



UNIVERSITY OF GOTHENBURG
SCHOOL OF BUSINESS, ECONOMICS AND LAW

Implementing Basel III in Sweden

*A case study of the four major banks' reactions to
the new requirements of the EU and the SFSA*

Bachelor thesis

Industrial and Financial Economics

University of Gothenburg School of Business, Economics and Law

Spring 2014

Authors:

Amanda Thielemann 910914

Natalie Hartman 910329

Advisor: Ted Lindblom

Acknowledgements

We would like to take this opportunity to first and foremost thank our advisor, Ted Lindblom, for the guidance he has given us throughout the research and compilation of this thesis report. He has been an extraordinary idea board, leading the path and development of this work. Secondly, we would like to thank our interviewees for their invaluable insights. Without them, this report would have lacked character and dimension.

Thank you!

Gothenburg 27th of May 2014

Natalie Hartman

Amanda Thielemann

Abstract

There is a great amount of media coverage and literature surrounding the Basel III framework. Sweden has been given particular attention due to the readiness in which the Swedish Financial Supervisory Authority (SFSA) has implemented the corresponding framework through the directives and requirements of the European Union. Although a vast amount of attention has been given these implementations there is a lack of response from the side of the banks in the statements. Literature such as *The Bankers' New Clothes* by Admati and Hellwig (2013) show that banks and regulators can have very different perspectives on what needs to be regulated and what type of regulations will lead to a healthy banking system. This thesis report analyzes the reactions of the major and systemically important banks in regards to the new regulations. The four major banks in Sweden (SEB, Swedbank, Svenska Handelsbanken and Nordea) have been interviewed to bring forth their perspectives of the new regulations in light of statements made by the SFSA. This report concludes that the general implementation of the regulations has been a heavy weight to for the banks to handle as far as human capital and high level of technicality considers. This study also shows that banks are managing the new implementations that have been made, as of today. However, when the future effects of the regulation requirements are considered, the bank representatives worry about possible negative consequences as a result of the current requirements.

Table of Contents

Acknowledgements	i
Abstract	ii
1. Introduction	1
1.1 Problem Statement	1
1.2 Purpose	2
1.3 Background: Leading up to Basel III	2
1.3.1 Bank for International Settlements.....	2
1.3.2 Basel Committee on Banking Supervision	3
1.3.3 Basel I (the 1988 Accord)	4
1.3.4 Basel II – Introducing the Pillars	4
2. Methodology	6
2.1 Literature Review	6
2.2 Interviews.....	7
2.3 Interviewees.....	8
2.3.1 Nordea.....	8
2.3.2 Handelsbanken	8
2.3.3 SEB	9
2.3.4 Swedbank.....	9
2.4 Credibility.....	9
3. Framework of the Study	10
3.1 Theoretical References.....	10
3.1.1 Regulation Theory	10
3.1.2 Effects of Regulation	11
3.1.3 Under & Over regulation.....	11
3.1.4 Regulatory Lag Hypothesis	12
3.1.5 Why Regulation Fails	12
3.1.6 Risk-Based Regulation	13
3.2 Basel III.....	14
3.3 European Union	15
3.3.1 European Commission	16
3.3.2 CRD IV package	16
3.4 The Swedish Financial Supervisory Authority.....	16
3.5 Sweden’s Financial Structure.....	17
3.6 The Swedish Initiative.....	18
3.6.1 Capital Requirements.....	18
3.6.2 Liquidity	18
3.6.3 Risk Weight Floors.....	19
4. Empirical Data	21
4.1 Capital Requirements	21
4.2 Liquidity.....	22
4.3 Risk-Weight Floors for Mortgages.....	23
4.4 Additional Comments in Regards to New Regulation	24

4.4.1 Time Frame & Complexities.....	24
4.4.2 Consequences of the Regulation.....	26
4.4.3 The future of regulation in Sweden.....	27
5. Analysis	28
5.1 What are the possible side effects associated with the regulations?	28
5.2 Will the new regulations protect banks in a future crisis?	30
5.3 How do the four major Swedish banks react to the increased regulations imposed by the Swedish Financial Supervisory Authority?	31
6. Conclusion	34
6.1 Findings.....	34
6.2 Further Research	35
Appendix	36
Bibliography.....	37

1. Introduction

1.1 Problem Statement

Today the economic and global financial systems are finding their way back to a more positive economic outlook, but not without forgetting the financial crisis of 2008. Since the crisis, there has been a demand for more stringent bank regulations with stressing a need for more transparency and the management of the newly identified risks. To take on the responsibility of such global financial policies there are institutions, such as the Bank for International Settlements (BIS) and the Basel Committee on Banking Supervision (BCBS), whose objective is to make international frameworks and standards to create a more stable financial environment (Bank for International Settlements 2014). Regulations and implementations are carried out by national governments whose responsibility is to follow through on the implementations in accordance to the strength of their economy and banking systems.

This report calls to attention the recent increase in regulations made by the Swedish Financial Supervisory Authority (SFSA). These regulations affect the major, systemically important Swedish banks to a greater extent due to additional regulations imposed upon them. These major, systemically important banks are: Nordea, Skandinaviska Enskilda Banken (SEB), Swedbank and Svenska Handelsbanken (SHB). These are by definition the largest banks in Sweden as they have a total revenue four times the size of Sweden's GDP (Swedish Financial Supervisory Authority risk report 2013). Systemically important banks are, by definition, the banks that significantly can compromise the stability of the financial system (Swedish central bank 2013).

The European Union (EU) has created the Capital Requirements Regulation (CRR) and Capital Requirements Directive IV (CRD IV), which later will be referred to as the CRD IV package. This package is to correspond to the Basel III Accord (European Banking Authority 2014). In Sweden the SFSA has been implicit about a swift implementation of the CRD IV package. The first round of the CRD IV package came into force January 1 2014, much earlier than the required time frame imposed by the EU (Swedish Financial Supervisory Authority 2013).

Sweden is one of the countries that have been proactive in the early implementation of the framework. The new requirements being set for Swedish banks

have been recognized nationally and internationally by media channels such as Svenska Dagbladet (Svenska Dagbladet 2011) and Bloomberg (Levring & Carlström 2013). Many are impressed by the great initiative the SFSA is taking. How banks have been affected by the initiative has, however, not been as emphasized. The SFSA and the EU have worked to build a regulatory framework that will create a more sustainable banking system. Will the regulations cause any negative side effects for the banks in the future? The nuanced discussion of perspectives between the banks and the SFSA is aimed to give a more balanced understanding of the benefits as well as the difficulties being experienced by the banks in regards to the new regulations.

1.2 Purpose

The aim of this research report is to analyze the reactions of the four major Swedish banks to the implementation of the CRD IV package made by the European Commission and the Swedish Financial Supervisory Authority. An assessment of the potential side effects regarding this sort of regulatory framework will also be conducted. The objective will be met through researching and drawing conclusions from the following question:

How have the four major Swedish banks reacted to the increased regulations imposed by the Swedish Financial Supervisory Authority?

The main question will be answered with the help of two supporting questions:

- a. *What are the possible side effects associated with these regulations?*
- b. *Will the new regulations protect banks in a future crisis?*

1.3 Background: Leading up to Basel III

An understanding of various international and national institutions is fundamental for this report. The background has been written to give a brief explanation of the various institutions, regulating bodies and frameworks which have contributed to the regulations being implemented in Sweden today.

1.3.1 Bank for International Settlements

Following the First World War, the Bank for International Settlements was formed to handle the payments Germany was to pay as a result of the Treaty of Versailles. After the various international settlements were carried out, the institution remained the key international collaborator providing, for example, monetary policy

support to national banks around the world. The bank that was founded in 1930 in Basel, Switzerland became a great platform carrying out the services of a commercial bank offering both monetary and financial stability to central banks as well as other agencies around the world. The bank describes its position as an international mediator between banks and other financial authorities (Bank for International Settlements 2014).

1.3.2 Basel Committee on Banking Supervision

As one of the main monetary actors in the 1970's and 1980's, the BIS was an entity supporting the Bretton Woods agreement which tied international currencies to the U.S. dollar. The failure of this system led to the development of what today is called the Basel Committee on Banking Supervision, which was formed by the central bank governors of the G10 countries. (Bank for International Settlements, *BCBS* 2013)

The goal of this new committee was to increase the quality of banking and create a more stable international banking environment. At the time of its establishment in 1988, the G10 countries had already experienced various crises and were keen to mitigate the foreign exchange losses and unruly monetary policies that were affecting a more and more connected financial system. As of today the committee has a total of 27 member countries¹ (Bank for International Settlements, June 2013).

Today, the BCBS continues to set international guidelines to create more stable financial systems through agreement among the member states. However, the committee cannot see through the implementation of the guidelines and recommendations it publishes. It is the responsibility of each nation as a member to implement the guidelines within their country (Bank for International Settlements June 2011). The regulation frameworks made by the Basel Committee are considered minimum requirements and countries may exceed these requirements to make them more personalized to the capacities of different nations. (European Union 2013).

One of the main goals of the Basel Committee is to develop regulations in line with the changes in global economy. This is reflected through the many amendments

¹ G10: Belgium, Canada, France, Germany, Italy, Japan, Netherlands, Sweden, Switzerland, United Kingdom and United States of America. Additional member states: Argentina, Australia, Brazil, China, Hong Kong SAR, India, Indonesia, Korea, Luxemburg, Mexico, Russia, Saudi Arabia, Singapore, South Africa, Spain, Turkey. Observers: European Commission, EBA and the European Central Bank.

that develop in between the implementation of each accord and the fact that the Accords are frameworks that build upon each other. Each accord has been implemented as reactions to major fluctuations in the economic system. (Bank for International Settlements 2014).

1.3.3 Basel I (the 1988 Accord)

The Basel Accord which acts as the first reform of the Basel Committee was presented in 1988. In light of the Latin American debt crisis and the savings & loans crisis of the 1970's and 1980's, the committee agreed that a system of regulations for international banks was necessary. In particular, the committee saw the need for capital requirements within the financial system. (Bank for International Settlements 2013).

There were two parts to the Basel Accord of 1988. The first part was capital requirements of 8 percent² and the other was the implementation of a risk weighting system to assess and evaluate different credits within the banks chances of default and so that they could be categorized in a manner that more visibly portrayed how much risk the bank was carrying. The risk weighting system sought to create more comprehensible risk assessments as well as measure counter party credit risk which was becoming relevant on a national and international scale with the development of internal loans in the banking system. (Bank for International Settlements 2013). During the years leading up to, and after, the full implementation of the Accord, additional supplementary amendments of various requirements evolved alongside the Accords, satisfying the needs for clarification and further reform.

1.3.4 Basel II – Introducing the Pillars

Building onto the original Accord of 1988 was the Basel II, which was introduced in 2004. The new features of the Basel II were designed to meet the innovations of the financial system that had been developed in the late eighties and nineties as a result of deregulations and other instruments which had evolved on the market (Bank for International Settlements 2013). As before, the capital requirements and standardized rules from the first Basel Accord and the amendments were included, as well as the risk weighting system which was evolving to be more

² The Accord called for a minimum capital ratio of capital to risk-weighted assets of 8 percent to be fully implemented by the end of 1992.

proactive in the way the internal assessment process was carried out. The Basel II came with a new type of framework, which was built based on three pillars: *capital requirements*, *supervisory review process* and *market discipline*.

The first pillar, which builds on the 1988 Accord, is the *Minimum Capital Requirements* which was set to a tier 1 capital³ of at least 8 percent of risk-weighted assets. The second pillar concerns the internal supervision and transparency and setting regulations for the *Supervisory Review Process*. This process includes the intervention of supervisors to prevent capital from falling below capital requirements, as well as an overall supervision of the capital adequacy in relation to the firm's specific risk profile (Bank for International Settlements 2001). The third pillar, *Market Discipline*, is supposed to prevent banks and other entities from taking excessive risk. The entities are required to reveal relevant data to the public so that they are able to properly assess the condition of the entity. (Bank for International Settlements 2001).

The most difficult aspect of the implementation of the Basel III Accord was determining a timescale for implementation that all countries could agree on. The challenge was not only about identifying a fair timescale, but also finding requirement levels that would not put any country to a disadvantage. In 2006, many were realizing that the requirements of Basel II were not enough. At this point many countries had yet to make the minimum regulation implementation. (Bank for International Settlements 2013).

³ The Tier 1 capital largely consisted of shareholders' equity and disclosed reserves

2. Methodology

Collis & Hussey (2009) state that there are three ambitions of social science research: descriptive, exploratory and explanatory. When problems are in a preliminary stage (i.e. when the issue was recently observed and sufficient data is scarce), exploratory research is applied. According to Shields & Rangarajan (2013) an exploratory research is created for an issue that has yet to be clearly defined and it is often conducted before knowledge is received to postulate an explanatory relationship. The aim of an exploratory approach, and thus the aim of this thesis report, has been to provide a significant understanding of the subject or issue rather than to propose solutions.

There are two different paradigms that are most frequently used when carrying out research, interpretivism and positivism (Collis & Hussey 2009). Interpretivism is most commonly associated with a qualitative research method as it relies on the researcher's interpretation and understanding of social action rather than measuring social structures through a quantitative research method. An interpretive paradigm has been used in this report due to the qualitative nature of the problem statement and objective of the research. The research began with a sense of understanding for the problem statement, and the aim thereafter was to delve deeper into the complexities and relative truths that surrounded the subject.

The research carried out for the thesis report has been of an abductive nature, meaning that the analysis began after the initial collection of data. Thereafter, new collection of data has depended on the results of the preceding analysis. The empirical data has been formatted to present the information in a manner that leads the reader intuitively through the investigation of the research questions.

2.1 Literature Review

The aim of using the literature has been to pinpoint the possible criticism (if any) among the banks and to narrow down which areas of the regulation were considered most important or difficult to implement. This criticism has aided the construction of the interview questions. Among the sources of second hand data are two pieces of literature which specifically critique the Basel III framework; these are the pieces of writing by Chorafas (2011) and Admati & Hellwig (2013). Throughout the literature, the subjectivity of these authors has been taken into account. There has been a limited use of these resources due to the lack of objectivity. The main purpose of this

literature has been to give an understanding of the issue and discussion surrounding the foundation the Basel III framework during the initial research phase.

Chorafas (2011) condemns the regulators and their inability to set the levels that are required as a result from the inefficiencies in the financial system. While Admati & Hellwig (2013) underline the weaknesses of the Basel III framework with regards to the unwillingness of many banks and governments to cooperate with regulation. These authors argue that the Basel Committee too easily accepts the banks' and governments' unwillingness to take on more stringent regulation.

The official reports and documents from the four major banks (Handelsbanken, SEB, Swedbank and Nordea) have been acquired from their respective home page. Although the banks' annual reports have been written with subjectivity, the reports have been pursued and audited by an independent accountant and are therefore considered to obtain a valid level of criticism. The reports conducted from the economic institutions are considered of high credibility, as these institutions are constantly kept under high scrutiny from independent actors.

2.2 Interviews

To gain more insight to the problem statement, a representative from each of the four major Swedish banks has been interviewed. The primary data has been gathered through semi-constructed interviews where the interviewers have allowed the interviewee to introduce new thoughts and ideas within the subject of research, in line with the interpretive paradigm of the research. The self-administered interview templates will be found in the appendix.

The authors have been aware of the unbalanced conclusions that can be made with a subjective approach. This is could have occurred if only the arguments of the interviews had been used in drawing conclusions. It is difficult to maintain complete objectivity in a project of this nature where interviews regarding opinions and perceptions of one representative from each entity are carried out. In order to maintain an objective point of view, an analysis of secondary data from the Swedish Financial Supervisory Authority perspective regarding the issues has also been carried out to avoid being colored by only the opinions of the banks.

After reviewing the interviews it was found that many of the questions could be bundled together to cover different areas of the discussion. The different categories of responses have been established corresponding to the regulation requirements

which are prevalent today. The representatives were prior to the interview informed that their responses would be presented anonymously in the thesis paper. This has been done to make the representatives more comfortable in giving more practical reflections as well as increasing the amount of additional discussions which the representatives find relevant to the subject. Also, it avoids making conclusions about specific banks, as the goal is to analyze the four major Swedish banks as a whole. The representatives have received the research paper prior to deadline to be able to correct any misconceptions.

2.3 Interviewees

The persons that have been chosen to participate in the interviews have been found within each respective bank to hold a high validity in their opinions due to the positions they hold within each bank. These positions are such that the interviewee has great insights in the implementation process of the regulatory frameworks carried out by the SFSA. The authors have either contacted the bank representatives through allocating their division and thereafter being recommended the most fitting candidate for the interview. In other cases an approach was made to a mediator of the bank who gave the most appropriate match. In one way or another the respective bank has been able to provide interviewees which have credible backgrounds and can represent the bank in a fair manner.

2.3.1 Nordea

Fredrik Södergren represented Nordea in the interviews. Fredrik has worked for the bank almost three years and is working on the regulations department where they are responsible for the reports regarding capital requirements. Furthermore, Fredrik is also collaborating (alongside other Swedish banks) with the Swedish Financial Supervisory Authority to harmonize theory and practice. The telephone interview with Fredrik was conducted on the 25th of April 2014.

2.3.2 Handelsbanken

Martin Blåvarg is currently based in London and works with Investment Relations. He was previously responsible for the operations and reports regarding credit risk, at the time when Basel II was in force. Martin was previously chief economist at the SFSA as well as deputy head of financial stability at the Swedish central bank. The interview took place on April 29th, 2014.

2.3.3 SEB

Pontus Hult is a finance manager in SEB, stationed in Stockholm. Pontus works with risk reporting, which involves all reports regarding CRD IV/CRR. On the 5th of May 2014 the interview with Pontus was conducted.

2.3.4 Swedbank

Olof Sundblad represented Swedbank in the interview and is stationed in Stockholm. He is currently working with treasury management and is head of capital and asset/liability management. Olof works with the interpretation of regulations. This interview was also completed on the 5th of May 2014.

2.4 Credibility

Collis & Hussey (2009) state that reliability is the absence (or presence) of differences in results, if the same research were to be repeated multiple times. Bryman & Bell (2011) explains that reliability is often associated to quantitative research and the reason why reliability is considered of lesser importance in qualitative studies, such as this research report. Given this study have been under an interpretive paradigm, reliability is often low due to the small number of observations (Collis & Hussey 2009).

Validity refers to the extent to which the findings accurately reflect the reality (Collis & Hussey 2009). The validity will therefore also be an effect of the level of objectivity when interpreting data as well as respondent's level of objectivity to the subject. It is understood that the respondents in the interviews have different experiences regarding the subject, which have colored their responses. The respondents have however been selected by the banks, which the authors consider to be an advantage, as the banks have better knowledge in who is best suited to answer questions regarding the subject of this research.

3. Framework of the Study

The framework of the study begins with general theories regarding regulation. Thereafter, an introduction to the Basel III framework is given as well as giving an explanation to how Basel III has become the CRD IV package. The perspective of the SFSA regarding the CRD IV package and the additional requirements will then be introduced.

3.1 Theoretical References

Throughout the years a vast amount of research has been carried out investigating questions regarding the homogeneous application of regulation and the outcome of various instruments of implementation. The following theories describing the many branches and nuances of regulation theory are fundamental to understanding the possible effects or perspectives that can arise surrounding the regulations that have recently been carried out by the SFSA.

3.1.1 Regulation Theory

Regulations are carried out through the force of public agencies which set the rules for a group of entities. The purpose of the regulation can either be to induce a certain type of behavior or it can be preventative and take specific actions to avoid or mitigate issues. Modes of influence vary from economic incentives (when for instance trying to influence behavior) or punitive action if rules are not followed. (Baldwin 1990).

Market failure is the lack of responsibility or sustainable market behavior by an industry. An effect of market failure is that public safety can be considered at risk. At this point a regulating body deems the industry unfit or inefficient in self-regulation. Regulation can also be the result of regulators trying to seek further social or political objectives which go beyond simply correcting the market.

Giandomenica Majone (2002) describes regulation as scenario specific and complex depending on the situation and risks being brought up. The perspective from which one is analyzing a situation to understand why the conclusion has been met and to which extent it correlates to other perspectives is also a determining factor in how the outcome of a regulation is interpreted. Although criticized by theorists such as Majone, pro-regulation arguments can often reflect the common saying that “it is better to have something than nothing at all”. Therefore regulation is a word of its

maker, depending on who is analyzing the outcome, good or bad is often based on different sets of criteria.

3.1.2 Effects of Regulation

When choosing to regulate Baldwin (1990) state that the decision needs to be made as to how the problem or risk should be approached. The options are to either work towards preventing the occurrence of risks or mitigating the identified risks. This can be achieved by, for example, inducing a certain type of behavior that will create resilience against the risk. Each option bears its own challenge of implementation. The first option, preventative regulation, is according to Majone (2002) of a preemptive nature where the weakness of this type of regulation lies in its uncertainty. The advocates of risk mitigation argue that this type of regulation creates a more sustainable “touch and go”-concept which is of a responsive character where regulations are implemented through the adaption of the system. This approach can therefore be seen as evolving with the risks and reacting to rather than trying to predict the risk.

Once the initial challenges of regulation are overcome, the remedy and levels of regulation are amongst the next aspects to be considered by the regulator. The established levels and requirements of a framework will have a great effect on the result of the regulation. The results will often not be seen until after the regulation has been implemented. The following theories will describe how the challenges of regulation reveal themselves after implementation. (Baldwin, Cave & Lodge 2011)

3.1.3 Under & Over regulation

The ideal balance between regulation and “freedom” within industries is often difficult to pinpoint. Baldwin, Cave & Lodge (2011) claims that regulation can easily fall onto one or the other side of a balanced spectrum leading to what is known as under and over regulation, both result in a failure for the regulation to reach its initial objective. There is often a false correlation made between regulation and a red light, making regulation seem like an endless list of “don’ts”. The red light example is the side of regulation that is defined as over regulation.

An example of the countervailing effect of regulation is also given by the authors, where they describe interventions in the banking field which are supposed to create stability but instead cause runs in the banking sector. As a result banks may move towards less regulated areas to conduct their business or become less

transparent. A perverse effect of over regulation is that it can lead to under regulation. If regulations are too precise or “over prescriptive” they can become difficult to apply to the fundamental aspect of the risk. In only the exact measures covered in the regulation will be averted rather than the broader spectrum of the risk leading to a case of under regulation.

Professor Sam Peltzman (1989) describes interest groups as the parties affected by regulations that compete, each working to maximize their own group’s utility from regulation. The interest group can also see a disadvantage of a regulation and want to work against it. The stronger this opponent group is, the more resources it has which can overrule the regulation proposal. Hence, regulation can be battered down or shaped by the interests of other parties (i.e. not the greater public interest) and lead to a situation of under regulation.

3.1.4 Regulatory Lag Hypothesis

Regulatory lag as explained by Fraser & Kannan (1990) is a hypothesis that argues that increased regulation will result in increasing risk due to the elongated process of regulation. According to Joskow & MacAvoy (1975), the reason for increasing risk exposure is that regulation falls behind in responding to changes in the market. For example, the regulatory framework of Basel II grew out of the concern that Basel I did not fully cover the risks associated with the developing banking activities at the time (Shadow Financial Regulatory Committee 2007). Regulatory lag occurs when the regulatory framework stays the same while market characteristics change to the point that the regulations no longer are relevant to the risks the banks, for example, are exposed to. Lag can also occur if a risk breaks down a system before the correlating regulation is fully effective, meaning the regulation is too late.

3.1.5 Why Regulation Fails

Regulation is, as Baldwin (1990) states, most often developed to help solve a problem or induce a new behavior in society. Thanks to the media and other sources the public is more likely to see how these regulatory initiatives are criticized for not meeting goals or failing to prevent the risk that they originally set out to eliminate. These examples of regulatory failure are not difficult to miss and it begs the question, what defines regulatory failure? The authors continues by stating that, to pinpoint what regulatory failure is, it is important to understand the variations of regulatory failure because there is not merely a right or wrong outcome.

The following theses are expressed as reflections on why regulation can be argued to be an inevitable failure. The German economist Hirschman (1991) summed up the reactionary thought into three types of perspectives: perversity, futility and jeopardy in explaining why regulation fails. The perversity theory acknowledges that a reform can be made with good intentions however they argue that the result of the reform will always have the same counterproductive or way of “backfiring” (Hirschman 1991). Hirschman describes that futility theorists draw the conclusion that regulation results in no change, positive or negative, and therefore fails to meet the intentions of regulation since it does not result in anything. The third perspective of the failure of reform, according to Hirschman (1991), is the jeopardy thesis. This theory argues that reforms are mutually exclusive which means that one cannot be implemented without considering how that will affect the already implemented reform.

3.1.6 Risk-Based Regulation

Risk-based regulation is a system that attempts to anticipate risk in a system rather than adhere to a set of prescriptive rules. What differentiates risk-based regulation from traditional methods is the nature in which it works to mitigate identified risks. Rather than identify the risks which are correlated to an already established set of rules, risk-based regulation identifies risks and then builds a framework in reaction to the risks.

According to Baldwin & Black (2010), this method of regulation has become more popular in recent years because it is seen as a way to make complex risks more manageable and build more justifiable foundations for regulation. It has also been welcomed due to the systematic and transparent nature of the calculations which make it a reliable source to identify risks and their potential impact.

The authors continue to describe that when the risk framework is established, it is often designed so that the different areas of regulation pertaining to each type or variation of the identified risk can be clearly understood and implemented. From the technical perspective, risk is identified through a type of scoring system in which the different propensities or chance of occurrence can be measured and systematically categorized. Critics of risk-based regulation question the reliability of the calculations carried out in determining the most and least prevalent risks in an industry. They argue that the results of the calculations are not objective because every stage of this

type of regulation is based on the choices of the regulator in correlation to the risks that are to be assessed and how to define risks. The regulators also decide how to prioritize the risks. This leads to a regulation which is colored by the regulators underlying assumptions.

Critics, such as Majone (2002), raise various arguments against risk-based regulation. It can have weaknesses due to its reliance on similar models to repeatedly measure and establish risks. Other weaknesses after implementation that critics raise are risk aversion lag and regulation “tunnel vision”. Tunnel vision after implementation can occur due to the nature of the weighting system which gives the heaviest risks the most attention and other risks which have been given lower priorities are not given as much attention. A lag in risk aversion has been recorded when the regulators find themselves using the “established methods” rather than looking for new risks that may be identified by other methods.

As shown throughout the text, regulation is a complex concept, which is difficult in many aspects including rationalization, management and control of risk, which in itself is difficult to define and control. Risk-based regulation is one of the few forms of regulation that gives hope in managing the task of regulation for regulators. According to Majone (2002) it is for this reason still considered a more rational, cost-effective and controllable form of regulation while maintaining transparency.

3.2 Basel III

After the financial crisis of 2008-2012, the three pillars of the Basel II Accord have been modified into the Basel III Accord and shall be fully implemented by 2019. The concerns that were raised in 2006 were proved valid through the crisis of 2007-08. The fall of Lehman Brothers and the domino effect this created in the financial environment highlighted the weaknesses of the Basel II. Additional regulations have been introduced in Basel III in regards to capital requirements. As one of the great weaknesses of the financial system during the 2008 crisis was due to insolvency issues (i.e. the banks had too much leverage). (Bank for International Settlements 2011).

According to the BCBS (2013), the new stipulations, with liquidity buffers and an underlying capital that can be turned into liquid funds, aim to prevent any such risks in the future. The fundamental changes that have been made from Basel II are

the increase in amount of common equity tier 1 capital as well as introducing liquidity requirements. These liquidity requirements aim to make the banks more self-sufficient in times of financial distress, which will decrease the reliance banks have had on the government and, by extension, the taxpayers. The reason for the increase in capital requirements is to decrease the amount of leverage in financial entities (Bank for International Settlements 2010).

The Basel III framework has been a target of criticism from many sources and perspectives. In his book “*Basel III, the Devil and Global Banking*” Chorafas (2011) criticizes the prolonged time frame of implementation with the Basel III framework, which he describes is the result of a massive amount of lobbying that has been carried out by various banks and governments. The banks are the biggest opponents to the regulation often with the argument that the regulation is too expensive, unnecessary or both. The author also argues that the global financial system will have time to suffer through another recession before the implementations are completed and he continues by stating that the financial market needs higher requirements sooner rather than later. Without creating a sense of hurry, he continues, the majority of the actors will suppress the consequences that were a fact from the previous recession and thus the framework would be wasted.

Admati & Hellwig (2013) more specifically criticize the mentality of banking system as well as the regulatory body. They also agree on the ineffectiveness of the minimum requirements that are placed on the banks. They argue that it is on the verge to under regulation and thus they will not make a difference when it matters the most. They also argue that there is not enough pressure on the institutions, which is why a significant change is not likely to come with Basel III.

3.3 European Union

According to the official website, one of the main tasks of the European Union is to create uniformity in regulation within the member states. Given the recent financial crisis, the importance of coordination through networks and reliance on regulatory capacity has been illuminated. In the aftermath of the financial crisis has been further institutional strengthening of the regulatory bodies (European Systemic Risk Board 2014).

3.3.1 European Commission

The European Commission is an executive function of the European Union, which has the tasks to propose legislations and enforce European law, as well as manage the EU policies (European Commission 2014). In the case of Basel III, the European Commission (2014) has adopted an implementation of technical standard (ITS) to harmonize the content and format of the reports from over 8 000 banks in the European Union. The reason for this harmonization is due to the Basel Accord amendments that are solely targeting the operations of multinational banks. All member states of the EU are obligated to implement the new regulations and thus Sweden is inevitably obligated to follow the CRD IV package.

3.3.2 CRD IV package

The CRD IV is based on directives regarding the establishment and management of banking operations, corporate governance, risk management requirements, and capital buffers. The CRR includes regulations regarding the requirements of capital, liquidity, solvency and reporting (European Commission 2014). Together, these two create the CRD IV package.

There are two main aspects that differentiate Basel III from the CRD IV package. The first one is that the CRD IV package has been implemented in European law whereas Basel III is an internationally accepted agreement among the member states of the Basel Committee. Furthermore, the capital adequacy agreements apply to multinational active banks, while the CRD IV package has been harmonized to be applicable to all banks and other financial entities in the European Union. To be able to carry out this legislative process, some important changes have been made to the banking regulatory framework (European Union 2013).

3.4 The Swedish Financial Supervisory Authority

The Basel Committee on Banking Supervision is a global network for supervisory authorities where the Swedish Financial Supervisory Authority is a member. The Swedish Government designated the SFSA to be the supervising authority for the implementations of the CRD IV package and the complementary directives to the mandatory stipulations (Swedish Financial Supervisory Authority 2013). Within the European Union regulations there are two kinds of implementations to be considered, *EU directive* (such as CRD IV) and *EU regulation* (such as CRR).

EU regulation is immediately applicable and mandatory to every member state of the European Union. EU directive is considered mandatory guidelines where the member state is expected to impose national specific regulations. The SFSA has the authority to impose additional regulations, based on EU directives. (Swedish Financial Supervisory Authority 2013).

3.5 Sweden's Financial Structure

Up until the 1990's the mortgage lending entities and banks in Sweden functioned as separate entities. In the mid 90's a law was passed which allowed banks to acquire mortgage institutions creating the major banking groups in Sweden today. This was a turning point for the Swedish Financial structure because the internalization of mortgage institutions and the deregulations that led up to these structural changes throughout the 1980's and 90's. These changes are fundamental to the explanation as to why Swedish banks have become more sensitive to changes in the economy than before this change. Today Swedish banks' reliance on market funding, of both national and international nature, makes them at the mercy of the confidence of investors. (Swedish Bankers' Association 2013).

Today the SFSA sees the major Swedish banks as strong in regards to capital and this past year in the has been defined as a good year with positive earnings relative the macro environment and slow growth in the rest of the European zone (Swedish Financial Supervisory Authority risk report 2013). In the SFSA risk report of 2013 it has been acknowledged that each of the four major banks has met the regulations requirements of the CRD IV package. Still, the SFSA finds many aspects of the current financial system in Sweden to be of a risk filled nature. There are four aspects of the Swedish banking system today that the SFSA regards as risks. The structural risks include the interdependence of the Swedish banks, their dependency on macroeconomic factors and their dependence on financing from the financial markets.

These banks carry out the majority of the loan activity in Sweden and make up 40 percent of the financial activity. When describing the structural risks and interdependence, the SFSA is referring to this structure in the banking system which means that if one bank becomes weak and infected, it will most likely weaken the other banks due to the interbank financial activity. Also, the banks are dependent on their investors who are the main source of funding and will only continue to invest

when the banks are reliable. It is important, the SFSA argues, that the banks maintain a reputation for strength and reliability. (Swedish Financial Supervisory Authority risk report 2013).

3.6 The Swedish Initiative

The SFSA and Sweden's central bank have, according to their respective risk reports (2013), detected what they find to be growing risks within the Swedish economy based on the structure of the financial system that is largely dependent on the mortgage and loan system. According to them, there is a structural risk with the current high levels of household debt and the possible threat of a housing bubble. In the risk report for 2013, the SFSA has kept a continued scrutiny of the banks' capital levels as well as liquidity risks and household debt in regards to the implications these variables have on the major Swedish banks. It was with these factors in mind that the SFSA has seen it necessary to take precautionary measures in the form of additional requirements.

3.6.1 Capital Requirements

The Swedish Financial Supervisory Authority has implemented stricter regulations and has also decided to implement them at an earlier stage. The CRD IV package requires that common equity tier 1 capital will be at least 7 percent (4.5 percent + 2.5 percent buffer) of risk-weighted assets by 2019 (European Union 2013). In terms of the four systemically important banks, the SFSA has set the common equity tier 1 capital to 10 percent as of 1 January 2013 and 12 percent by 1 January 2015, including 2.5 percent buffers (Swedish Financial Supervisory Authority 2011). Capital requirements on banks have thus been set well beyond the 7 percent common equity tier 1 capital requirement. This was a direct result of the capital requirements being recommended by the European Commission, extending beyond that of the international recommendation.

3.6.2 Liquidity

The SFSA acknowledges that credit losses on Swedish mortgage loans have been low the past 20 years. However, the level of risk is found to be higher today than it was 20 years ago due to the growing expenses for Swedish households which have increased the exposure of risk. This, in turn, affects the overall risk exposure of

the banks and contributes to the vulnerability of the Swedish banking system (Swedish Financial Supervisory Authority risk report 2013).

Today the EU commission has taken on the established liquidity risk of the banks, which uses LCR (Liquidity Coverage Ratios) to assess if a bank is liquid enough to withstand a stressed situation. LCR ratios are process where the ratio requirements increase with a final goal of 100 percent or more in 2018 (European Union 2013). A ratio of 100 percent means that the banks have assets of a highly liquid nature that cover a 30 day stress period. The SFSA has, however, deemed it plausible to set the standard to above 100 percent already today for the major Swedish banks due to their current capabilities. (Swedish Financial Supervisory Authority risk report 2013). The stress tests are carried out with a scenario where the banks are put in a situation where they experience diminishing earnings and an increase in credit losses. According to the SFSA's risk report (2013) the four major banks all pass the stress test, however two of the banks would have to use the extent of their buffers to survive.

3.6.3 Risk Weight Floors

Due to the relationship between liquidity risks, credit risks and capital requirements, the SFSA has emphasized the importance of bank stability. As stated earlier a great deal of lending in Sweden is composed of mortgages. The financing of these loans is mainly carried out through secured bonds. According to the SFSA one of the bank systems vulnerabilities is towards events such as falling house prices, which would make the placement in these bonds more unreliable for investors. This would in turn result in less investing which could significantly affect the bank system in Sweden (Swedish Financial Supervisory Authority 2013). Due to these identified vulnerabilities in the Swedish banking system, the SFSA states in their 2013 risk report that they have found it necessary to intervene by implementing a risk-weight floor.

When Basel II was implemented, the Swedish banks were allowed to use internal risk weighting models known as IRB-models to calculate the correlating risk weights to their credit exposures (Swedish Financial Supervisory Authority May 2013). All the credits that were calculated by using these models became considerably lower. As mortgages in Sweden have been calculated in this manner, the resulting calculations were average risk weights of 6 percent for the Swedish banks (Swedish

central bank 2013). This is considerably lower than the original 50 percent that was required in the first Basel Accord and the 35 percent alternative that the SFSA had given as a pre-calculated template in Basel II (Swedish Financial Supervisory Authority 2013).

In May 2013, the SFSA announced that a risk-weight floor of 15 percent for Swedish mortgage loan portfolios would be introduced (Swedish Financial Supervisory Authority May 2013). According to the institution, the fundamental reason for the regulation is to decrease the amount of lending in Sweden. Parallel with the implementation of the 15 percent floor, the SFSA also stated that if the mortgage cap continued to be high further raising the risk-weight floor (Swedish Financial Supervisory Authority Nov 2013).

In May 2014, during the compilation of this report, the SFSA decided on the 25 percent risk-weight floor (Swedish Financial Supervisory Authority May 2014). The 25 percent risk-weight floor that is about to be implemented has been introduced as a part of the overall capital adequacy requirements for the banks within the scope of pillar II (Swedish Financial Supervisory Authority May 2013). Pillar II gives SFSA the opportunity to impose additional capital (and liquidity) requirements depending on the economic structure of Sweden, “*in order to address higher-than-normal risk*”, according to the European Union (2013).

4. Empirical Data

The empirical data has been setup so that the research question regarding the reasoning behind the SFSA's regulatory implementations have been discussed so as to give an understanding of the requirements and the SFSA's perspective on the Swedish banking system today. The second part of the empirical data covers the interviews conducted during the research, which aim to highlight the banks' perspectives and reflections of the requirements. Since, the objective of this report has been to get the overall reaction of the major banks rather than their individual opinions, statements made by the bank representatives have been presented anonymously. The authors found that this gives a more complete picture of the banks' perspectives as a whole. This part has been set with a backdrop of each banks annual report to give an insight into the bank's levels of implementation with the various requirements. The interview questions that have been brought up in the empirical data have been grouped in a manner that categorizes the different regulation requirements and sheds light on what the banks have found important to bring up during the interviews.

4.1 Capital Requirements

During the interviews the bank representatives were asked about the effects of the new capital requirements. All of the four major Swedish banks have been able to meet the increased capital requirements of the EU's CRD IV package and the stress test levels of the SFSA. When reflecting upon the capital requirements, bank representatives 2 (BR 2) and 4 (BR 4) responded that these levels had been determined from what deemed accomplishable by the banks. Bank representative 3 (BR 3), responded that the high levels of capital makes the banks more competitive and the banks can use it to their advantage. BR3 also reflected that the difference in credit rates was not really being felt today, due to the already low nature of the interest rates.

The following question, regarding why other banks did not implement similarly high requirements, had the following answer. The international and certainly southern European banks are not in the same position of strength and can therefore not take on as stringent of regulations as the Swedish (BR 3).

In response to a question regarding the costs associated with higher capital requirements, BR 4 indicated that higher capital requirements come at a cost and that in the end it may very well be the customers that pay for this. He went on to say that,

according to the SFSA, the cost is supposed to zero out for the banks because then the banks will have a lower dividend requirement to pay out to investors due to the decrease in risk. So, from a banks perspective, the SFSA does not believe the bank will bear the new costs. Bank representative 4 then reasoned that although the costs may increase for the customer, the price that is paid might be worth the stability and security that the customer gets in return from the bank. BR 2 built on the discussion stating that the bank ratings which can be boosted as a result of strong capital levels are one of the ways banks can recapture losses, or at least make the cost of capital to the banks advantage, he adds.

4.2 Liquidity

When asked about the main requirements of the new frameworks many of the banks brought up the liquidity requirements of the framework. BR 4 brought up liquidity describing it as one of the most recent developments of the third Basel Accord. BR 1 stated that there is a substantial difference regarding liquidity and capital requirements. In terms of liquidity, all banks have had to invest in new systems to be able to calculate the bank-specific requirements for liquidity. The annual reports have shown that all of the four major Swedish banks have met the requirements of 100 percent⁴.

BR 1 also brought up the requirements of the liquidity buffer. In his point of view the models and specific requirements of how the buffers are to be implemented have been unclear. He added that the waiting period between the publication of CRD IV in January and the SFSA's implementation and revision of for example the buffer calculations complicate the implementation within the bank. According to the same representative, the bank occasionally has to assume that they are using the correct models and then present them to be judged after-hand by the SFSA. BR 2 also described the implementation as unclear. The representative went on to describe the detail-oriented nature of the framework and reiterated the point of BR 1 about the lack of guidelines in certain calculations.

The interview question which regarded the type of effect the regulation framework would having on the banking system led BR 3 to give an example, he reflected that as after the latest crisis 2008, in Sweden 1992, changes in regulation

⁴ The Svenska Handelsbanken has a liquidity coverage ratio of 128 percent. SEB, Swedbank and Nordea respectively lie at levels of 129 percent, 142 percent and 117 percent according to their respective annual reports as of 2013.

were also made that redefined what makes a sound bank. Similar changes to the changes being made today, he discussed. Even though BR 2 said that it did not change or affect everyone in the firm he still said it required new competency and more responsibility on the side of the bank.

BR 2 described that liquidity before the 2008 crisis was something that everyone was aware of and that everyone measured, however, the crisis proved that it had not been measured correctly. BR 3 described the crisis as a wake-up call in regards to how banks measure liquidity using Lehman Brothers failure as the straw that broke the camel's back; meaning that this was the ultimate piece that brought down the entire structure. Both BR 2 and 3 went on to say that if the crisis had not happened and this risk had not been identified banks would have continued with the same liquidity standards.

4.3 Risk-Weight Floors for Mortgages

With the new implementations of 25 percent risk-weight floor, Svenska Handelsbanken (2014) published in its 2013 annual report that since the IRB-method calculations are based on historical credit losses and since the issues have arisen in the recent years, the banks have underestimated the current risks due to the nature of the IRB-method. According to Swedbank's (2014) annual report, it has agreed with the SFSA that there are some imbalances in the Swedish economy, particularly in the housing market. Swedbank reported that low levels of new housing has resulted in a demand surplus and increasing housing prices which in turn has led to an increase in household debt levels.

Interviews carried out with representatives of each bank gave mixed opinions and perspectives when asked their opinions of the risk floors. BR 1 described how the elevated risk weight floor was positive from their shareholder's point of view. According to the representative there are three ways the authorities can choose to lower the level of borrowing. Firstly, the authorities can force households to amortize, which in turn would mean that they would be paying more money to themselves as they will pay back the loan sooner rather than later. Secondly, they can remove the tax subsidy for loans, resulting in a greater cash flow to the Swedish government. Or, thirdly, they can implement a risk-weight floor, meaning that the banks shareholders receive more money as a redistribution of value is made from borrower to shareholder.

The representative also stated that when the 25 percent floor was first suggested, share prices had increased by 10 percent in value. BR 3 responded to the question by saying he did not oppose the implementation *per se*. However, he stated that from a competitive point of view, those banks that are not stationed in Sweden (and are therefore not affected by Swedish law) but act on the Swedish market might be given a competitive advantage, as they may not be required to hold capital to the same extent as Swedish banks.

According to BR 4 the risk-weight floor is not necessary in Sweden. He claimed that, due to the fact that borrowers are personally liable for their mortgages (as opposed to where the mortgage follows the property as in Spain and the U.S, for instance), Sweden does not have to consider the risk that follows. He explained that these risks might be higher in those countries where the owners can leave their house and mortgage payments to the bank if they cannot pay. However, this is not the case in Sweden where the mortgage owner is liable for their payments until the mortgage is completely paid off why there is relatively less risk on the Swedish banks than for example Spanish or American banks, he concluded. The same representative believed that the risk weight floors have been a reaction to the increased scrutiny Swedish banks have received from European counterparts, due to the low mortgage risk-weights Swedish banks have held prior to the floors.

4.4 Additional Comments in Regards to New Regulation

4.4.1 Time Frame & Complexities

In response to which aspects (if any) of the regulation framework had been most difficult to implement, respondents 1, 2 and 4 each brought up the time frame that the SFSA had set. Bank representative 4 compared the implementation time of the new framework to that of the Basel II. He stated that the discussions regarding Basel II began around 1998 and the accord was finally implemented in 2007. With the Basel III, discussions regarding the framework began around 2009 and the framework for the regulation was more or less completed in the summer 2013, a much shorter period as the representative pointed out.

BR 2 commented on this question by saying that even though a date had been set for the implementation period to begin, not everything was completely decided at the point of implementation. The new rules, explanations and guidelines that had come along with the regulations made it much like a trial-and-error period, which he

believes has presented difficulties for the banks in trying to understand what is required of them. BR 2 stated that even though all banks have been well aware of the approaching regulatory framework. He went on to state that implementing the regulations too early would be a potential waste of both time and resources due to the back and forth nature of the aspects of the regulation which were not complete when the regulation was published.

In response to whether or not the banks had experienced any other difficulties with the new regulation, two of the respondents stated that the increased investments in time and manpower have been a substantial aspect with the new framework. BR 2 said that more is required from the employees of the banks as a result from the regulations. The representative also explained that complexity arises when employees have to take liquidity, leverage and capital requirements into account when determining the price to a customer, which is a matter of technical difficulties that is transferred to the required level of resources.

The representative of bank 4 explained that within the bank there are over 100 employees working with regulations on a day-to-day basis who are merely a cost to the bank as none of them generate revenues. He also stated that the regulations will most likely have a positive effect on the bank, such as a solid standing in future crises, which he deemed a worthwhile investment. BR 2 answered the question by reflecting on the possible upsides of the regulations saying that, although the regulation does not generate revenue, the bank will find ways recapture these expenses, now or in the future.

When the question regarding the complexities of the framework was raised, BR 4 explained that “due to the insufficient amount of time, the implementations have not been properly tested which results in a trial-and-error concept”. According to the representative, the authorities rely on the banks (which are encountering problems and questions along the way) to solve the issues. If issues remain unsolved, the banks are unable to fully implement the requirements. BR 2 reacted to the question by saying it is illogical to lay the requirements upon the banks without proper instructions and leave them to solve the issues. He continued that, leaving it to the banks to assess the models does not only increase the expenses for the banks, but leaves many aspects up for interpretation.

4.4.2 Consequences of the Regulation

When asked about the level of regulation and if today's framework will prevent a crisis in the future, BR 1 stated that no one will know until the next crisis if the implemented regulations are effective. As BR 3 described it, "the risks we are working with today are not the ones that will cause the next big problem, it is the unforeseen and unrecognized risk that cause the problems". The representative went on to describe the concept of the black swan, which was mentioned in several interviews as the "surprise risk". BR 2 referred to "Lehman" as the black swan of the financial crisis, meaning that the liquidity had been an unforeseen risk.

Tangent to the discussion of regulation, a discussion of the effects of over regulation came forth. Bank representatives 1 and 3 brought up the possibility of banks moving to unregulated areas such as off balance sheets activities, known as shadow banking. Bank representatives 1 and 2 both brought this up as a possible threat while bank representative 2 claimed that, in Sweden there is neither the kind of regulation that allows irrational interpretations nor the mentality to do so.

When discussing which risks were not covered by the regulation (if any), BR 4 believed that mainly responsive regulations were being implemented today due to the difficulty in identifying future risks. BR 4 pointed out in this aspect, that there is an area of the regulation corresponding Pillar II where banks are supposed to report risks that are not covered today but may become problems in the future. When BR 2 was asked if the banks go beyond the identification of present risks, said that it is difficult to be more preemptive than what Pillar II already is, and that is as far as the banks go in finding new unidentified risks.

Again, when asked questions about the difficult aspects of the framework BR 2 and 4 stated that the underlying political intentions are good. BR 4 said there was inadequate technical support can make the implementations appear poorly thought through. BR 4 continued by clarifying that there are no expectations on politicians to have the competence to solve the banks technical issues. On the other hand, involving too much politics in the financial technicalities of the regulation can constitute a problem, he concluded.

One of the bank representatives described it as risky to allow politicians and institutions to implement rules according to their risk identifiers, questioning if they really are the best candidates for identifying risk (BR 4). In regards to the political involvement, BR 1 made a similar statement, saying it is a shame when politicians

make certain regulations part of “their campaigning”. He went on to say that the implementation of regulations that are unnecessary or do not mitigate the actual risks can in themselves become risks.

4.4.3 The future of regulation in Sweden

As a reaction to the question of how requirements will affect banks in the long run there was a difference in opinion from the representatives. BR 2 worried that when the global markets are normalized, the Swedish banks will be at disadvantage if they are the only country with a banking system which is heavily regulated and in turn has higher interest rates. The representative at first described the advantages other countries that do not have as high of rates will have. He then went on to mention that international banks established on the Swedish market such as Danske Bank in Sweden is already at an advantage because will be able to offer lower rates for example.

BR 4 discussed the long-term effects in regards to the investor perspective when questioned about the banks opinions of the future effects of capital requirements. According to him investors are looking for margins. He stated that it was not as important what the level of the requirement was but what type of margins the banking is making over the requirements. BR 4 went on to say, if the bank is constantly raising its levels in accordance to minimum requirements to avoid sanctions, then they are not keeping as strong of margins and investors will not be satisfied.

5. Analysis

The themes that have carried through the report from the theoretical foundations to the empirical data gathered through interviews and reports have given way to many interesting perspectives in regards to the problem statement. The interviews have been able to breathe life and perspective into the facts given through annual reports in describing the reactions of the banks. The analysis begins by answering the supporting question, in order to set a foundation for answering the main question of the report in the end of the chapter.

Areas where the banks based the greater deal of their interview time have therefore been considered the most relevant aspects to cover when describing the reactions of Swedish banks to the increased regulations of the SFSA. The areas that have become more pronounced when looking back at the interviews and data are: the implementation process of capital requirements, the new liquidity components of the regulations, the risk-weight floor, and finally a general discussion regarding the future implications of today's regulations in Sweden.

5.1 What are the possible side effects associated with the regulations?

This study has identified positive and negative aspects of the regulation framework that the SFSA has implemented as well as some possible criticism of the regulation. The discussion is carried out by foremost weighing the reactions of the banks, but also in light of the goals of the SFSA in correlation to the theoretical framework.

In response to Hirschman's reactionary theses, two types of arguments arise from the research. The banks' reflections show that they believe that the regulations, which have been made in response to past crises and those that are implemented today, do result a change in the banking system. As the implementations of risk-based regulations such as the stress tests and capital requirements may prove not to protect the banks in future situations of distress. This leans towards Hirschman's futility theory which correlates to what can be the result of under or missed regulation. However, seen in the opposite light, if over regulation make banks move towards unregulated areas this can cause an opposite reaction to the goals of the SFSA upholding the perversity theory. If either of these theories is realized in the future, it will imply a failure of regulation.

Both the bank representatives and the SFSA deem it important to retain a strong creditworthiness to attract and maintain investors. However, their opinions of how to reach these objectives differ somewhat. While the SFSA works towards this goal by, for example, raising the minimum capital requirements. Bank representatives 1 and 4 believed that the investors look for strong margins above the minimum requirements. Therefore, BR 4 stressed the importance of lying above the minimum requirements set by regulations, which is why he believed a higher level is not always the optimal solution to the issue. In a worst-case scenario the differences in margins that the banks produce could cause investors to move away from Swedish banks, BR 4 commented. If the minimum requirements are higher in Sweden it is more capital of the Swedish banks to attain greater margins than banks with lower requirements. The result of this may be that Swedish banks cannot maintain as strong of margins as other banks and investors may therefore move onto those with greater margins. This can therefore be seen as the opposite of the goal of the SFSA, since they wish to continue maintain the attraction of Swedish banks. This type of unwanted reaction is in line with Hirschman's perversity theory, where the opposite of the regulator's intentions occurs.

A negative consequence if the banks feel that they are being "over regulated" is an increased activity in shadow banking (BR 3). The representative also stated that the risk of an increasing shadow banking system is a consequence of imposing (too) firm of laws and regulations upon the banks, which can cause an unstable banking system.

The bank specific calculations concerning LCR that the stress tests have required have been a point of distress amongst the various bank representatives. Areas of uncertainty have been in regards to which models and definitions to use as well as how to cover all the details that go into the calculations. The liquidity requirements are the newest update in the framework and have required a great amount of human capital, time and investment on the part of the banks, as the bank representatives discuss. This regulation can be considered risk-based since it has developed as a result of risks identified by the latest financial crisis. As emphasized by Black & Baldwin (2010), one of the main weaknesses of this type of regulations is that the choices that are made in identifying the risk levels are subjectively chosen. For instance, the level of liquidity has been set as 100 percent based on the assumptions of regulating bodies such as the SFSA and the European Commission. Another aspect to consider is that

the tests, which are designed to measure if the banks are sound or not, are designed by financial institutions. Both these aspects make the regulation imprinted by the regulators opinion.

Tunnel vision was another weakness associated with risk-based regulation. A possible side effect of tunnel vision is that the other risks are not covered because the recent implementations of regulations are considered the most important ones, such as the liquidity regulations in the CRD IV package. This may result in other risks being somewhat or completely missed, which may instead lead to failure in mitigating the overall identified risks of the framework.

5.2 Will the new regulations protect banks in a future crisis?

As the regulation framework points out and the interviews with the bank representatives concur, the consequences of the regulations that are currently being implemented are difficult to predict. According to the interviews and annual reports of 2013, the banks feel strong today and are well financed through the markets. Therefore the implementation of the regulation framework is not as difficult as if the banks had been financially weak and lacked funding.

Another aspect of uncertainty is how the regulations will protect the banks in future crises. As the representatives have reflected, the current regulations can mainly be seen as mitigation-regulation due to the fact that the majority of the pillars within the framework are a result of risks identified in prior economic down turns. The bank representatives doubted that the next cause of financial instability will be covered by the current regulations. Both BR 2 and BR 3 described the occurrence of unidentified “black swans” which are difficult to mitigate until after it they have shown themselves.

It can be said that the regulation works to weave a precautionary acting part in the framework which works towards identifying unknown variables. The SFSA as well as bank representatives 3 and 4 bring up Pillar II as a mechanism to identify risks that are not being regulated today. However, beyond the work that is being carried out in Pillar II, the banks agree that it is difficult to do much more than work with the risks that make up possible areas of weakness that the SFSA (in collaboration with the banks) has identified today.

5.3 How do the four major Swedish banks react to the increased regulations imposed by the Swedish Financial Supervisory Authority?

The heightened requirements of the SFSA are a reaction to structural risks that the SFSA and other financial institutions have identified in the Swedish banking system. The research underlines that these regulations have also been made with the banks' capabilities in mind, making it more tailored to the banking system in Sweden. The bank representatives even see this as a competitive edge today, as for example bank representative 3 stated. The annual reports from 2013 also highlight the view of the banks as strong and reliable banks. This is noteworthy due to the macro environment today, where this is not the case with many other European banks.

When discussing the effects of the SFSA's requirements, the general impression is that regulation (for the most part) covers the risks that have been established in recent years. The bank representatives were more uncertain if the framework would cover future risks. A reflection of the interviews in reaction to the underlying effects of regulation shows that all of the representatives found that the regulation affects the banking system in Sweden. Bank representatives 2, 3 and 4 agreed that the new regulations will change the banking system in Sweden to a certain degree. With these remarks in mind, set against Hirschman's futility thesis, the banks reflect a more optimistic reaction to the regulations impact. Although they admit that a regulation cannot always predict the trigger of a future crisis, the regulation makes changes that affect Swedish banks and which in turn changes the system.

The area where discussion varied the most was when responding to the newly implemented risk-weight floor requirements. The responses ranged from embrative to very critical. The benefits of the regulation can also be seen as dependent on the perspective being analyzed. From the SFSA's perspective, the decrease in loans through increased costs is in line with the objective in mitigating the housing risk as well as making Swedish banks more like their European banking counterparts in their mortgage risk weights. Therefore, the imbalance in opinion may instead be based on a dispute over the prognosis rather than the prescription. The bank representatives that are critical may actually criticize the SFSA's underlying risk assessment of the mortgage levels and the risks they deem pertinent in the system, rather than the regulation's ability to accomplish its objective.

From the SFSA's point of view the risk weight floor can be considered positive and, therefore, they do not agree that there is a risk for over regulation. According to the SFSA (2013), the regulation is in line with the institutional opinion and will lead to less mortgages and thus less risk (i.e. the objective). The SFSA will also consider the objective met when Sweden is at the same levels of credit risk levels for mortgages as the other banks in Europe, which will help them maintain a creditworthy reputation.

Surrounding the discussion of over regulation, which indirectly was brought up in many of the interview questions, a trend was noticed in the answers. Although none of the four representatives believe the heightened requirements as sources of disadvantage at present, the representatives do foresee areas that can be to a disadvantage in the future. The general opinion that has come through during the interviews is that Swedish banks can be put in a position of disadvantage if other banks do not follow similar regulations in the future.

The literature analyzed in gathering the general discussion about Basel III criticized the time frame that the Basel Committee had set, deeming it too long. Chorafas (2011), states that it is important to create a sense of urgency in implementing a framework. In correlation to the theories regarding regulatory lag which describes the negative consequences that can occur when regulation does not react quickly enough, the compressed time frame that the SFSA has chosen to follow can be seen as an attempt to avoid the regulatory lag. Thereby, the SFSA may be able to eliminate this weakness, which both Chorafas (2011) and Admati & Hellwig (2013) identify.

Another reason why the SFSA is requiring a faster implementation stage is because Swedish authorities are conscious of Swedish banks' solid starting point. They require an earlier implementation date "because they can," as bank representative 4 stated. This applies to both time frame and level of capital requirements. The SFSA has responded to the criticism that the Basel III accord has received, by limiting the implementation time and setting higher capital requirements.

Even though these points can be seen as positive mitigation of typical regulation weaknesses, three out of the four bank representatives reacted negatively to the increased time pressure (representatives 1, 2 and 4). As a majority of the representatives worked with the reporting or other aspect of implementation, they experience first-hand the time and extent of work that has been required by the

framework. All of the bank representatives made similar comments about the amount of work and complexity involved in calculations, which in combination with the shortened time frame they believe made for a more stressed situation. Bank representatives 1 and 4 also pointed out that the regulations felt rushed on the part of the SFSA.

Establishing a balanced regulation that avoids the various types of failures described in the framework is difficult to create. The theoretical framework reflects the difficulties in judging the results of a regulation and the responses of the bank representatives reveal that the goals of the regulating body and those of the banks do not always coincide.

6. Conclusion

The concluding observations of this report have been drawn from the inferences made in the study, and have developed with the underlying research questions as a backdrop for identifying the major implications of this research. As the theoretical framework discusses, regulation cannot be defined as merely good or bad. However, put in different contexts, different areas of strength, weakness have been identified and other interpretations have been made.

6.1 Findings

The main concern with the framework that this report has identified from the responses of the bank representatives is the disadvantages that the current regulations may cause, if other banks in Europe and around the world do not implement similar capital requirements in the future. The banks' investors and customers are only willing to pay so much for the stability that these regulations provide. This can become especially true when the markets normalize and banks strengthen in areas such as Southern Europe which are considered unstable today. If cheaper options with international banks become available, Swedish banks will be at a great disadvantage. In turn, this may cause Swedish banks to move to more unregulated activities to make up for the lost revenue. It will then be considered a regulatory failure in line with the perversity theory.

This thesis report has also concluded that the complexities and difficulties that arise between theory and practice when forming regulation cannot be overlooked. The main focus of the SFSA is to create, what they deem, a sound financial system whereas the banks are result-driven entities which have to deal with the practical issues that arise with regulations. The banks must consider their profits as well as their commitments to investors and shareholders. Therefore, it is natural that the banks will be critical of a framework that requires huge investments of resources. However, if the difference between regulators' theories and the reality for banks become an impediment for the banks, the risk for over regulation and thus the risk for a more unstable banking system may increase. Risk-based regulation is not a fully perfect method which means that the identified weaknesses such as tunnel vision or risk aversion lag can affect this framework. The banks will then suffer, not only sunk costs, but other unforeseen side-effects.

A positive effect of the regulation requirements, the research brings to light, is the opportunity of improved credit ratings and the increased credibility the banks can obtain with their new stronger positions with capital and liquidity. This is seen as a positive and distinguishing characteristic of Swedish banks today. Both parties (regulator and regulatee) consider the banks strong and capable of implementing the regulatory changes that have been necessary. This increases investor, shareholder and customer confidence in the banks. Whether or not the regulation developments will help in a future crisis is more difficult to anticipate in the banks eyes. Although the Basel III framework attempts to mitigate established risks as well as identify future risks, the threat of events led on by black swans means that the regulator can only do so much to protect banks in future crises.

The balance between the objective of the regulator and the group being regulated can shift on many points within a framework. Agreement is not always reached between the parties and although one can weigh the discussion with the help of theoretical frameworks, the resilience or success of a regulation will not be seen until it is tested in reality, which will show itself in the next crisis.

6.2 Further Research

To be able to fully understand the impact the CRD IV package will have on the four major Swedish banks and thus the Swedish economy in the future, examining the results of the ongoing implementation process is one suggestions to further research. Particularly interesting would be to examine the liquidity aspect of the regulatory framework, since it is the newest and therefore the least explored aspect of the regulation.

A second suggestion to further research (which was ensued while conducting one of the interviews) is the possibility of new regulations regarding leverage ratios which may be imposed on the banks in the near future. This regulation will encourage lower leverage ratios, as a result of the vulnerabilities the SFSA still identifies in the Swedish banking system. The reactions and capabilities of the banks to further regulation will lead to an insightful discussion due the hesitancy that the bank representatives have reflected in regards to further restrictions on the banking sector in Sweden.

Appendix

Interview template

1. What is the bank's general perception of the Basel III framework on the bank and in general for the Swedish banking system? (Positive or negative?)
2. Has the bank found it difficult to implement the regulations from the Swedish Financial Supervisory Authority (and CRD IV package)?
3. Do you believe that the new regulations will help prepare the bank for future risks, such as a new financial crisis? If yes, in what way?
4. Do the requirements cover all possible risks?
5. What are the positive effects of the SFSA's new regulations on the bank?
6. Are there negative effects? How so?
7. The SFSA is requiring higher amount of common equity tier 1 capital; will this increase the total costs for the bank?
8. From a competitive point of view, do you believe the bank's position in the (international) market has been/will be weakened by the new requirements?

Bibliography

Admati, A. and Hellwig, M. (2013). *The Bankers' New Clothes: What's Wrong with Banking and What to Do about It*. New Jersey: Princeton University Press

Baldwin, R. (1990) Why Rules Don't Work, *The Modern Law Review*, 53(3) pp. 321–337.

Baldwin, R., Cave, M. and Lodge, M. (2011). *Understanding regulation: theory, strategy, and practice*. Second edition. Oxford: Oxford University Press

Bank for International Settlements (June 2013). *Basel Committee on Banking Supervision* [Online] Available from: <http://www.bis.org/bcbs/> [Accessed 30 Mar 2014]

Bank for International Settlements (2011) *A global regulatory framework for more resilient banks and banking system*. Basel Committee on Banking Supervision [Online] Available from: <http://www.bis.org/publ/bcbs189.pdf> [Accessed: 25 Mar 2014]

Bank for International Settlements. 2014 *History* [Online] Available from: <https://www.bis.org/about/history.htm> [Accessed 2 Apr 2014]

Bank for International Settlements (June 2011) *Basel III* [Online] Available from: <http://www.bis.org/bcbs/basel3.htm> [Accessed 2 Apr 2014]

Bank for International Settlements (2006) *Core Principles for Effective Banking Supervision*. Basel Committee on Banking Supervision [Online] Available from: <http://www.bis.org/publ/bcbs129.pdf> [Accessed 3 Apr 2014]

Bank for International Settlements (2013) *A brief history of the Basel Committee*. Basel Committee on Banking Supervision [Online] Available from: <http://www.bis.org/bcbs/history.pdf> [Accessed 3 Apr 2014]

Bank for International Settlements (2001) *Pillar 2 (Supervisory Review Process)*. Basel Committee on Banking Supervision [Online] Available from: <http://www.bis.org/publ/bcbsca08.pdf> [Accessed 4 Apr 2014]

Bank for International Settlements (2001) *Pillar 3 (Market Discipline)*. Basel Committee on Banking Supervision [Online] Available from: <http://www.bis.org/publ/bcbsca10.pdf> [Accessed 4 Apr 2014]

Black, J. and Baldwin, R. (2010) Really Responsive Risk-Based Regulation. *Law & Policy* 32(2) pp.181-213

Bryman, A. and Bell, E. (2007) *Business Research Methods*. Second edition. Oxford: Oxford University Press

Chorafas D. (2011) *Basel III, the Devil and Global Banking*. Basingstoke: Palgrave Macmillan

Collis, J. and Hussey, R. (2009) *Business Research: a practical guide for undergraduate & postgraduate students*. Third edition. Basingstoke: Palgrave Macmillan

- European Banking Authority. 2014. *Implementing Basel III Europe: CRD IV package* [Online] Available from: <http://www.eba.europa.eu/regulation-and-policy/implementing-basel-iii-europe> [Accessed 4 Apr 2014]
- European Commission (April 2014) *Capital requirements directive* [Online] Available from: http://ec.europa.eu/internal_market/bank/regcapital/legislation_in_force_en.htm [Accessed on 4 Apr 2014]
- European Commission (April 2014) *European Commission at Work* [Online] Available from: http://ec.europa.eu/atwork/index_en.htm [Accessed on 27 May 2014]
- European Systemic Risk Board. n.d. *Establishment of the ESRB* [Online] Available from: <https://www.esrb.europa.eu/about/background/html/index.en.html> [Accessed 3 Apr 2014]
- European Union (2013) *Capital requirements - frequently asked questions*. European Commission [Online] Available from: http://europa.eu/rapid/press-release_MEMO-13-690_en.htm [Accessed 3 Apr 2014]
- Fraser, D. and Kannan, S. (1990) Deregulation and risk: Evidence from earnings forecasts and stock prices. *FM: The Journal Of The Financial Management Association*, 19(4) pp. 68-76.
- Hirschman, A.O. (1991) *The rhetoric of reaction: Perversity, Futility, Jeopardy*. Cambridge, Mass: Belknap Press
- Joskow P. L. and MacAvoy P. W. (1975) Regulation and the Financial Condition of the Electric Power Companies in the 1970's *The American Economic Review*, 65(2) pp. 295-301.
- Levring P. and Carlström, J. (2013) Swedish Banks Get No Mercy as EU Agenda Ignored: Nordic Credit, *Bloomberg*, 20th May.
- Majone, G. (2002) The Precautionary Principle and its Policy Implications. *JCMS: Journal of Common Market Studies*, 40(1): 89–109. Print
- Nordea (2014) *Nordea 2013 Annual Report* [Online] Available from: <http://www.nordea.com/Investor+Relations/Financial+reports/Annual+reports/804982.html> [Accessed 27 Mar 2014]
- Peltzman, S. (1989) The Economic Theory of Regulation after a Decade of Deregulation *Brookings Papers on Economic Activity*. 1989 special issue, pp. 1-59
- Shadow Financial Regulatory Committee (2007) *Lessons for Basel II from the Recent Financial Turmoil* [Online] Available from: <http://fic.wharton.upenn.edu/fic/policy%20page/Shadow%20Statement%20248.pdf> [Accessed 15 May 2014]
- Shields, P. and Rangarajan, N. (2013) *A Playbook for Research Methods: Integrating Conceptual Framework and Project Management*. Stillwater: New Forums Press
- Skandinaviska Enskilda Banken (2014) *SEB Group 2013 Annual Report* [Online] Available from: <http://sebgroup.com/en/Investor-Relations/Investor-Relations/Financial-calendar/2014/Annual-Report-2013/> [Accessed 27 Mar 2014]

Svenska Dagbladet (2011) 'Ingves vill ha hårdare bankkrav än Basel III'. *Svenska Dagbladet*. [Online]. 31st May 2010. Available from: http://www.svd.se/naringsliv/ingves-vill-ha-hardare-bankkrav-an-basel-iii_6209679.svd [Accessed on 27 May 2014].

Svenska Handelsbanken (2014) *Svenska Handelsbanken 2013 Annual Report* [Online] Available from: [http://www.handelsbanken.se/shb/inet/icentsv.nsf/vlookuppics/investor_relations_en_hb_13_highlights/\\$file/hb_13_highlights.pdf](http://www.handelsbanken.se/shb/inet/icentsv.nsf/vlookuppics/investor_relations_en_hb_13_highlights/$file/hb_13_highlights.pdf) [Accessed 27 March 2014]

Swedbank (2014) *Swedbank 2013 Annual Report* [Online] Available from: <https://www.swedbank.com/investor-relations/financial-information-and-publications/annual-reports/> [Accessed 27 Mar 2014]

Swedish Bankers' Association (Feb 2013) *Bankstrukturen* [Online] Available from: [http://www.swedishbankers.se/web/bf.nsf/\\$all/3EB3F41103785D17C12576180044EBF3?open#Svenska%20bankaktiebolag](http://www.swedishbankers.se/web/bf.nsf/$all/3EB3F41103785D17C12576180044EBF3?open#Svenska%20bankaktiebolag) [Accessed 15 May 2014]

Swedish Central Bank, Bengtsson, E., Holmberg U., Jönsson K. (2013) *Att identifiera systemviktiga banker i Sverige – vad kan kvantitativa indikatorer visa oss?* [Online] Available from: <http://www.riksbank.se/sv/Press-och-publicerat/Nyheter/2013/Att-identifiera-systemviktiga-banker-i-Sverige--vad-kan-kvantitativa-indikatorer-visa-oss/> [Accessed 20 May 2014]

Swedish Central Bank (2013) *Financial Stability Report 2013:1* [Online] Available from: http://www.riksbank.se/Documents/Rapporter/FSR/2013/FSR_1/rap_fsr1_130527_eng.pdf [Accessed 27 May 2014]

Swedish Central Bank (2013) *Minimikrav på bankernas kapital vid höjda riskvikter för svenska bolån* [Online] Available from: http://www.riksbank.se/Documents/Rapporter/FSR/2013/FSR_2/rap_fsr2_art1_131128_sve.pdf [Accessed 27 Apr 2014]

Swedish Financial Supervisory Authority (2013) *Finansinspektionens stresstester av svenska storbanker* [Online] Available from: http://www.fi.se/upload/43_Utredningar/20_Rapporter/2013/pm-stresstest-2013n.pdf [Accessed 20 May 2014]

Swedish Financial Supervisory Authority (2013) 'Förslag till föreskrifter om tillsynskrav för kreditinstitut och värdepappersföretag'. *Promemoria*. [Online]. Available from: http://www.fi.se/upload/30_Regler/10_FFFS/11_remiss/20131015-tillsynskrav/remisspm-tillsynskrav-2013-10-14.pdf [Accessed 28 Apr 2014].

Swedish Financial Supervisory Authority (2013) *Risks in the Financial System 2013* [Online] Available from: http://www.fi.se/upload/90_English/20_Publications/10_Reports/2013/riskrapp_2013eng.pdf [Accessed 7 May 2014]

Swedish Financial Supervisory Authority (2011) *Nya kapitalkrav på svenska banker* [Online] Available from: <http://www.fi.se/Press/Pressmeddelanden/Listan/Nya-kapitalkrav-pa-svenska-banker/> [Accessed 27 May 2014]

Swedish Financial Supervisory Authority (Nov 2013) *Så kan FI minska riskerna med hushållens skuldsättning* [Online] Available from:
<http://www.fi.se/Tillsyn/Skrivelser/Listan/Sa-kan-FI-minska-riskerna-med-hushallens-skuldsattning/> [Accessed 27 Apr 2014]

Swedish Financial Supervisory Authority (May 2013) *Riskviktsgolv för svenska bolån* [Online] Available from:
http://fi.se/upload/43_Utredningar/40_Skrivelser/2013/riskviktsgolv-svenska-bolan-12-11920-21maj2014.pdf [Accessed 27 Apr 2014]

Swedish Financial Supervisory Authority (May 2014) *Kapitalkrav för svenska banker* [Online] Available from:
http://www.fi.se/upload/43_Utredningar/40_Skrivelser/2014/kapital_ny3.pdf [Accessed 15 May 2014]