, based on the Basel III framework. The ratio at the end of the year is 15.4 % according to Basel III, and 17.4 % when calculated from Basel II. The bank expresses a need to slow down the rate of increase in its capital base, as a further rise can put productivity at risk while not adding to the resilience of the company. The bank again refers to the Riksbank stability report, in which they are cited as a leader when it comes to transparency. They highlight the fact that in the stress test performed by the Riksbank, only Swedbank managed to achieve positive results every year.

5. Analysis

In this section the results will be analysed through the frame of references, according to the five different areas of focus.

5.1 Banking Regulation

The revisions of the Basel regulations is a common topic for the banks to discuss. Though Sweden have implemented a stricter set of rules than the revised Basel III, as well as an earlier implementation, the banks all express the expectation for the rules to be adapted to the new rules eventually. One change that can be noticed compared to before the crisis is the targets the banks set in comparison to the regulations. Before the crisis the targets were set close to the requirements of the regulations, whereas now they can be several percent above this limit. What the respondents said coincides with what Lilico (2012) writes on the aspect of risk. Handelsbanken discussed their profile as a bank with a low risk-profile where they steer away from business that may have a potentially high compensation, but where the risk is too high, and have done so since before the crisis. They also discussed the danger of having a bonus based reward system for a bank, as it can lead to excessive risk taking, especially if the banks are certain that the government will bail them out in case of emergency. On the contrary, Swedbank stated that leading up to the crisis the development perhaps included taking too much risk. Therefore their work has been focused on reducing the bank's risk. Otherwise, there is no development of the suggestions that Lilico offers.

The regulations have both increased the focus on quality and quantity by not only increasing the requirement, but also putting more emphasis on the core tier 1 capital, the highest quality capital. This fits with Blundell-Wignall & Atkinsons (2010) argument that focus can not only be on quality, although both are needed. The banks claim to have a diversified liquidity portfolio, however a deeper analysis of these are out of the scope of this study.

5.2 Global Financial Crisis

The impact of the crisis varied greatly between the banks. One major factor for how deeply the banks were affected was the involvement in markets outside the Nordic countries. Swedbank's and SEB's heavy involvement in the Baltic countries, where they had expanded quickly and had become market leaders, led too much of their decreased profitability during the crisis. Nordea also operates in the Baltic States but to a lesser extent, only representing about 3 %, of their business. So the region's downturn did not have as much overall effect on the bank.

Two of the banks, Handelsbanken and Swedbank, express a decentralised structure with autonomous branches. The difference in stability for the banks during the crisis does not concur with the conclusion of McCauley et al. (2012), where decentralised banks coped better during the crisis. It is important however to note that the crisis affected some of the banks' home markets differently, so the comparison is somewhat flawed.

Barr's (2010) argument for an increase in both quantity and quality of required capital matches the development seen in all Swedish banks, as the equity increase for the banks have been between 42-64 % (Appendix I). The problems with the risk-weighted assets are something that several of the interviewees have agreed with. The lack of standardisation is critiqued, as the banks' own models are used. Therefore comparison between the banks can get unfair. Another suggestion from Barr that is in line with what banks' expression is the need for better cooperation between countries. Since all of the banks have home markets outside of the Nordic countries, this is of great importance.

5.3 Management

The risk-taking of banks is something that received much of attention after the financial crisis, involving both boards and CEO's to take the blame for the excessive risks in the banks' leveraging and assets. For Swedbank, there were some factors that may have been caused by this kind of risk-taking, with a large investment in markets that are insecure about how their system works. The bank withdrew from Russia and Ukraine, as lending in this area involved a risk, which was not taken into consideration during the time of investment. A strong board could cause this kind of behaviour, as a stronger board might increase the shareholders' risk appetite (Pathan, 2009). Now, Swedbank has moved on to transparency as one of its goals, which will further improve the image of the bank. In the pre-crisis years, management ownership might have improved the risk-taking in the bank, and in the present board, ownership might be more suitable as management ownership has become less important after the transparency movement. This is because of the incentive for the board to monitor its own bank (Westman, 2011).

The correlation between CEO compensation and excessive risk-taking is something that has been widely discussed and within the Swedish banks there are many differences. While board risk-taking might have moved the bank into the new regions, it could be a CEO decision moving the bank as well. There are divided opinions on this subject, while some argue that CEO compensation did not cause the risk-taking that started the financial crisis (Acrey et. al, 2010), others provides facts that many of the crisis bringing banks had highly compensated CEO's (Krawcheck, 2012). On the other hand, Handelsbanken does not use incentives at all, completely moving away from this structure and the danger of excessive risk-taking present in most banks.

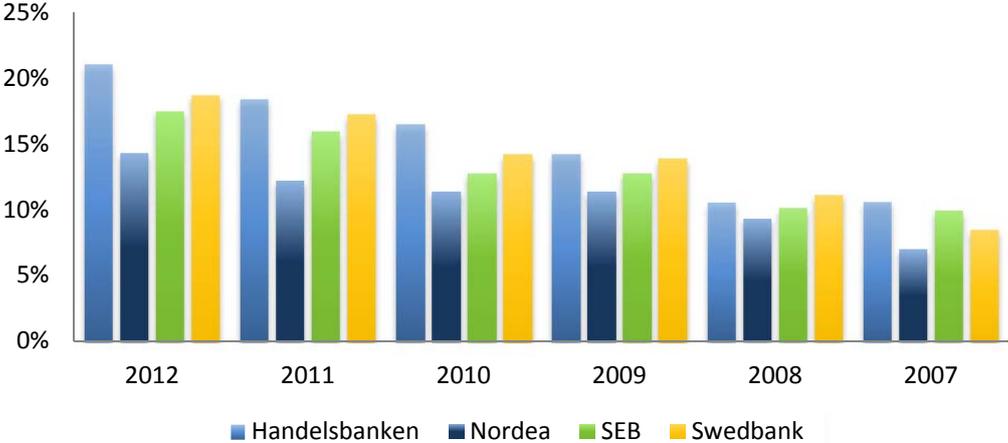
5.4 Capital Structure

All of the banks have made significant changes to their capital structure, moving to increase their stability and to stay above the limit of the new regulation that will come with Basel III. Most of the banks have moved up to levels much higher than the capital requirement that will be issued with the new regulation, according to the banks' own strategy. Now in their 2012 annual reports, Handelsbanken and Swedbank have a tier 1 capital ratio at about 20 %, moving into very safe area in terms of capital adequacy. It is often noted that banks with deposit insurance, minimum capital ratio and a bank franchise value tend to have a higher

capital ratio than the regulatory requirement (Harding et al, 2013), something that can be seen in most of the banks in Sweden . The regulatory minimum will move up to 12 % in 2015, something that all four banks have reached and gone past. Nordea has the lowest tier 1 capital ratio at 14.3 %, which also involved an increase of state-insured papers to fulfil the requirements of the capital requirement.

Figure 1.1

Tier 1 Capital Ratio Development *The four big Swedish banks*



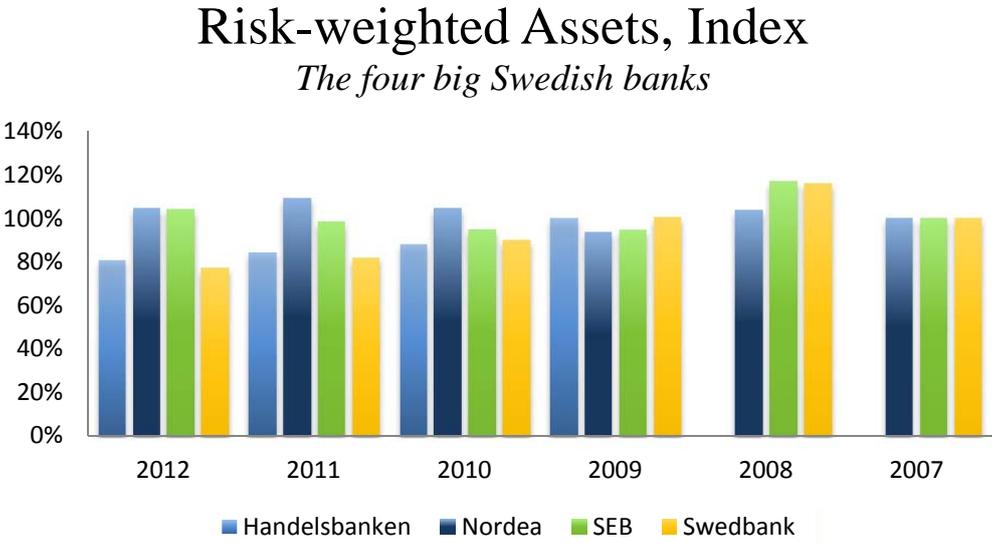
The movement of an increased capital ratio of the banks is opposite to before the crisis, when leveraging was a very common practice for banks worldwide. This involved the attempt to get as high leverage as possible, while having the lowest amount of capital possible. This way of banking was brought up in most of the interviews with the bank representatives, giving it further reliability. Before the crisis, some of the literature used argues that a higher leverage was important to achieve first-best incentive for risk-taking, instead of just making banks take excessive risks (Inderst & Mueller, 2008). As can be seen from the outcome of the crisis, leveraging did cause serious problems, and many banks have changed direction to a more stable capital structure and leverage, because of the complications with the risk-taking associated with the low capital ratio. The regulation from the Basel Accords also has a role in the change of capital ratios, with more strict rules to avoid this kind of excessive risk-taking.

All of the banks were, and still are, active on the loan sales market, which is something that brought a lower capital ratio because of the relatively more effective way of managing their credit risks (Cebenoyan & Strahan, 2004). This, together with the size of the banks, might have been one of the reasons for a lower capital base, but the banks that were able to handle their risks experienced a much less uncertain position in the financial crisis. There are many other factors to this choice, as many banks use a capital ratio target or goal for their business (Mommel & Raupach, 2010). During most of the years investigated, all of the banks had

capital ratio targets, concerning mostly tier 1 capital, the choice of this type of capital measure depends on the regulatory minimum.

During the financial crisis, there was another problem that involved some of the Swedish banks. Swedbank had noticeable trouble with the impact of riskier assets on the balance sheet as the cause of this problem. Literature on the subject associates a higher capital base with a higher asset risk (Akhigbe et al, 2012). This theory most likely affects smaller banks to a greater extent, as their market position does not allow them the same freedom to capital and liquidity, something that is an advantage of the larger banks (Berger & Bouwman, 2013). However, during the financial crisis, markets were shut down and availability of resources was extremely limited, which meant that even larger banks were being shut out. As in the case of Swedbank, assistance from the Swedish National Debt Office was received to handle the problems during the financial crisis. As can be seen in figure 1.2, the amount of risk-weighted assets was heavily reduced for Swedbank. Handelsbanken also reduced their amount of such assets, gaining a more stable position with less risk. This movement can be seen as one of the steps to achieve a higher trust from their clients, mainly Swedbank, that were hit hard during the financial crisis and needed this change of risk orientation.

Figure 1.2



5.5 Liquidity

All the banks stated that they had increased their liquidity after the crisis. This strengthening started before the new regulations with LCR was introduced. Thus, the ratios have not affected the banks operations in any major ways. The only bank that stated that they had been directly affected was SEB, but they also stated that they had already begun to strengthen the liquidity before the ratio was introduced. The banks continue to work with different internal methods to measure their liquidity, such as Swedbank’s survival horizon.

Increased transparency is something that Swedbank in particular expressed as a key factor moving forward, both in the interview and in the annual reports. This fits well with Ratnovski's (2013) views on the importance of transparency in dealing with major crises. Swedbank was the bank experiencing most turbulence so building trust and securing refinancing was vital to their business. This is also important as the bank had to change its strategy and also had to change the perceptions as a bank that took too much risk before the crisis.

The implementation of the stricter rules in Sweden counters some of the criticism from Valladares (2013), though the banks are expecting changes to the regulations.

That globalization played an important role in the effect on the different banks. In accordance to Cetorelli & Goldberg (2012), the need for more collaboration, can be showed by the impact the Baltic countries had on the Swedish banks. Even though the Swedish market stayed relatively stable, the problems the Baltic countries experienced hit the Swedish banks hard and affected their whole business. It is in the interest for all the involved countries and the banks to make sure that this situation cannot occur again, but if it does, the nations need to cooperate to deal with it in the best possible way.

One criticism that the banks have expressed is regarding LCR. The problem is how the different assets are valued as liquid, resulting in what was described as a race to invest in the central banks. This can be related to the problem of LCR being too general to fit all the affected countries (Valladares, 2013; Blundell-Wignall & Atkinson, 2010). It is difficult to reflect on the fact that sovereign bonds of different countries will be of different quality, as this would demand a great deal of extra work.

6. Conclusion

The financial crisis forced major changes in the Swedish banking business. The most noticeable change caused by the crisis is the difference in the view and the ratio of capital structure. The bank with the lowest percentage change has close to doubled their tier 1 capital ratio, with the three other banks at double the amount of tier 1 capital in 2007. The view of capital structure has changed from the leveraging of the years before the crisis, to that a stronger capital base is not only necessary but also beneficial for the reason of gaining trust from clients and lowering borrowing costs. The consequences of the crisis can be found in the year of 2009, bringing down results and negative profits for most banks, reducing the return on equity for all banks and bringing about the movement towards a higher capital ratio. Three of the banks performed a rights issue and for Swedbank a second rights issue was required, owing to the problems that had surfaced in the Baltic countries as well as Russia and Ukraine. The only bank that remained stable and did not perform a rights issue was Handelsbanken, which continued their way of banking throughout the crisis.

Two critical adjustments, caused by the financial crisis, were made within the banks,. The most significant restructuring has been done in Swedbank, which has moved from aggressive expansion to a structure that emphasises transparency and sustainability. These changes originate in the uncertain financial situation and the future it could possibly trigger. The need for a more sustainable way of banking was evident, as for Swedbank's part their expansion into the new markets had proved to be too risky. This forced the bank to change its entire structure to keep it from collapsing, making a movement to start regaining the trust of its clients. All of the banks have altered their financial goals because of the financial crisis and its effects, a very distinguished movement of strategic goals was perceived in Nordea, in the form of four initiatives. The four banks have made changes to their capital structure and liquidity, due to the focus on return on equity as a financial goal. Return on equity has been used more because of the lowered leverage in the banking sector. It has become important as a result of the fact that banks have less leverage to achieve the yield that was normal for the banking sector pre-crisis, thus making other factors more important than just leverage.

The regulatory changes have not resulted in any major differences for the banks investigated. While monitoring the regulators, the four banks moved according to their own policies and strategies. The regulation for capital structure has been modified to a higher capital ratio, which banks acknowledge but they have taken steps to remain ahead of this regulation. The new regulation is stricter, however. The banks have realised that they need to have a stronger capital base and liquidity to manage the market changes that has evolved from the financial crisis.

A direct consequence of the financial crisis is the change in the view of liquidity for all of the four banks. This change can be observed in their increase of the liquidity reserves and the quality of these reserves. However the comparability between the banks is questionable.

This uncertainty comes from the absence of any standardised liquidity measures between the banks, which have resulted in all four banks using their own internal liquidity measures to a greater extent. Handelsbanken and Nordea have reported liquidity buffers double the pre-crisis levels. This progress can be recognised throughout the industry, with close to excessive increases of liquidity buffers to sustain the banks in the case of a new financial crisis.

6.1 Further Research

There are a few areas of interests that this study does not cover. An area that would need some control is whether banks actually have the diversified and stable liquidity reserves as stated in the financial reports. This was brought to our attention as Swedbank stated the same thing before the crisis, where a great risk was later discovered in their market choices and portfolio with some part of subprime papers. Another area of interest could be to differentiate between the effects of the regulation and the banks own agenda. A further subject of investigation might be if the increased liquidity reserves will remain after a stabilisation of the financial market.

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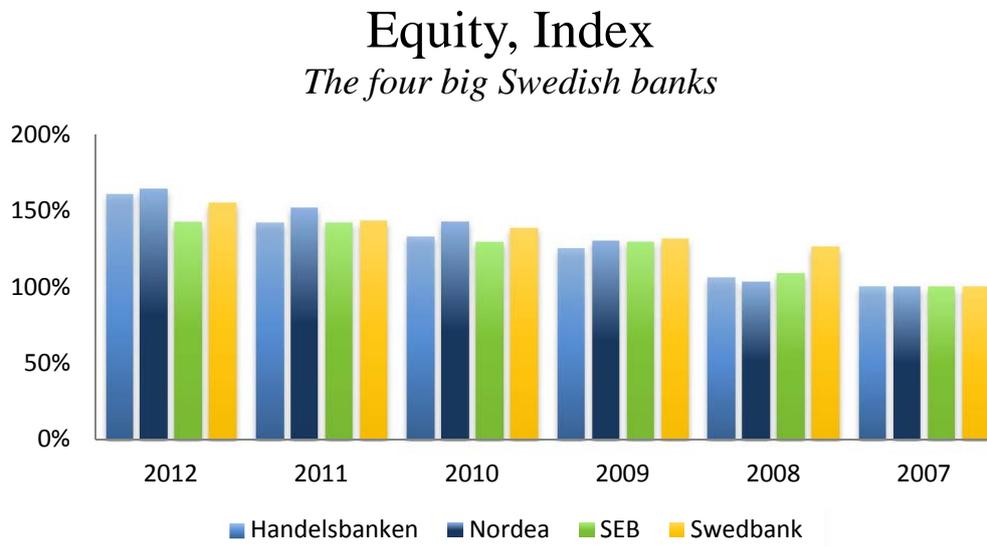
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Appendix I; Figures

Figure 1.3



Appendix II; Interviews

The following questions were used in the interviews conducted for this study, with Bank X being the name of the bank. One additional question was added for the interview with Handelsbanken, because of their unique structure compared to the other banks.

1. Please start with a presentation of yourself and your role within Bank X.
2. A short introduction of the core business of your bank.
3. How was Bank X affected by the financial crisis of 2007-2008? An overview in a broad perspective please.
4. If you have made any adjustments to your financial strategy, what have been done and what do you deem to be the most important change.
5. About capital structure, have your attitude towards debt changed now compared to how it was before the crisis? In what way?
6. Have your view of risk in relation to available capital changed during the years and how did these developments move in to place? Have your bank changed differently compared to the other large banks on the Swedish market? Have the changes been towards a more risk-averse point of view, and why has it turned out that way?
7. If no change has taken place, why has there been no need for changes and what factors have affected these decisions?
8. Have the banking sector changed differently in terms of capital structure compared to Bank X.

9. If there have been changes, have the goals that was established during the financial crisis been achieved and what challenges have been met to reach these goals?
10. Handelsbanken have a strong decentralisation, what influence did this have on your banks ability to handle crises? (Handelsbanken only)
11. What is your opinion on the LCR measure and have the introduction of this measure affected your business?
12. What liquidity measures were used before LCR was introduced?
13. What is your opinion of the strict implementation of the new Basel III rules in Sweden?