Managing the Consequences of Climate Change: Can Green Value Creation Mitigate Risks and Create Opportunities in the Financial Sector?

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Abstract

The current economic system is dependent upon constant growth and consumption to function, but the planetary boundaries are finite (UNEP 2013). The resulting climate change is likely to influence companies’ ability to do business in both positive and negative ways. The financial industry could be heavily impacted by the predicted consequences. This study seeks to identify the risks and opportunities that could arise as a result of climate change, and discuss whether the concept of green value creation could mitigate the risks and help companies reap the benefits.

This study has looked aimed to answer the following research questions:

1. How can green value creation in the financial sector be defined?
2. Is green value creation present in SpareBank 1 SMN today?
3. What risks and opportunities arise for the financial sector due to climate change?
4. Can green value creation influence banks’ ability to manage changes that stem from climate change?
5. Which measures can SpareBank 1 SMN implement to improve their green value creation?

This has been a qualitative study of green value creation and the consequences of climate change on the financial sector. The research has been a case study of the large regional bank SpareBank 1 SMN. The information that is used was collected in two ways. The first was by doing a literature search for relevant academic literature on the topic of environmental sustainability in the financial sector. The second was through conducting interviews with the Executive Vice Presidents in SpareBank 1 SMN and the director of communications.

Additionally, information gathered from a previous research project on stakeholder influence on CSR strategy in SpareBank 1 SMN was used as a supplement.

The conclusion of this study is multifaceted. The research found that there is little green value creation in SpareBank 1 SMN today. The discussion showed that it was difficult to determine the impact of GVC on mitigating risk and benefitting from opportunities that arise from climate change because the topic is very complex. Several of the informants argued that they did not believe that it was possible to make a profit from providing green products and services to consumers, because consumers are not interested in it. Additionally, some of the informants argued that they did not believe that it was a part of the banks’ responsibility to bear the costs for influencing their customers in a green direction. Based on this, a number of
measures are suggested to help SpareBank 1 SMN achieve a more responsible business model. This was done by targeting areas where the bank is most exposed to consequences of climate change, as for example in terms of risk management.
Prologue

I started my affiliation with SpareBank 1 SMN in December 2012, when I got a part-time position as a youth economist at the bank, where I still work. As I became more familiar with the bank, my interest in the financial sector and its challenges grew. This led me to undertake an internship at SpareBank 1 SMN from July to December 2013, during which I wrote an internship report called “strategies of corporate social responsibility and stakeholder influence in SpareBank 1 SMN”. The interviews and the research conducted was primordial in my understanding and knowledge of the company. Some of the research conducted for the internship report has been used for my master thesis as well. It was my supervisor John Eilif Hermansen who introduced me to green value creation, a concept that would become central to this study.

There are many people who have enabled me to write this thesis and who deserve my utmost thanks and recognition. I am grateful to have many wonderful people in my life who have supported me throughout this process.

I would like to thank my family for motivation and encouragement. A special thanks to my boyfriend Jens, for having faith in me and continuously inspiring me to do better.

Writing a master thesis can be an arduous process that requires skilful guidance. I would like to thank my supervisor John Eilif Hermansen, whose advice and reassurance has made writing this master thesis an educational experience.

Additionally, I would like to thank Petter for valuable input and critical reviews of my study. His feedback has helped me make this thesis the best it can be.

I also want to thank SpareBank 1 SMN for welcoming me into the organization. Also, thanks goes to my informants from SpareBank 1 SMN for taking time out of their busy schedules to participate in this study: Wenche Margaretha Seljeseth, Svein Tore Samdal, Vegard Helland, Ola Neråsen & Hans Tronstad. Their opinions and insights have given me crucial understanding of sustainability in the financial sector. Additionally, thanks to everyone in the bank who has taken time to answer my questions and discuss my thesis with me, and to Roger Teimansen and Ole Ragnar Thanem for reading my thesis.
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<tr>
<td>CERCLA</td>
<td>Comprehensive Environmental Response, Compensation and Liability Act</td>
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<td>CSR</td>
<td>Corporate Social Responsibility</td>
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<td>EBF</td>
<td>European Banking Federation</td>
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<td>EIB</td>
<td>European Investment Bank</td>
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<td>ERAT</td>
<td>Environmental Risk Assessment Tool</td>
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<td>EU</td>
<td>European Union</td>
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<td>GRI</td>
<td>Global Reporting Initiative</td>
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<td>GVC</td>
<td>Green Value Creation</td>
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<td>MDG</td>
<td>Millennium Development Goals</td>
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<td>OECD</td>
<td>Organisation for Economic Co-operation and Development</td>
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<td>SDG</td>
<td>Sustainable Development Goals</td>
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<td>SME</td>
<td>Small and Medium-sized Enterprises</td>
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<td>TBL</td>
<td>Triple Bottom Line</td>
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<td>UNDP</td>
<td>United Nations Development Programme</td>
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<td>UNEP</td>
<td>United Nations Environment Programme</td>
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<td>UNFCCC</td>
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1. Introduction

“Perpetual growth is the operating principle, reinforced by our current economic and political systems, on which many of the world’s business leaders, policy-makers, and investors make decisions every day. As a result, the gap between our current level of consumption and what the global environment can support on a sustained basis continues to grow” (United Nations Environment Programme 2013: 6).

The globe is currently in a double bind: there is an immediate need to reduce the consumption and pollution that occurs, but the entire economic system is underpinned by the continuous need for growth with no viable alternative in sight. Consequently, the issue of climate change and economic growth has risen on the international agenda. The United Nations Framework Convention on Climate Change (UNFCCC) defines climate change as “a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods” (UNFCCC 2014.). The longer the current economic system perpetuates growth with little or no care for environmental issues, the more likely it is that the effects will become dire. The consequences from continuing with “business-as-usual” could prove catastrophic: the United Nations Environment Programme (UNEP) identifies five issues that stem from climate change: “risks to unique and threatened systems, risk of extreme weather events, distribution of impact, aggregate damages, and the risks of large-scale discontinuities” (UNEP 2009: 9). The consequences are many, and necessitates a unified response to stop the current development. Central to the debate of climate change and the economic system is the allocation of responsibility concerning mitigating the negative impacts. Banks have a special position due to their role in the economy and as a supplier of premises. It appears as though more action is needed: a recent survey on climate change by TNS Gallup (2014a) found that 47 % of the population in Norway felt that Norway did too little to adapt to the changes that stem from climate change.

1.1. Background

The consequences that arise from climate change are likely to influence the business community increasingly as they evolve in scope and intensity. The financial sector is central to the economic system both nationally and globally. Banks plays a pivotal role in the functioning of society; they are an important part of the economic infrastructure due to the products and services that they provide, as well as the role they inhabit. As such, they has the power to influence the current economic system – but they are also likely to be impacted by it
should revolutionary changes happen as a response to climate change. However, Schmidheiny & Zorraquin argue that the banking sector (1996) has been very slow to respond to their environmental responsibility, the opportunities that arise and the liabilities they may face. Surveys have found that many banks feel that the environment is outside their sphere of responsibility because it is a moral issue (Schmidheiny & Zorraquin 1996; Giuseppi in Jeucken & Bouma 2001). It is in the financial sector’s interest to engage itself in the risks and opportunities that stem from climate change. Companies that wish to prosper cannot ignore the consequences that arise. Although there are potential benefits to be gained for those who embrace the new opportunities, there are also many potential risks that will riddle the companies who do not react (KPMG 2013; UNEP 2013; Finance Norway 2010). Remaining passive to the changes that come from environmental change could potentially reduce a company’s competitiveness, and perhaps in the long run undermine its viability (RobecoSAM 2014a).

Naturally, different sectors of the economy are likely to be affected by new risks and opportunities in different ways, which makes it difficult to propose a one-size-fits all solution. However, in order to mitigate these consequences it is necessary to propose a solution which is likely to appeal to companies. Hopefully it can be done by unifying the companies’ business goals and their need for revenue with the sustainability perspective. This study takes a pragmatic approach to sustainability in the financial sector by proposing the concept of green value creation (GVC):

“Green value creation is present when a company is able to integrate environmental sustainability into its core business activities in a way that creates value. Creating value must be done in a way that does not undermine its future operations, and that safeguards Earth’s life-support system.

The case company for this thesis is the Norwegian savings bank SpareBank 1 SMN. SpareBank 1 SMN has a long-standing role in the region of Trøndelag and the North-West of Norway; its history dates back to 1823, which makes it one of the oldest banks in Norway (SpareBank 1 SMN 2013). In 2012 the company had a total of 1200 employees (SpareBank 1 SMN 2013). In addition to its prominent role in the region, SpareBank 1 SMN is also one of six members of the SpareBank 1-alliance (SpareBank 1 SMN 2013). The company has a strong market position, and manages assets of 108 million Norwegian crowns (NOK) in 2012, and it is the leading bank in retail market in Trøndelag and the North-West of Norway (SpareBank 1 SMN 2013). There are advantages linked with using such a large company as a
case study when exploring green growth; namely that a large actor is more likely to have the necessary capital and manpower necessary to implement green measures and engage in reporting on corporate social responsibility (CSR) and the environment.

1.2. Problem statement and research questions
Climate change affects the business community, which has to adapt to dynamic terms and processes and changing business opportunities in order to keep up with new developments. There is an increasing interest from companies to report on sustainability, and many integrate environmental concerns into their strategies on CSR. However, proponents of the greenwashing thesis argue that CSR is only used for PR-purposes to make companies appear more responsible than they are (Midttun 2013). Despite an ever-increasing amount of concepts on sustainability, reporting guidelines and initiatives, there is still need for a concept that unites value creation and sustainability into one concept; they are usually seen as two separate dimensions. There is a need for a pragmatic approach that manages to integrate the goals of the company with the needs of the environment in a way that appeals to the business community. It is important to investigate whether it can be profitable to be green, but also whether the risks and consequences that come with not paying enough attention to climate change can leave a company less competitive if ignored too long.

This study will propose green value creation as a potential solution to the challenges posed from climate change. It is necessary to take a closer look at how a bank can become greener, while creating value. It is crucial that the companies themselves see the benefit of being responsible, or else the process of implementing responsible measures is likely to be slow and incremental at best. The aim of this study is to identify what green value creation is and how it can be integrated into the core activities of a company, as well as evaluate whether it is present in the case company. If successful, such a process will give the company a good overview of the status of its green value creation, as well as suggest areas where additional measures could be implemented. The company SpareBank 1 SMN is used as a case study, so that the concept of green value creation can be applied to a specific case in order to evaluate its usefulness.

This study will answer the following research questions:

1. How can green value creation in the financial sector be defined?
2. Is green value creation present in SpareBank 1 SMN today?
3. What risks and opportunities arise for the financial sector due to climate change?
4. Can green value creation influence banks’ ability to manage changes that stem from climate change?
5. Which measures can SpareBank 1 SMN implement to improve their green value creation?

The first research question will look at how green value creation can be defined within the financial sector, and the answer to this question will be used as a basis for evaluating whether green value creation is present in SpareBank 1 SMN. The second research question will explore whether green value creation is present in SpareBank 1 SMN today. This entails looking at the efforts on some key areas, and identifying what the status is today. The third research question will identify the possible risks and opportunities that the financial sector might be subjected to as a result of climate change. This is important because it exposes which vulnerabilities the bank could be exposed to, and which business opportunities it could benefit from. The fourth research question is concerned with whether or not green value creation can influence a bank’s ability to handle the positive and negative consequences due to climate change. The last research question will follow from the results from the evaluating of green value creation in SpareBank 1 SMN, and appropriate measures to increase GVC in the bank will be presented according to where improvements are most needed.

1.3. Limitations
The green value creation concept that is discussed in this study focuses only on the financial sector, and is discussed in relation to the case company. Since the concept of GVC is based on value creation in the financial sector, the subsequent discussion might not be as relevant for other sectors of the economy. The interviews that are conducted do not apply randomized sampling and can thusly not be generalized from. Therefore, the findings from this study is not necessarily applicable to other cases. The definition of GVC should therefore be amended if applied to other companies outside this sector. However, it is likely that the issues and measures discussed in this thesis will be relevant for other banks as well, even though the starting point is SpareBank 1 SMN’s situation.

1.4. Structure of study
Chapter 2 presents the methodological basis for the study. The research design will be presented, choice of case will be explained, and there will be a discussion regarding the literature used for this study and the quality of this. There will also be a brief discussion
regarding the choices regarding the interview guide. Chapter 3 provides a discussion and definition of the concept of green value creation, as well as a brief literature review presenting the banking sector’s view on climate change and its own role with regards to this. Chapter 4 contains a discussion on how climate change may possibly impact the financial sector. Here, the relevant risks and opportunities for the financial sector will be presented and discussed. Additionally, the role of risk management for this sector will also be discussed here. Lastly, there will be a brief presentation of the Financial Supervisory Authority of Norway’s report on the risk outlook for the financial markets in 2014. This chapter answers the research question concerning risks and opportunities for the financial sector. Chapter 3 and 4 provide the theoretical framework for this study. Chapter 5 provides a brief introduction to the case company, SpareBank 1 SMN. It will give the reader an insight into the bank’s position in the market today, as well as briefly present what it has done in terms of the environment. In addition, the bank’s organizational structure and the responsibilities and tasks of each section will be found here. This will provide the basis for understanding the green value creation of each department, as well as the improvements that will be proposed later on in the thesis. Chapter 6 contains the findings from the interviews and other empirical evidence. Chapter 7 presents the analysis of the empirical evidence. In this chapter, the empirical evidence is analysed using the three-dimensional model of responsibility presented by Jørgensen & Pedersen (2013). Chapter 8 contains the discussion, and this part will discuss and answer several of the research questions; namely, whether or not green value creation can influence banks’ ability to manage consequences that stem from climate change, and how valuable green value creation really is. Chapter 9 will put forth some recommendations to SpareBank 1 SMN on the basis of the results from the evaluation and which measures they could implement in order to become better at green value creation. The last chapter will be the conclusions from the study and suggestions for future research.
2. Methods

The purpose of this study is to investigate the consequences of climate change on banks’ ability to do business and whether green value creation can mitigate the risks or increase the benefits they are exposed to. This is done by conducting a case study whereby interviews with the Executive Vice Presidents of the bank and a literature review is used to answer the research questions. The case used is SpareBank 1 SMN, which is the largest financial services group in the region of Trøndelag in Norway (SpareBank 1 SMN 2014).

2.1. Research methods & research design

The choice of qualitative, quantitative or mixed methods depends on the research questions and what kind of data that one needs to collect in order to answer it (Matthews & Ross 2010). Quantitative research methods stem from a positivist approach, and are often used to collect structured data, which in turn can be used to test hypotheses, often in a statistical manner (Matthews & Ross 2010). Qualitative methods, on the other hand, are usually more concerned with the informants’ perceptions of situations and their opinions concerning the topic of research, and the information gained is often difficult to generalize from due to this fact (Matthew & Ross 2010). This study is interested in exploring the concept of GVC from the informants’ point of view, as they are likely to have opinions on the viability of the concept. Tjora (2010) argues that quantitative research methods often make a stronger use of theories and existing literature to guide research choices such as hypotheses and research design, while qualitative research is less bound by theories. Few theories and little pre-existing literature is available on the topic of green value creation, which makes it difficult to make use of quantitative research methods due to difficulties in formulating testable hypotheses. It is necessary to approach the topic with an open mind to not let one’s own preconceived notions and expectations influence the research design and thus the results of the study. Therefore, an exploratory approach is preferable to start investigating this topic. The research questions are both evaluative and exploratory in nature, which guides how the research design is shaped and conducted. Exploratory research is applied when there is limited knowledge of the chosen topic or issue one wishes to start investigating (Matthews & Ross 2010). Although there has been done a lot of research concerning sustainability, green economy and green growth, the literature search found that there was extremely limited research available on green value creation. Because there is little pre-existing research done on this topic, it is necessary to exploratory in nature. As such, the research will be more empirical than theoretical, because of the limited amount of information to go on.
As opposed to exploratory research, evaluative research aims to look at the value, effectiveness or effect of a phenomenon (Matthews & Ross, 2010). In this case, it entails looking at whether green value creation is present in SpareBank 1 SMN today, and what measures can be implemented to better integrate sustainability into the business operations of the bank. As such, this research has a bipartite objective: firstly, to identify and understand the role of green value creation and consequences of climate change on business opportunities in the financial sector. Secondly, to evaluate the presence of green value creation in the bank and the viability of implementing measures to increase it. This is summarized in the table below:

Table 1: Classification of research questions.

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<tr>
<th>Exploratory research questions:</th>
<th>Evaluative research questions:</th>
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<tr>
<td>Can green value creation influence banks’ ability to manage changes that stem from climate change?</td>
<td>Is green value creation present in SpareBank 1 SMN today?</td>
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<tr>
<td>How can green value creation in the financial sector be defined?</td>
<td>Which measures can SpareBank 1 SMN implement to improve their green value creation?</td>
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<td></td>
<td>What risks and opportunities arise for the financial sector due to climate change?</td>
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2.2. Case study

There are mainly four types of research design one can choose from when conducting research: case studies, cross-sectional, longitudinal and experimental (Matthews & Ross 2010), all of which have different strengths and weaknesses. For this study, a case study of SpareBank 1 SMN has been chosen, and the reason for this will be explained in more depth below.

One of the advantages of the case study is that it allows the researcher to look into one case in-depth and in a way which results in a lot of information and detailed knowledge (Matthews & Ross 2010). Because of the lack of previous research on this topic, it is an advantage to be able to go into detail of one case to explore this subject. The measures that are proposed will be based on SpareBank 1 SMN’s situation, which increases the applicability of said measures. By exploring a specific case rather than just working on it on a theoretical level, it will be easier to evaluate the viability of the measures that are proposed as recommendations in chapter 9. It enables the researcher to propose realistic measures or suggestions with regards
to the specific situation of the bank because the suggested measures are based on this specific company rather than on the basis of general research on the topic.

SpareBank 1 SMN can be said to be a typical case as it representative of many other cases because it does not distinguish itself from other banks in any significant way (Matthews & Ross 2010). SpareBank 1 SMN was chosen primarily because I as a researcher had access to it through my part-time position at the bank. Because I already knew the organization it was easy for me to gain access to potential informants, and I did not have to spend a lot of time trying to identify who could be the relevant informants. The majority of the people that were contacted were eager to contribute and appeared to find the research both interesting and relevant for the company.

2.3. Data collection

The data for this study was collected in two ways, both of which are qualitative in nature. The first part of the research project was a literature search that helped me identify the dominating discourses on the topic. Important issues concerning green value creation, risks and opportunities due to climate change and the financial sector were investigated, in addition to identifying the dominating discourses on sustainability in the financial industry. The relevant academic literature was identified to gain an understanding of the field and to provide a basis for understanding the issues that will be explored in this thesis. The research questions regarding a definition of GVC and the identification of risks and opportunities were answered mainly through the use of existing literature. The literature was collected by using academic search-engines such as Scopus, Jstor and Web of Knowledge. A search for green value creation on Scopus yielded two results, both of which were conference papers on the construction industry. This made it clear that it was necessary to widen the scope to find relevant literature. Additional topics that were searched for included “green economy”, “sustainability” and “green growth”, both on their own and in relations to “the financial sector”, “the financial industry”, “banks” and “banking sector”. By filtering the results from these searches so that the most cited articles came first, the most central articles on these topics were found. This does not mean that these articles necessarily are the best or most relevant articles, but it did provide a good overview of the topic. Because the articles that were used were the most cited, it indicates that they were of importance to the academic community, seeing as they were discussed to such a large degree. It is important to use central articles and not articles on the fringes. By using articles from peer-reviewed journals, it was
ensured that the articles were of high academic standard because they have been subjected to scrutiny from fellow professionals.

In addition to the information gathered through the literature search, I would look at the references of these articles in order to see whether there were any articles that appeared to have relevance for my study. Moreover, much relevant information was found by visiting the home pages of Norwegian banks and organizations that have participated in the discussion on sustainability and the environment in the financial industry. Other relevant information that was sought after was related to sustainability reporting, the financial industry, sustainable development and financial performance. Examples of these include United Nations Development Programme (UNDP), United Nations Environment Programme (UNEP), RobecoSAM and Finance Norway. Because sustainability in the financial sector is often discussed in the media, newspapers were also a significant source of information.

The empirical data was collected by conducting semi-structured interviews with the people who have leading positions in the different departments that I wished to investigate. I interviewed the Executive Vice Presidents of four departments: Wenche Seljeseth, Ola Neråsen, Vegard Helland and Svein Tore Samdal. Additionally, I interviewed the director of communications, Hans Tronstad. The leader for the department for Economy, Finance, Strategy and HR did not respond to any of my requests. It is possible that this left a blind spot in my research. However, I believe that the previous research I conducted as a part of my internship in SpareBank 1 SMN as well as the annual report helped fill the information gap. Interviews are especially suited in situations where there is not much research already done on the topic, because the questions are sufficiently open-ended so that the researcher is able to gather information without having to fear that information is lost, as could be the case with questionnaires if one omits questions due to lack of knowledge (Tjora 2010). The research is thus less likely to be affected by the researcher’s own bias, and can reveal information which was not expected beforehand.

The informants were chosen specifically due to their positions in the bank; as Executive Vice Presidents and leader of a department, it is likely that they have the best overview of both their department but also the bank as a whole. Additionally, it is likely that there are many differences between the departments, which made it necessary to evaluate them separately. Due to the size of SpareBank 1 SMN, it was suitable to choose individuals with both an overview of the structure of the bank, as well in-depth knowledge of their particular department. This kind of sampling is called purposive sampling, which is an approach
“generally associated with small, in-depth studies with research designs that are based on qualitative data and focused on the exploration and interpretation of experiences and perceptions” (Matthews & Ross 2010: 167). Naturally, since the informants were chosen purposively rather than through probability sampling, the findings from this study cannot be generalized onto the population.

The questions in the interview guide (Appendix A), were divided into six topics; 1) Introductory questions, 2) Tasks and role of the department the informant was responsible for, 3) Risk evaluation and risk management, 4) Economic and ecological risk, 5) Risks and opportunities that stem from climate change, and 6) Final questions. In the interview setting, I found that many of the questions in part 4 of the interview guide regarding ecological risk was not relevant for the leaders except for the leader of the risk department. For the director of communications, the interview focused specifically on the impact on climate change on the reputation of SpareBank 1 SMN and did not follow the interview guide. The interviews were conducted in Norwegian, seeing as both the interviewer and the informant were Norwegian. Therefore, there is a risk that some of the meaning and context are changed as the information was translated from Norwegian to English in this study. However, it is likely that there would have been more confusions surrounding the terms and concepts if the interviews had been conducted in English. Therefore, conducting them in Norwegian seemed to be the best option to avoid misunderstandings. The interviews were conducted at SpareBank 1 SMN’s headquarters in Trondheim as this was most convenient for all parties involved.

The purpose of this data collection was to apply gain a better understanding of how the different departments in SpareBank 1 SMN function, what products and services they offer, and not to mention whether there is green value creation in the bank. Additionally, it gave good insight into what the informants considered to be the risks and opportunities for the bank due to climate change, and why. The bank has recently undergone organizational changes, which meant that there was a lack of written information concerning the new roles and responsibilities of the different departments. It was also helpful to understand the leaders’ views and opinions regarding the topics discussed in this study, because they are instrumental in deciding the direction SpareBank 1 SMN is heading in in terms of sustainability. If they do not perceive climate change to be of importance to the bank, it is unlikely that changes will happen in this area. The interviews were not recorded or transcribed, and therefore there will be no direct quotes from these interviews. Nonetheless, the information gained proved to be invaluable in order to answer the research questions.
Additionally, I have supplemented with the findings from my internship report where it was relevant. The report is on the topic of “strategies of corporate social responsibility and stakeholder influence in SpareBank 1 SMN”. In this study, I conducted interviews with four CSR decision-makers in SpareBank 1 SMN, who cannot be named for anonymity reasons. Many of the topics that were researched in the internship report are relevant for this study and can be used to illuminate important aspects of CSR and CSR decision-making in SpareBank 1 SMN. The interview guide for the report can be found in Appendix B.

2.4. Validity and reliability
There are several ways of checking that the findings from the research adhere to strict academic standards of quality. Typically, validity and reliability are most commonly used to evaluate the research. Some also include generalizability as a third criteria (Tjora 2010). The latter has briefly been discussed in the section about limitations of this study, which is a part of the introduction.

Validity can be defined as “a measure of research quality, meaning that the data we are planning to gather and work with to address our research questions is a close representation of the aspect of social reality we are studying” (Matthews & Ross 2010: 52). According to Tjora (2010) the validity of a research project can be increased by being open about how the research was conducted, account for the decisions that were made and being sensitive concerning which factors are important within the topic of research. Especially important for this project, which is relying on literature to answer several of the research questions, is to account for which sources have been used, and what keywords that were used to find the literature. This ensures that the reader can see where the focus was, which makes them able to identify whether or not important topics or viewpoints have been omitted for this research project. In this research project I have been very explicit concerning methodological choices and the choice of literature.

Reliability, on the other hand, means that “another researcher would expect to obtain the same findings if they carried out the research in the same way, or the original researcher would expect to obtain the same findings if they tried again in the same way” (Matthews & Ross 2010: 52). In order to do this it is important to account for the context of the study: who were chosen as informants and why, the relationship between the researcher and the informants, and how this may have affected the results (Tjora 2010). In addition to being a researcher, I have also been a part-time employee at SpareBank 1 SMN for a year and a half. On the positive side, this has given me a good insight into and knowledge of the organization.
prior to this research project. Additionally, it has rewarded me with a lot of organizational know-who; meaning that I knew who to contact to get the answers I need for this research project. It is also likely that this position has given me a swifter access to informants. However, there are also some potential issues that could affect the reliability of this project. Firstly, my time as an employee could have impacted my view of the organization, which in turn could influence my analysis. Tjora (2010) argues that the best way to avoid this kind of bias is for the researcher to be aware of his or her own opinions and how they may influence the research. Doing this enables the researcher to reflect on how he or she affects the research and seek to minimize the impact. Having a conscious awareness of this will most likely influence the reliability in a positive direction. It is possible that my employment at SpareBank 1 SMN influenced the informants. Although most of them were people with whom I have had little contact with as an employee at SpareBank 1 SMN, they all knew that I worked there. During some of the interviews, it appeared as though some of the informants took for granted that I had knowledge of specific terms or concepts. In order to avoid missing important information because the informant presumed I already knew, I asked the informants to explain when I was unsure of what they meant. This ensured that the information became explicit rather than implicit.

2.5. Ethical considerations
Research projects can potentially influence the participants of the study in a negative manner, especially if the research impinges upon sensitive topics. This study is about a topic that is unlikely to affect any of the informants in a negative way due to its insensitive nature. Because this research focuses on the different departments and their leaders, it was not possible to grant anonymity to the informants. Due to their prominent positions they would have been identified regardless. Nonetheless, they were chosen as informants due to their positions in SpareBank 1 SMN, and as such, it was important to be able to identify their role in the bank in the study.
3. Green value creation in the financial sector

The financial sector is increasingly placing the focus on climate change and its own role in mitigating its effects. A number of actors are important in the discussion about climate change and its consequences for the financial sector: international and national non-governmental organization, governmental entities, the financial institutions and their representative organizations are all instrumental contributors to the public discourse. Primordial to this discussion is how the banks see their role and responsibilities when it comes to environmental sustainability.

3.1. Discourses on sustainability in the financial sector

Understanding the issue of sustainability is not as straight forward in this sector as it might be in others. Financial institutions are in an unusual position in the business community when it comes to sustainability. Because of their role as societal infrastructure and the longevity of the services they provide banks need to have a long-term perspective on their involvement.

Unlike many other sectors, the financial industry’s supporting role in the economy makes it a facilitator for polluting companies. This in turn obscures the distribution of responsibility; compared to many other sectors, the banking industry itself pollutes relatively little (Finance Norway 2010; Jeucken & Bouma 2001; Schmidheiny & Zorraquin 1996). Most likely, the actions of the banks’ customers will have a much larger impact on the climate than the bank’s own environmental footprint, although the latter should not be ignored either way.

Nonetheless, some criticize the banking sector for inhibiting sustainability:

“[f]irst, they prefer short-term payback periods, while many investments necessary for achieving sustainability must be long-term. Second, investment that take account of environmental side-effects usually have a lower rate of return, while financial markets usually look for investments with the highest rate of return” (Jeucken & Bouma 2001: 28).

The banks’ facilitating role makes the discussion regarding the responsibility difficult. Because the majority of the pollution comes from the customers of the banks rather than the banks themselves, it is highly relevant to ask whether it is the duty of the banks to try to reduce it. Research indicates that banks themselves are reluctant to take this role towards their customers. According to a survey of 68 European commercial banks, “a majority of banks wish to avoid the role of moral arbiter and do not consider themselves to be regulators” (Giuseppi in Jeucken, Bouma & Klinkers 2001: 20). Schmidheiny & Zorraquin (1996) argue
that banks have been slow to react to environmental issues and that the impetus for banks to change must come from outside; namely, consumers, regulators, and voters. Nonetheless, this attitude is problematic because it leaves the responsibility for change with the consumers and the regulators rather than with the banks themselves. According to this argument, the banks will not take responsibility voluntarily; it must be placed upon them by someone else. This in turn is reliant upon consumers that are aware of sustainability issues and assert their views upon both regulators and the banks. The danger with this argument is that a vacuum of responsibility can occur when nobody wants to take responsibility and nobody is willing to take the role of instigator. One event captured the banks’ attention and succeeded in putting environmental responsibility on the agenda. In the US in 1980, the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) stated that banks could become liable for the pollution of their customers (Schmidheiny & Zorraquin 1996; Jeucken & Bouma 2001). For some banks, the costs of remediation payments were so large that they went bankrupt (Jeucken & Bouma 2001). The new realisation that banks could be held responsible for the actions of its customers became a turning point for many, who then saw the benefit of acting sustainable.

The role of banks’ as reluctant actors runs counter of what many of the financial industry’s representative organizations have communicated. Both Finance Norway, which is the organization which is “the federation for banks, insurance companies and other financial institutions in Norway” (Finance Norway 2014a) and the European Banking Federation are involving themselves in issues concerning sustainability. They are mapping the roles and responsibilities of this sector and distributing knowledge to its members on how they can become more sustainable. There are many ways in which the financial industry can contribute to a greener economy. The European Banking Federation (EBF) lists the following tools that can be used to contribute to a more environmentally friendly practice:

“Contributing to research, environmental certification, environmental management and reporting of annual carbon footprint, eco-friendly financial products, green procurement, green assets, environmental funds, green property management, eco management, green constructing business, low energy buildings” (2013: 14).

Based on the measures presented by EBF it is possible to differentiate between two types of approaches to sustainability in the financial sector. The first is the traditional approach that
entails reducing the environmental footprint of the bank itself, popularly referred to as “good housekeeping”. The second is a more proactive approach, which focuses more on the banks’ ability to influence the actions of its customers through their services by implementing sustainability into the banks’ core activities. The traditional approach is achieved through measures such as environmental certifications and low energy buildings, as EBF (2013) proposes. Although important, these measures are not particularly innovative, and many of them are already implemented by many banks today. As previously mentioned, the financial industry pollutes relatively little through its own activities, suggesting that they need to expand their focus to areas that pollute more. A natural place to turn would be to the business activities of their customers. The proactive approach focuses on providing products and services to retail customers and corporate customers with a green profile. The EBF (2013) mentions eco-friendly financial products, green assets and environmental funds as examples of this. These measures are likely to have an impact on the customers’ actions. There is a varying degree of prevalence of these kinds of products and services in Norwegian banks today. Finance Norway has been a strong proponent of sustainability in the banking sector, which is clearly visible due to its many publications on the topic. It is important to realize that sustainability in the banking sector is not delimited to the bank’s internal operations or the products and services they provide. Risk management is a central part of banks’ business. Like many other actors, Finance Norway (2010) acknowledges that climate change will lead to both greater risks and greater opportunities for the banking sector. For example, they argue that the banking sector needs to incorporate the climate perspective into the risk perception and incorporate this into their credit policy (Finance Norway 2013b). Even though international organizations and the banking federations emphasize the importance of sustainability in the banking sector, the question is to which degree this innovative thinking has permeated the Norwegian banks and their core activities. Conversely, for a bank to be interested in implementing such measures as those mentioned above, there must be some benefits stemming from it beyond merely doing good, which is where the concept of green value creation comes into the picture.

The topic of sustainability in the financial industry is high up on the agenda of international institutions and organizations. The Rio +20 conference had “Green Economy in the context of sustainable development and poverty eradication” (UNCSD 2014) as one of its main themes, which naturally gives the financial sector a pivotal role as a facilitator in the economy. Accepting green economy as a natural step in promoting sustainable development and poverty
eradication represents a new line of thinking in terms of economy. Previously, the discourse on climate change has mainly centred on reducing consumption, while now there is a renewed focus on using the economy to promote both sustainability and development. As Schmidheiny & Zorraquin (1996) argue, zero economic growth is not a viable alternative because it fails to fulfil the needs of present or future generations. Although reducing the carbon footprint is still considered to be of paramount importance, there is now also a focus on how economic growth can be achieved in a way that does not compromise the possibilities of future generations. The need to slow down overconsumption necessitates an alternative strategy for growth, which has spawned concepts such as green growth.

The European Union (EU) is increasingly taking the lead in terms of promoting sustainability in the financial sector in Europe. One of the spearheading initiatives is The European Investment Bank (EIB), which is “the largest multilateral borrower and lender by volume” (EIB 2014a). One of the investment bank’s core objectives is “[t]o provide a range of climate finance solutions, for both mitigation and adaptation purposes, as part of the EU response to the climate challenge” (EIB 2013). It helps promote sustainable finance through a number of measures. The EIB itself states that due to their excellent credit rating, they are “able to borrow at attractive rates, while the benefits of the EIB’s borrowing conditions are passed on to project promoters” (EIB 2014b). The bank also describes the act of passing on the benefits as a “non-profit-maximizing feature” (EIB 2014b), indicating that although the EIB can borrow at attractive rates, they do not benefit financially from offering these types of products. It is difficult to say whether such a solution will be feasible for commercial banks. Subsidizing loans to promote sustainable behaviour already exists in the Norwegian banking industry today, something that will be discussed more in the discussion chapter. Initiatives such as loans by the EIB show that it is possible for banks to work together with external partners such to promote sustainability through the products and services that they offer.

As this section has shown, sustainability in the financial sector is a highly relevant topic. Many actors are adapting to the new challenges and opportunities that climate change represents, as is illustrated by the efforts of the EIB. The organizations representing the financial industries recognize that it needs to take responsibility, and they have proposed a number of measures that can be implemented. The question that arises when evaluating the GVC in SpareBank 1 SMN will be whether the views of the organizations are congruent with the actions of the bank.
3.2. Defining sustainability

Green value creation is a new concept in terms of sustainability and financial performance. Although the meaning of green value creation might be rather intuitive, it is important to define it to increase the operational validity and usefulness of the concept. Because it is a new term there are few existing definitions of it, but this section will have a brief discussion with the available literature and other relevant concepts before proposing a definition. Because of the lack of literature that focuses specifically on green value creation, a definition will be proposed after discussing similar and related concepts. The problems due to lack of literature on GVC is mitigated by the fact that there is extensive literature on similar concepts, such as sustainability, green economy, green growth & other terms.

As the name implies, green value creation is about bridging the gap between a green, environmentally sustainable way of doing business and economic development and growth. The notion of a sustainable society has been on the agenda since the Brundtland report of 1987, and its definition of sustainability is cited in almost any article on the topic. Their definition of sustainability is “development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs” (World Commission on Environment and Development 1987). Although the concept of sustainability has been developed further, this definition is most often the starting point. Recently, Giggs et al (2013) have proposed an updated version of this definition, arguing that sustainability is: “[d]evelopment that meets the needs of the present while safeguarding Earth’s life-support system, on which the welfare of current and future generations depends” (2013). They are proposing a new framework, which integrates the Millennium Development Goals (MDG) with important planetary conditions, to form what they have dubbed Sustainable Development Goals (SDG) (Giggs et al 2013: 306). This framework entails a new way of looking at sustainability, as is illustrated by figure 1 below. Unlike the triple bottom line (TBL) approach, which views the economy, environment and social dimension as separate and equal, the new paradigm proposed by Giggs et al (2013) proposes a more integrated approach. It is clear from the paradigm in figure 1 that the society and economy dimension are firmly embedded within the boundaries of what the Earth can manage, and thus dependent upon it.
The environment has often been included as a part of many companies’ CSR strategy, so it is helpful to use the concept of CSR as a starting point for further discussion. It is through this concept that many companies become aware of, and start their work towards being more environmentally friendly in their daily operations. SpareBank 1 SMN use the TBL as the starting point for discussion on sustainability in the financial sector, which includes the social, environmental and economic dimensions (SpareBank 1 SMN 2013). The concept of green value creation has certain similarities to CSR because they encounter some of the same topics, especially in terms of whether responsible behaviour can be financially beneficial for a company. The introduction of corporate social responsibility into the business community started in the 1950s, and the concept has steadily grown in terms of importance and scope (Carroll 1999). The focus was initially on how a company could become a more responsible entity in society. The 1980s, however, introduced a new form of thinking on CSR, where the academic community started looking at if there was a connection between taking social responsibility and profitability in a company (Carroll 1999). One is now starting to see a fledgling interest to lift the environmental issue from being a part of CSR activities at the fringes of company operations, to being a part of the value creation of a company. A review of 51 studies of the link between CSR and financial performance found that the majority of the studies found a positive link, but that it was difficult to conclude because different methods were used in the studies (Griffin & Mahon 1997). The increased focus on reporting might also be responsible for the increased attention that the environment is getting in the financial sector. The surge in stakeholder involvement and consumer awareness necessitates a new approach to the efforts by companies. RobecoSAM’s Corporate Sustainability
Assessment is one of the dominating companies when it comes to sustainability reporting today. They argue that being sustainable is beneficial for companies, because:

“[c]ompanies that anticipate and manage current and future economic, environmental and social opportunities and risks by focusing on quality, innovation and productivity will emerge as leaders that are more likely to create a competitive advantage and long-term stakeholder value” (RobecoSAM, 2014b).

The role of RobecoSAM is to aid investors in finding suitable companies to invest in, and their business idea is based on the belief that sustainable companies are more likely to be profitable in the end. Their focus is on connecting sustainability and financial performance by “identifying the most important intangible factors that relate to companies’ ability to create long-term value” (RobecoSAM 2014a: 15). This kind of thinking is increasingly gaining popularity, especially in terms of reporting.

New concepts are being introduced to unify economic and environmental issues and promote sustainable growth. One of these concepts is called Green Economy, which is defined as an economy that leads to “improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities” (UNEP 2011). Even though green economy naturally includes all sectors of the economy, it is likely that the financial sector will be heavily impacted by a shift to a green economy due to its role in the economy. Nonetheless, this signifies the need to integrate the sustainable perspective into the concept of economic growth. Green value creation could possibly bridge the gap between being environmentally friendly, and creating value for the company – with the latter being very important if GVC is to appeal to businesses. In order to make such a shift, it is necessary to be able to operationalize and measure the efforts. There have been some attempts at unifying environmental sustainability with economic indicators. One of the ways of determining at the impact of climate change is by investigating the consequences on ecosystems, which are “a dynamic complex of plant, animal, and microorganism communities and the nonliving environment, interacting as a functional unit” (Millennium Ecosystem Assessment 2003: 49).

The problem, however, is that although it is clear that ecosystems are under pressure as a result of human activities, it is difficult to translate this knowledge of consequences into behavioral change. An important way of trying to demonstrate the importance of sustainability is through the concept of ecosystem services, which can be defined as “the benefits people obtain from ecosystems” (Millennium Ecosystem Assessment 2003: 49). It seeks to emphasize the influence and importance of ecosystems on humans’ welfare, and
make people aware that the ecosystems also have an economic value – a point that is often overlooked. The discussion about green value creation in this thesis emphasizes the need to incorporate a much longer perspective on value creation and its consequences, which is also the thought behind ecosystem services. By depleting resources today, one is destroying future livelihoods. Hardin (1968) describes this as the tragedy of the commons: that common resources are deteriorated because profit-maximizing individuals seek to continue to exploit finite resources, even though by doing so they are undermining their own existence by tapping the resources they need to survive in the future. More and more actors are emphasizing that society needs to see the hidden costs that changes in the climate lead to. Finance Norway (2014b) agrees with this and argues that some of these economic consequences can be easily be identified by looking at numbers from insurance companies and Norwegian National Fund for Natural Damage Assistance, but that other costs, such as increased maintenance costs for roads and railways are rarely included. By appraising the services the public receives from ecosystems one will be able to better highlight the de facto costs of environmental degradation.

3.3. Value creation in the financial sector

In order to propose a good definition of green value creation it is first necessary to find a good definition of value creation, seeing as it is an important part of the definition. Bowman and Ambrosini argue that merely obtaining resources are not enough to create value for a company; therefore, the following process is needed in order to count as value creation:

“[the resources] need to be activated, worked on before they can contribute to the production of new use values. The tangible inputs into the production process, i.e. the use values acquired by an organization, are inert. The intervention of people is necessary to create new use values from the acquired resources” (2000: 5).

From this one understands that value creation happens when the employees of the company go through the process of interacting with the resources the company has available. Bowman & Ambrosini (2000) differentiate between two types of value; namely perceived use value and exchange value. Perceived use value “is defined by customers, based on their perceptions of the usefulness of the product on offer. Total monetary value is the amount the customer is prepared to pay for the product” (Bowman & Ambrosini 2000: 4). Exchange value, however, “is realized when the product is sold. It is the amount paid by the buyer to the producer for the perceived use value” (Bowman & Ambrosini 2000: 4).
Dicken, however, argues that “value is a surplus over and above the costs involved in performing the transformations and transactions at that particular stage or node” (2011: 432, emphasis in the original). According to this definition of value, it is the sum left after detracting all labour costs, costs of materials and such from the exchange value. Dicken also defines the process of value creation as dynamic, where:

“the aim is continuously to enhance value – to increase profits and/or to reduce competition – through a whole variety of means: production and process innovation, improved labour productivity, more efficient logistical systems, and so on” (Dicken 2011: 432).

This definition seems to encompass a lot more than the definition posed by Bowman and Ambrosini, which mainly focused on the process of creating value through reworking resources. Dicken’s definition, however, also includes measures that can increase the value in this process, such as increased efficiency and productivity, and innovation. This means that value creation has two dimensions: creating value through reworking resources and increasing value by reducing the costs of the production process. As such, value creation can be seen both as increasing revenue and reducing costs.

The next question is how the notion of sustainability which has just been discussed can be integrated into the value creation of a bank. After looking at different definitions of sustainability and green economy, the next step is to investigate the meaning of value creation in this context. Schroeck (2002) argues that banks mainly do two things; they offer financial products and services, and they manage risk and engage in financial intermediation. As a result of this, a bank’s value creation is dependent upon its ability to provide products and services of high quality, and a good risk management (Schroeck 2002). It is frequently argued that in order for a company to properly benefit from CSR, it needs to be a part of the company’s core activities (Porter & Kramer 2011; Jørgensen & Pedersen 2013). As a result of this, efforts concerning GVC in the banking sector should focus on these areas in order to provide the best effect.

3.4. Defining green value creation

The previous discussion provides the basis for the suggested definition of the concept. For this study, the following definition of green value creation is suggested:

*Green value creation is present when a company is able to integrate environmental sustainability into its core business activities in a way that creates value.*
value must be done in a way that does not undermine its future operations, and that safeguards Earth’s life-support system.

The first part of the definition stresses the need to integrate an environmentally sustainable perspective into the core business activities of the company, as it is frequently argued that for a company to really benefit from being responsible, it must incorporate it into the core activities (Porter & Kramer 2011; Jørgensen & Pedersen 2013). Since providing products and services as well as risk management is in its core business activities, the bank should focus its efforts on measures that promote environmental sustainability in these areas. Examples of this might include providing products that encourages the customers to take more sustainable choices, or lending criteria that exclude polluting companies. Jørgensen & Pedersen (2013) refers to these two dimensions as reducing the company’s negative externalities while boosting the positive externalities. The last part of the definition emphasizes that the company should not engage in any actions that might undermine the opportunity it has to do business in the future. This entails two things; firstly, that it should let long-term consequences weigh more than short-term benefits. Although this might sound trivial, it is easier said than done. Schmidheiny & Zorraquin (1996) argue that the financial industry is not sufficiently interested in the long-term perspective because they prefer short-term payback. Green value creation necessitates that a longstanding perspective is needed. The definitions reviewed earlier in the thesis viewed value creation as something that ends when the exchange value of the product or service is realized. However, in order to be sustainable it is not enough to say that the responsibility of the company is over once it has traded in its product or service for a monetary compensation. Even so, for the banking industry the relationship between the bank and its customers might run for as long as 30 years, which requires a long-term perspective. Secondly, this definition means that the bank should also consider the environmental profile of its business partners. For a bank, this would for example entail looking at the environmentally damaging activities of its corporate customers. The reasons for this is that by having a client that is contributing to climate change through their polluting business activities, they are indirectly contributing to undermining their own future operations. The last part of the definition is especially important because a financial institution is rarely directly involved in activities that damage the environment. Even though the banking industry contributes to emissions through their day-to-day operations, it is likely that the impact of their customers exceeds the banking industry to a great extent. The part of the definition concerning safeguarding Earth’s life-support system comes from Giggs et al (2013) and their
definition of sustainability. This is added to emphasize that the responsibility of the bank is not only to uphold the status quo but also to actively promote sustainability through its business operations. Jørgensen & Pedersen argue that “the company needs to address the question of responsibility on a business model level. This involves integrating responsibility into the way the company creates, delivers and captures value” (2013: 28, my translation). Hopefully, GVC can be a step towards integrating sustainability into the business model of a bank so that value creation can happen alongside sustainability rather than the expense of it.
4. Risks and opportunities in the banking sector

It is fundamental to understand the potential risks and opportunities that stem from climate change. If the banking industry is to have any impetus to incorporate environmental concerns into their operations, it must be substantiated that the consequences that stem from climate change is likely to affect their operations in some way. Therefore, this section will discuss the potential risks and benefits that banks can be subjected to. Additionally, there will be a brief outline of the role of risk management and risk evaluation in the banking sector. Lastly, there will be a brief summary of The Financial Supervisory Authority’s risk outlook for the financial market in 2014, which gives an overview of what the Financial Supervisory Authority judges to be the most pressing issues for the financial sector.

4.1. Risks

There is no denying that climate change is gaining interest within the financial sector, as the literature review has shown. Several actors have sought to identify the potential threats that may materialize as a result of these changes. If the banks are to respond to the threats to business, it is imperative that they are aware of what kind of risks they are running and how they can influence this particular sector.

There are several kinds of risks that a company can be subjected to. KPMG identified six types of risks that companies have to face due to climate change after reviewing the corporate responsibility reports of 250 large companies: “physical risk, regulatory risk, reputational risk, competitive risk, social risk and litigation risk” (KPMG 2012: 15). All of these are not equally relevant for this sector, however; results from the KPMG corporate responsibility reporting (CRR) survey found that reputational, regulatory, and competitive risks are the most frequently mentioned risks in CRR reports in the finance, insurance and security sector (KPMG in KPMG 2013).

Regulatory risk refers to “[c]omplex and rapid changes to the regulatory landscape” (KPMG 2013: 49). The financial sector is a heavily regulated sector. This is especially true of SpareBank 1 SMN, which due to its size and the scope of its activities is considered a systemically important bank in Norway (Finance Norway 2013a). It is generally though that by being pre-emptive about reducing a company’s negative impact on society, it is possible to avoid regulation (Porter & Kramer 2011; Finance Norway 2010). Additionally, as there is an increasing focus on climate change, stakeholders may set higher requirements for environmentally conscious operations. As the consequences of climate change increase,
governments will be required to introduce measures to reduce emissions. It is likely that such regulations will influence not only banks but also their corporate customers in a way that could influence their competitiveness.

Physical risk can be defined as “damage to assets and supply chains from physical impacts such as storms, floods, water shortages and sea-level rise” (KPMG 2013: 49). For a bank, damages to the banks’ own building structure or its commercial property result in losses. Just as serious, however, is the consequences it will have on their customers – especially corporate clients. As a lender, SpareBank 1 SMN has an interest in many companies that could be adversely affected by climate change. As is seen in figure 3, 28% of SpareBank 1 SMN’s share of loans is to the real estate sector. This means that a significant part of their loan portfolio is directed towards a sector which is especially vulnerable against physical risk. Additionally, if the customers’ assets were stranded it could seriously affect their ability to repay their loans, which in turn influences the banks’ revenues and in the long term, sustainability. Retail customers can also be affected by extreme weather, as it can cause damages to their private properties. Another consequence which can have great impact on the bottom line for a bank is the rise in amount and size of insurance claims (RobecoSAM 2014a). This is perhaps one of the easiest cases to determine cause and effect between climate change and the effects it can have on a company’s bottom line, because the effect of the rise in for example extreme weather can be easily measured in monetary terms.

Reputational risk is, as the name implies, risks that threaten the reputation of the company. UNEP argues that

*[a]s concerns about the impacts of environmental trends and drivers increase, companies that inflict damage on ecosystems or that contribute significantly to climate change may face rising reputational risks. Companies in the finance sector that invest in or lend to those companies may face the same risks*” (2013: 28).

What places the banking industry in such a special position is that it facilitates the actions of so many other industries and individuals, without being directly involved in them themselves. By lending money to companies, the banking sector is influencing the environment, although indirectly, by enabling the company to do business by lending them money. This is also mirrored in the potential risks it faces because the focus is often on the action of the banks’ customers, rather than on the banks’ own environmental footprint. It is argued that the banking industry can face both public backlash resulting in reputational damage and financial
risks from lending to environmentally damaging companies (Finans Norge 2010, RobecoSAM 2014a). As such, the financial industry can experience negative consequences from stakeholders and the government, even though they are only polluting by proxy. Therefore, it is not enough to look at what the bank itself is polluting through its day-to-day operations. In order to look at the full picture, a more holistic approach is needed. This means that the influence of its customers’ actions should also be considered.

Competitive risk is risks due to “[i]mpacts of fast-changing market dynamics, and uncertainty of supply and price volatility of key inputs” (KPMG 2013: 49). According to Kreutzer (2014), it is likely that the new risk factors such as climate change will be priced into the capital market in the future. Additionally, situations can arise where many of a bank’s customers are not able to repay their loans because of stranded assets as a result of climate change (UNEP 2013), which can reduce a bank’s competitiveness. As is argued: “[s]erious efforts to limit global warming to 2°C above preindustrial levels may lead to reduced fossil fuel demand and large amounts of oil, gas, and coal reserves becoming stranded assets” (UNEP 2013: 27). Additionally, if a company lags behind on its environmental initiatives vis-à-vis other companies, it might damage the company’s competitiveness. The question of whether it is possible to become more competitive by engaging in green behaviour will be discussed in more depth in the next section regarding opportunities.

Legal risk is due to “[e]xposure to potential legal action, for example, over non-disclosure of environmental, social and governance information” (KPMG 2013: 49). UNEP emphasizes “[i]ncreased pressure on lenders and investors to improve consideration and disclosure of client companies’ impacts on and from environmental trends” (UNEP 2013: 4) as a potential consequence. This was one of the risks that was devoted the least attention according to the KPMG (2013) review of 250 CRR reports. Either way, banks are dependent upon the trust of their stakeholders, so it is reasonable to suggest that have a strong focus on transparency in their operations. Nonetheless, as the case of the CERCLA in the US showed, there is a potential that banks may experience legal consequences because of the actions of their corporate customers (Jeucken & Bouma 2001). This indicates that banks ought to take into account that they are not immune to the environmentally damaging behaviour of their clients.

Social risk includes “[c]onflicts, social unrest, community and worker protests, labor shortages, migration” (KPMG 2013: 49). Although this might be a very important risk factor in other parts of the world or in other industries, it is unlikely that the financial sector in
Norway will experience social unrest and conflicts to such a degree that it impinges upon the profitability of a company. Therefore, no attention will be dedicated to this risk.

4.2. Opportunities

Although it is easy to identify the potential pitfalls companies may face due to climate change there are also some opportunities that stem from these changes. There is increasingly being argued that a company can reap a number of benefits by being responsible and sustainable (RobecoSAM 2014a). Kreutzer (2014) has identified six drivers for a sustainable financial industry: customer behaviour, adapting to competition, risk management, capital costs and investor behaviour, innovation, and considerations regarding reputation of a company.

In terms of positive side effects of climate change, there is a recurring benefit that is repeatedly mentioned; innovation. KPMG (2013) found that out of the 250 CRR reports it reviewed, 72% of the companies identified innovation as an opportunity that has arisen due to climate change. Innovation in the financial sector can for example include offering new, green products and services. An often mentioned example of such a product is green funds, which enables the customers to invest their money in green companies (UNEP 2013). Another type of product that is mentioned is “insurance products that encourage the spread of more energy-efficient homes and buildings and renewable energy technologies” (UNEP 2013). In addition, it is likely that there will be a bigger demand for products that already exist, such as property insurance coverage (UNEP 2013). As such, failing to react and adapt to these changes may not only expose a company to adverse risks and extra costs, but also make them less competitive and lose potential revenue because they are less innovative and not able to provide new products that consumers and other companies may want. Overall, a wider array of products and services coupled with increased demand could potentially bring more revenue to banks.

The second most mentioned opportunity mentioned in the KPMG report (2013) was improving reputation or promoting the brand – which was mentioned by 51% of the companies. Improving market position was mentioned by 36% of the companies surveyed by KPMG (2013). Here, it is not unlikely that there are advantages to being a first mover. By taking the lead, a company will be able to brand itself as sustainable – which in turn might compel more customers to choose the bank with the most sustainable profile. According to UNEP (2011: 504): “Gross Domestic Product in the green scenario is projected to overtake business-as-usual (BAU) within ten years”, which should be a powerful incentive to engage in
more green value creation because of the increased profitability which is projected to happen in a scenario based on a green economy. However, there are other benefits to taking responsibility seriously. Being pre-emptive in terms of incorporating measures to mitigate negative effects on the environment might prove beneficial. Finance Norway (2010) also suggests that the government will eventually propose regulations on the financial industry with regards to green suppliers and products, as well as more public awareness concerning this. They also argue that:

“\[e\]xperiences from other issues have shown that it is sensible to be pre-emptive by introducing convincing and practicable measures of self-regulation before the government imposes laws that are difficult to manage on the industry” (Finance Norway 2010: 6, my translation).

Not surprisingly, cost reduction was mentioned by 30 % of the companies surveyed (KPMG 2013). By striving towards more environmentally friendly operations, a company can save considerable amounts by reducing paper usage, limiting the amount of air travels, by installing video conference rooms and investing in environmentally friendly buildings. This is what was previously discussed as being a part of “good housekeeping”.

4.3. The role of risk management in the banking sector

Risk management and risk evaluation is of great importance for the banking sector. Risk management often includes complex analyses and tools in order to determine the risk associated with different business activities. This study will not go into depth regarding how these calculations and models are formulated. The focus is rather on trying to determine whether environmental issues are taken into account when managing risk in SpareBank 1 SMN.

As most companies, banks need to evaluate the risks of their business activities. While for most other companies, the relationship between the provider of a product or service and the buyer usually ends when the product or service has been delivered. For a bank, however, some products (for example a loan for a house) can be repaid over as long as 30 years, effectively tying the lender and the borrower together financially for a long time. Should the borrowers find themselves in a situation where they are no longer able to repay what they have borrowed, the bank can face great losses if they have not properly secured their interests. The financial crisis of 2008 showed the potentially devastating consequences that can arise when banks start to fail. Because of this, the Financial Supervisory Authority of Norway,
which is a governmental agency that supervises banks and other financial institutions, has imposed stricter regulations on this sector to ensure that they are financially sustainable. Unstable banks pose a threat to the national, or even global, economic stability. One of the measures that have been imposed is to demand that banks and financial institutions that are systemically important are subjected to stricter rules and regulations, in addition to more core capital (Finance Norway 2013a). SpareBank 1 SMN is considered to be systemically important and thus subjected to additional requirements.

The question is naturally how risk evaluation and risk management is practiced in the daily operations of the bank. Previously, it was argued that the main responsibilities of a bank was to offer financial products and services, and manage risk (Schroeck 2002). From this definition it is apparent that risk management can be seen as a part of a bank’s core activities. Because risk management plays such a pivotal role it is reasonable to question whether the environmental dimension should also be included, seeing as it has a large potential impact on this sector and its daily operations. Schroeck argues that risk in the banking sector

“arises from any transaction or business decision that contains uncertainty concerning the result. Because virtually every bank transaction is associated with some level of uncertainty, nearly every transaction contributes to the overall risk of a bank” (2002: 25).

This quote shows why risk management is important for the financial sector. Following from this, risk management in a banking context can be defined as

“an active, strategic, and integrated process that encompasses both measurement and the ‘mitigation’ of risk, with the ultimate goal of maximizing the value of a bank, while minimizing the risk of bankruptcy” (Schroeck 2002: 28).

From Schroeck’s definition it is clear that there are two dimensions to risk management: value maximization and minimization of risk.

4.4. Risk outlook for the financial market in 2014

The Financial Supervisory Authority of Norway has released a report on the risk outlook for the financial markets in 2014. The purpose of the report is to evaluate whether there are any developments in the markets and the economy can potentially threaten the stability of the Norwegian financial system. The importance of the financial sector necessitates that it is properly monitored and regulated in order to avoid situations where banks start to fail. There
is a large focus on the banks’ need to increase their core capital and liquidity coverage ratio in the report, but since it is outside of the scope of this study, it will not be discussed here.

The Financial Supervisory Authority emphasizes that in a historical perspective, the banks have had much higher losses on loans to companies than to private households, and that commercial property and the shipping industry are considered the sectors with the highest risks (The Financial Supervisory Authority 2014). As the following section regarding the case will show, SpareBank 1 SMN currently has 41 percent of their loans in these two sectors (SpareBank 1 SMN 2013), which implies that a large part of their portfolio comprises of what The Financial Supervisory Authority deems to be high-risk sectors. Amongst the biggest risk factors for the Norwegian economy is its dependency on oil; Norway is highly vulnerable to fluctuations in oil price, especially when it is due to lower demand (Financial Supervisory Authority 2014). In terms of private households, their debt ratio poses a possible threat because it makes them very susceptible to increasing interest rates on loans – which in turn can lead to individuals not being able to pay back their loans (Financial Supervisory Authority 2014). Therefore, scenarios in which many borrowers are not be able to pay back their loans at the same time could endanger the stability of the financial system.

The Financial Supervisory Authority’s (2014) report has almost no mention of environmental issues as a potential threat to the financial industry. The Financial Supervisory Authority only mentioned climate changes in their report when discussing insurance. The reason why climate change is deemed to have little impact on insurance is that despite the increase in costs due to more damages caused by nature, insurance companies are less affected by this because they are members of Norwegian Natural Perils Pool (The Financial Supervisory Authority 2014). The Perils Pool is responsible for distributing the costs of damages between the participating companies (Finance Norway 2012). Insurance is possibly the part of the financial sector that is most directly impacted by climate change. As the IPCC argues: “[i]nsurance is linked to disaster risk reduction and climate change adaptation, because it enables recovery, reduces vulnerability and provides knowledge and incentives for reducing risk” (IPCC in IPCC 2014). Either way, it is striking that climate change is devoted so little attention in the Financial Supervisory Authority’s risk outlook report. Even so, the fact that the scope of the report is limited to 2014 might be the reason why environmental risks are not discussed to a great extent.
5. Introduction to the case company – SpareBank 1 SMN

SpareBank 1 SMN holds an important role in the business community in the area of Trøndelag in Norway. In 2013 the bank made a profit of 1400 million NOK after tax, and a return on equity of 13.3%, thus cementing its role as the largest financial services group in the region (SpareBank 1 SMN 2014). SpareBank 1 SMN is also one of six members of the SpareBank 1 Alliance (SpareBank 1 SMN 2014). In addition to its own business operations the bank has a number of subsidiaries, including for example the real estate company Eiendomsmegler 1 and an accounting company to name a few (SpareBank 1 SMN 2014).

SpareBank 1 SMN is one of eight banks in Norway that are deemed systemically important: in order to be considered as systemically important, the institution has to have a size and function that makes it very difficult to replace, and that issues in this institution can result in significant damage to society (Finance Norway 2013a).

The information regarding the different departments come from the interviews, and where indicated, the annual reports. The organizational chart for SpareBank 1 SMN is as following per 20.03.14 and shows the different departments and their areas of expertise:

![Organizational Chart](image)

**Figure 2: SpareBank 1 SMN’s organizational chart. From Tronstad (2014b).**
5.1. Risk management

Risk evaluation and risk management is one of the primary concerns for a bank. The risk department in SpareBank 1 SMN is responsible for monitoring the risk profile of the bank, developing risk strategies, as well as monitoring the bank’s liquidity and credit. The risk department is also responsible for making projections into the future to predict possible outcomes in order to ensure that the bank has a capital development that can meet potential challenges. These projections are usually looking three to five years ahead. In addition, the risk department is responsible for ensuring that there is a balance between the required return on equity and the risk capacity of the bank. It is up to this department to evaluate whether the bank has enough capital available to meet the business ambitions that the company has or not. The department monitors the day-to-day operations of the bank to see whether they adhere to the targets that have been set, and report this to the board of the bank and CEO. As such, the risk department has a dual role; it is responsible for developing the strategies and tools for evaluating risk in the other departments. An example of this is the bank’s credit policy, which defines who are eligible for credit. However, it also has a monitoring capacity, and will implement measures to ensure that targets are met.

5.2. Economy, Finance, Strategy & HR

The department for economy, finance, strategy and HR has a broad range of responsibilities. As the name implies, the economy and accounting for the organization is located in this department. Additionally, strategies for the bank and digital business are located here. Lastly, human resources is also the responsibility of this department.

5.3. Business operations and development

The department for business operations and development is responsible for several important functions within SpareBank 1 SMN. One of these functions include developing products for the bank, both targeted at retail customers and corporate customers. This includes insurance, financing (such as loans and credit), savings and deposits. This department is also responsible for the operations of the bank in terms of IT, the running of the offices and the physical environment connected to it. Moreover, the marketing division and the internal communications unit are embedded in this department. As such, this department is important in facilitating the tasks of the departments that deal with retail and corporate customers within the bank. The department has a support function within the bank because it provides the products and services that these departments offer their customers.
5.4. Retail market

Retail market is responsible for offering the products and services that are directed towards retail customers of the bank. Herein lies mortgages (for houses, cars and boats), insurance, savings accounts & investment, as well as pensions and card solutions. Within this department, one finds the financial advisors who provide financial advice and products and services to retail customers. In addition to service the retail market, this department also supplies services to agriculture, teams and organizations, private banking and sole proprietorship. Within this department there is a team dedicated to “continuous improvement”, which focuses on swifter and more effective processes and tools that can increase the productivity of SpareBank 1 SMN. Their role is to implement good practices at the workplace to reach the bank’s strategic goals of an increase in the number of customers & people who choose SpareBank 1 SMN as their main supplier of bank services and products.

5.5. Corporate customers

The department for corporate customers is responsible for “financial counselling in investment and operations financing, domestic and foreign money transfers, fixed income and currency hedging, investment of surplus liquidity and insurance of individuals and buildings/operating equipment” (SpareBank 1 SMN 2014: 17). A part of the mandate of a bank is to give out loans to both retail and corporate customers. When looking at the share of loans given out to each of these groups, one finds that 42.2 % of SpareBank 1 SMN’s loans go to companies and 57.8 % to individuals in 2012 (SpareBank 1 SMN 2013). This says something about where SpareBank 1 SMN has the strongest possibility to influence its customers and where the greatest risks are located.

Figure 3 shows the share of loans to different sectors of the economy:
Figure 3: Distribution of loans by industry sector. (SpareBank 1 SMN 2013: 21).
6. Green value creation in SpareBank 1 SMN

Green value creation can be achieved in different ways, but in order for it to be most effective it should be implemented in the core activities of the company. The GVC in SpareBank 1 SMN, internal operations, the products & services it provides and the risk management and risk evaluation of the bank will be evaluated in this chapter. The findings from the interviews will be presented here. The answers will be supplemented with information from the annual report, and is indicated through citation.

6.1. The internal operations

The review of SpareBank 1 SMN’s efforts concerning the environment reveals that the bank has made considerable efforts when it comes to reducing its own environmental footprint. This has been done through a series of measures that has made it clear that this issue has been a priority for the bank. The annual reports for 2012 and 2013 also shows that the bank has managed to reduce its environmental impact and is improving this effort for each passing year in most areas. Since these efforts are not benchmarked against other banks’ results, it is difficult to say how well SpareBank 1 SMN is doing compared to other banks. Nonetheless, the annual report gives an indication as to whether the bank is improving in this area or not.

Taking environmental responsibility is a part of SpareBank 1 SMN’s CSR strategy. SpareBank 1 SMN uses the triple bottom line-approach to corporate social responsibility, in which corporate social responsibility is divided into three dimensions: economy, social and environment (SpareBank 1 SMN 2013). Even though the environment has not been discerned as a separate topic of priority, it is a part of the total strategy of corporate social responsibility of the bank. SpareBank 1 SMN contributes to society through its Fund; it is the returns from the Fund each year that determine the budget and thusly the scope of their engagements. During 2012, SpareBank 1 SMN contributed almost 65 million NOK to good causes, which are divided into two main areas; culture and sports, and development of the economy (SpareBank 1 SMN 2013). However, it is difficult to discern from the annual reports whether any contributions are directed towards measures targeted at the environment.

On the 1st of June 2013 the new changes to the accounting law in Norway came into force, which necessitates that all large companies report on CSR on an annual basis (Finance Norway 2013b). For a transitional period, it is possible to fulfil this requirement by reporting through the UN Global Compact or the Global Reporting Initiative (GRI) (Ministry of Finance 2013). The bank has been reporting on CSR in its annual report since 2008. In the
annual report of 2013, its efforts in the area of environment are measured by 9 indicators, 3 of which are qualitative and 6 that are quantitative (SpareBank 1 SMN 2013). Their efforts can be summarized in the figure 4:

<table>
<thead>
<tr>
<th>Environment</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchase of paper (tonnes)**</td>
<td>46.50</td>
<td>35.90</td>
<td>39.10</td>
<td>35.70</td>
<td>35.76</td>
<td>35.80</td>
</tr>
<tr>
<td>Energy consumption (kWh)</td>
<td>6,193,000</td>
<td>6,580,000</td>
<td>7,004,400</td>
<td>6,900,600</td>
<td>6,135,000</td>
<td>6,194,600</td>
</tr>
<tr>
<td>No. of flights</td>
<td>3,964</td>
<td>3,965</td>
<td>3,916</td>
<td>3,910</td>
<td>3,524</td>
<td>3,517</td>
</tr>
<tr>
<td>E-waste return scheme (tonnes)</td>
<td>5.30</td>
<td>2.90</td>
<td>3.43</td>
<td>3.40</td>
<td>3.25</td>
<td>3.10</td>
</tr>
<tr>
<td>Waste sorting at source</td>
<td>Continued</td>
<td>Continued</td>
<td>Continued</td>
<td>Continued</td>
<td>Continued</td>
<td>Continued</td>
</tr>
<tr>
<td>Printer and toner return scheme</td>
<td>Continued</td>
<td>Continued</td>
<td>Continued</td>
<td>Continued</td>
<td>Continued</td>
<td>Continued</td>
</tr>
<tr>
<td>No. of videoconferencing rooms</td>
<td>3</td>
<td>6</td>
<td>6</td>
<td>8</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Strategy/action plan for energy and the environment at the new head office</td>
<td>Continued</td>
<td>Continued</td>
<td>Continued</td>
<td>Continued</td>
<td>Continued</td>
<td>Continued</td>
</tr>
<tr>
<td>No. of offices certified under the 'Environmental Lighthouse' scheme</td>
<td>1/1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>

* New system for organisational analysis as from 2011
** Slight increase in paper consumption from 2012 to 2013 due to increased customer base.

Figure 4: Environmental sustainability in SpareBank 1 SMN. (SpareBank 1 SMN 2014: 27)

As can be seen, SpareBank 1 SMN made improvements in 2013 in almost all areas since they started to track their environmental efforts. One area of the bank’s internal operations, however, shows a different trend. The bank has not been able to reduce their paper usage; in 2013 35, 8 tonnes of paper was purchased, compared to 35,76 tonnes in 2012 (SpareBank 1 SMN 2014). The annual report states that this increase is due to an increase in the number of customers (SpareBank 1 SMN 2014). Another potential explanation for this increase might be that efforts pertaining to influencing employee behaviour in terms of environmental issues has not successfully permeated the organization. Samdal (2014) said that there are enormous differences between the different offices when it comes to postage costs. According to him, this variation could not be explained by different levels of activity; rather, a lot could be explained by differences in work processes.

There have been implemented measures to try to influence employee behaviour in a more sustainable direction. These include initiatives such as courses in eco-driving. Even though these measures have been implemented, it is difficult to ascertain whether they are well known within the organization, or that they lead to behavioural change. Although this study has not conducted a survey amongst employees that can support this claim, the results in figure 4 indicate that since many of the indicators are relatively stable year after year, it is reasonable to question whether the behavioural change has permeated the organization.
Generally, decreasing the number of trips taken by employees necessitates a conscious decision on the part of the employees, as well as viable alternatives to travelling.

SpareBank 1 SMN is certified as an Eco-Lighthouse, which is “Norway’s most widely used certification scheme for enterprises seeking to document their environmental efforts and demonstrate social responsibility” (Eco-Lighthouse 2014a). The Eco-Lighthouse certification entails that the company that applies has to satisfy a number of general and industry specific criteria to be certified (Eco-Lighthouse 2014b). During 2012 the company’s headquarters in Trondheim, as well as the offices in Ålesund, Stjørdal and Steinkjer were certified in the areas of work environment, procurement and use of materials, energy, transport, waste, emissions and aesthetics (SpareBank 1 SMN 2013). The efforts to certify the company’s offices are expected to continue throughout 2014 (SpareBank 1 SMN 2014). Certifications such as Eco-Lighthouse can be important for SpareBank 1 SMN’s competitiveness. The bank has a strong motivation to certify its offices. The interviews conducted by Moa (2013) found that public sector customers often demanded environmental certifications from SpareBank 1 SMN in order to do business with them. The demand for Eco-Lighthouse certification is also present in the bank’s dealings with their own, large customers. Sustainability is an integral part of the bank’s procurement strategy, and environmental factors is one of the criteria in SpareBank 1 SMN’s procurement assessments (Moa 2013). Certifications are not a demand for every supplier has due to the sheer volume of suppliers that the bank has. Nonetheless, it is a criterion when choosing between large suppliers. The Eco-Lighthouse Certification is an example of how a supplier can prove that they are invested in sustainability.

When SpareBank 1 SMN chose to build new headquarters, they did so according to strict environmental standards; in 2010 their low energy office building in Trondheim was ready. When measuring the energy consumption in the building during the first year it had an average of 66 kWh per square meter, which can be compared to the government’s requirements of 144 kWh per square meter (SpareBank 1 SMN 2013). The company stresses that there are multi-faceted reasons as to why the energy consumption is so low, but emphasizes the following factors:

“a heavily insulated and compact building structure, an energy effective ventilation system, a sophisticated system for management and operation monitoring, and the organization of the work place and follow-up from the employees that work there” (SpareBank 1 SMN 2013: 31, my translation).
The headquarters’ low energy construction has received attention outside the company. The building received two awards for its environmentally conscious construction in 2011. It received the municipal energy saving prize from Trondheim municipal government (Sund 2011). It is given to companies or projects that provide “innovative solutions to reduce energy consumption in Trondheim” (Trondheim Kommune 2014, my translation). The second prize was given by the International Real Estate Federation FIABCI, due to the focus on the environment and saving energy (Tronstad 2011). These efforts to reduce SpareBank 1 SMN’s environmental impact has most likely lead to cost reduction, effectively making it a part of the bank’s green value creation. Although it is important, it is not the most vital part of the green value creation of the bank. The definition of green value creation applied in this thesis emphasizes that the environmental efforts are most effective when a part of the company’s core activities. For the banking sector, these competences are to provide products and services, and risk management (Schroek 2002). Therefore, although the internal dimension of green value creation should not be overlooked, it is important to realize that the biggest impact is likely located within the core activities of the bank.

6.2. Green value creation and risk management

In terms of the environmental focus of the risk department, the interview with Neråsen (2014) revealed that risk management and risk evaluation in SpareBank 1 SMN was mainly focused on economic risk. Environmental risk or risks connected to climate change did not play a part in the risk evaluations of SpareBank 1 SMN. Neråsen (2014) explained that although climate change might be the reason for an event, for example by causing an economic downturn, the focus would be on the economic consequences rather than the driving forces behind it. This is not to say that there were no regards for environmental concerns in the bank, but rather that they are difficult to quantify and predict when they cannot be expressed in economic terms. Banks make projections in order to analyse potential scenarios that might occur in the future. The risk management department in SpareBank 1 SMN make projections three to five years into the future. It is reasonable to question whether this is long enough. Several of the informants said that they thought that climate change was a slow process, and that there would be time to adapt to these changes. Nonetheless, Neråsen (2014) also argued that although these risk projections are evaluated continuously, they were vulnerable to dramatic shifts. As such, if climate change leads to unpredicted and sudden economic changes, it could potentially be difficult to foresee and adapt to it.
The interviews also revealed that environmental risks were often a part of an overall assessment upon the establishment of new customer relationships. This was mainly relevant for the corporate customers. SpareBank 1 SMN is a savings bank with strong regional ties – and one of their visions is to be close to their customers (SpareBank 1 SMN 2013). Helland (2014) informed that the bank’s credit strategy in addition to good knowledge of the customers’ operations ensures that the bank does not enter into business relationships with companies that have disproportionately high levels of pollution. Notwithstanding, it was emphasized by Helland (2014) that their concerns were mainly linked to the legality of the operations; as long as the companies adhere to governmental regulations, the level of pollution was of secondary importance. Some argue that it is beneficial to be socially responsible (RobecoSam 2014a; KPMG 2013). That would entail that simply following the laws and regulations is not enough to gain a competitive advantage. If profitability rises with the level of social responsibility the company takes (amongst it, in terms of environment), then it is possible that following the law is not enough to differentiate between desirable and undesirable customers. Neråsen (2014) said that risk management is not only about minimizing risk, it is also about enduring the consequences. By diversification and spreading the risk between many companies and sectors, SpareBank 1 SMN can reduce its vulnerability to downturns in specific sectors. By having a capacity to absorb losses the bank can continue its business even if some of its customers go bankrupt and induce losses on the bank. Insurance was mentioned often as a part of the financial activities of the bank that was likely to experience the highest level of risk due to climate change. That could be because the consequences are expressed in monetary term and thusly more visible than other kinds of consequences (Finance Norway 2014b). It is apparent that the insurance side of business can potentially be quite expensive for banks if extreme weather keeps increasing in scope and intensity. Projections that only go three to five years into the future might make it difficult to capture the extent of extreme weather conditions in the next years – especially since it can be difficult to predict.

6.3. Green value creation in products and services

The department for business operations and development is responsible for developing products and services within SpareBank 1 SMN. Although several informants mentioned that sustainability has been a topic of discussion in the bank, there is little evidence that this has been integrated into the products or services that the bank provides, nor the processes surrounding them. Interviews with Seljeseth (2014) and Samdal (2014) revealed that there
existed no products or services that can be labelled as green that were being offered to retail customers. Research found that a subsidiary of SpareBank 1 SMN called SpareBank 1 Finans Midt-Norge offers Green Car Loans with good interest rates for electric cars, hybrid cars or cars running on biofuels (SpareBank 1 Finans Midt-Norge 2014). It was the only green product that SpareBank 1 SMN offers to retail customers.

There were mainly two sources of concern from the informants in terms of offering green products or services. The first was to which degree such products has any business potential. Seljeseth (2014) pointed to the previous trend of ethical funds, which are comparable to green funds. She claimed that ethical funds were unsuccessful because they failed to have big enough appeal to the public. Several informants believed that the majority of consumers are not sufficiently interested in green products for it to produce enough revenue for the bank. According to the informants, providing such products will not lead to a competitive advantage because it is not what consumers are interested in. Another explanation put forth by Seljeseth (2014) was that the consumers are positive towards green products and services, but not sufficiently interested to pay for it. This indicates that the informants believe that the consumers are rational actors rather than ideological: they will choose the fund that will give them the best return rather than what they find ethically preferable. Another source for concern was whether it was the bank’s role to provide sustainable products to the consumers at a discounted interest rate. Many of the green products that exist today use lower interest rates as an incentive to influence the consumer to make green choices. For example, the large Norwegian bank DNB offers climate loans with lower interest rates for individuals who buy cars with low CO2 emissions (DNB 2014). The issues raised by several of the informants was whether it was right that the banks should be responsible for subsidizing these products. Helland (2014) argued that there should be external funding for such products, by either the Norwegian government, the Nordic investment bank or the European investment bank. None of the informants discussed whether the decreased revenues incurred by giving loans with discounted interests rates could be balanced due to increased profits as a result of more customers.

The interviews and the evaluation of the products offered to corporate customers revealed that they offered no products or services that can be considered green or sustainable with one exception. SpareBank 1 SMN has a contract on a loan from The European Investment Bank of 100 000 000 euros, which SpareBank 1 SMN in turn can lend to their customers who are small and medium-size enterprises (SME). The loan from EIB comes with a number of terms
attached to it, some of which makes it green. One of the terms stated in the contract is that
SpareBank 1 SMN cannot lend money to “activities which give rise to environmental impacts
that are not largely mitigated and/or compensated” (European Investment Bank 2014c). The
contract between SpareBank 1 SMN and EIB also specifies that the interest rate on this loan
towards the SME has to be lower than ordinary loans by 0, 25%. This ensures that the SME’s
benefits from this arrangement. A majority of the amount from EIB has gone to financing
green energy production, according to Helland (2014). This can be seen in relation to what
was mentioned earlier in terms of the informants looking to external actors to finance green
products and services.

The interviews revealed that some of the informants thought that it was difficult for
SpareBank 1 SMN to take an active role in terms of their corporate customers. Helland (2014)
argued that if SpareBank 1 SMN incorporate stricter criteria towards their customers
concerning environmental issues or increase the cost of loans due to pollution, they would
lose customers. The argument was that the customers would just go to a competing bank that
did not have such criteria or increased fees for polluting companies. Overall, several
informants said that they did not believe that it was an advantage to be a first mover when it
comes to sustainability in the banking industry. The general notion was that if the bank
imposed stricter measures on corporate customers they would be less competitive than other
banks. As previously mentioned, Helland (2014) argued that he did not feel that there was any
need to demand any more of the bank’s customers than what was stated by law. There was a
recognition, however, that regulations can change, which might lead to more difficult business
climate for their customers. Helland (2014) argued that if fossil fuel was to become illegal it
could have a profound impact on the bank’s finances and its customers.

In short, the following conclusions about green value creation in SpareBank 1 SMN can be
drawn: in terms of the bank’s internal operations there has definitely been a strong focus on
environmental sustainability. The bank has implemented measures that seek to limit the
impact of its business operations. Nonetheless, it is unclear to which degree this has
successfully permeated the organization in order to achieve behavioural change amongst the
employees. In terms of risk management there was little or no focus on risks that arise from
climate change and how to mitigate them. This was true for both the bank and their
customers. As long as the bank’s corporate customers adhered to legislation, the bank saw
little use in evaluating the environmental risk of their customers’ operations and how this
might affect the bank’s own operations. There was little evidence of GVC in the products or
services that SpareBank 1 SMN provides. One exception was the agreement between the bank and the EIB, which enabled the former to provide loans with lower interest rates to SME, given that the SME adhered to certain criteria. Apart from this, there was little evidence that the green perspective had any part in the products or services that the banks offer to neither retail nor corporate customers. The general feeling amongst the informants were that climate change is not a pressing issue and that there would be time to adjust to it when the changes came. Additionally, several of the informants felt that there was a lack of incentives for them to provide green products to their customers – and they were unsure if it should be a bank’s responsibility to take the cost for influencing consumers’ behaviour in a green direction.
7. Analysis

The potential for green value creation in a company is contingent upon a number of factors. By mapping the current situation for SpareBank 1 SMN it is possible to identify whether they are currently engaged in green value creation or not. This process will also reveal what areas the bank is currently underperforming in, if the conclusion is that they are not succeeding in creating value in a green way. It will make it easier to come with suggestions as to where they can improve.

7.1. Criteria for analysis

Jørgensen and Pedersen (2013) propose a three-dimensional model for social responsibility, which they call “the cube of responsibility”. They use the TBL-approach to CSR, meaning that they include economic, social and environmental issues in their model. The GVC definition in this study does not include the social dimensions because it looks at situations where sustainable behaviour leads to value creation. Therefore, the social issue is not discussed when using the model to analyse the responsibility of SpareBank 1 SMN. This amendment makes the model more suitable for this study without detracting from its explanatory power. The model comprises of three variables that categorize companies according to their level of responsibility. These variables are pictured in figure 5:

![Figure 5: Three dimensions of responsibility (Jørgensen & Pedersen 2013: 102).](image)

The motivational dimension is concerned with the motivational reasons that explain why companies act responsible. Jørgen and Pedersen (2013) differentiate between internal and external motivation. “Internally motivated actions are those actions that are done for their own sake, and where the motivation is inherent in the action itself (Jørgensen & Pedersen 2013: 106-107, my translation). Externally motivated actions, on the other hand, are done “as a means to achieve other objectives or to avoid sanctions” (Deci & Ryan in Jørgensen &
Pedersen 2013: 107, my translation). In terms of GVC it is inherent in the concept itself that both internal motivation, which is the wish to contribute to sustainability and external motivation, which is the wish to earn money from a sustainable business model, should be present. As such, a degree of external motivation is to be expected.

The integration dimension examines the integration of CSR-measures into the company and its operations. According to Jørgensen and Pedersen “the measure for whether corporate social responsibility is integrated into the company in a real sense, is whether corporate social responsibility measures influence the company’s core activities” (2013: 109, my translation). Schroek (2002) argued that the most important activities of a bank are to provide products and services as well as risk management. These are the core activities of the bank, and will receive the most attention in the analysis.

The last dimension is effect, which looks at the outcome of responsible behaviour on a company’s bottom line. Jørgensen & Pedersen (2013) emphasize that since they are exploring this subject from a business perspective, their focus is how these actions affect the company from a purely financial perspective. GVC looks at the situation where financial and environmental effects are integrated, or where the effects of environmental measures can be expressed financially. They differentiate between measures that have a direct or indirect effect on a company’s bottom line, and measures that have no or negative effect (Jørgensen & Pedersen 2013). From this, it can be deduced that both tangible and intangible effects are included in the analysis, although the latter is more difficult to quantify.

According to the company’s combination of attributes, they are placed in one of eight categories in the three-dimensional model. This is illustrated in figure 6. SpareBank 1 SMN’s position will be concluded in chapter 7.3 with a brief explanation of what this entails for the bank’s business model.
Figure 6: The three-dimensional model of responsibility. (Jørgen & Pedersen 2013: 120, my translation).

7.2. Analysis

SpareBank 1 SMN’s motivations for engaging in responsible behaviour was not asked after specifically during the interviews. Additionally, information collected from previous research on CSR in SpareBank 1 SMN looked specifically at the motivational aspect. The motives behind companies’ responsible behaviour has been a source of much discussion in literature. Midttun (2013) identifies three perspectives on CSR, critical CSR, civilised capitalism and the greenwashing thesis. The latter claims that CSR is reduced to a tool for managing a company’s reputation, when “crude working conditions, exploitation of the natural environment and outsourced corruption are veiled by enchanting ethical declarations, selective reporting of good performance and carefully managed spin” (Midttun 2013: 20).

Although it is debatable whether or not this is the case, the fact that this has become an issue suggests that there is need for more openness and transparency in terms of the motives of the companies. Nonetheless, since the motivational aspect of responsibility has become a contentious issue, there is a possibility that the companies could feel sceptical about expressing their true intentions for acting responsible. Previous research on CSR in SpareBank 1 SMN found that “[a] majority of the informants mentioned economic gain as important when it came to why the bank is engaging in CSR” (Moa 2013: 44). Three arguments were often discussed by informants when it comes to CSR and financial performance:
“Firstly, there was the topic of CSR as intangible assets, such as building an image and reputation and a good corporate culture. Secondly, there were the immediate effects on the bottom line through reducing consumption and having a more environmentally friendly business. Thirdly, there was the competitive advantage that came from engaging in CSR” (Moa 2013: 43).

The fact that many of the informants were concerned with the financial benefits from engaging in CSR does not necessarily mean that SpareBank 1 SMN is always externally motivated to act responsible. Nonetheless, it does indicate that external factors play an important role. During the current study on green value creation, the results were somewhat different. This difference was not that the motivation had changed; rather, the change seemed to be that the motivation was low. Whereas the motivation for engaging in CSR appeared clear for all the informants, the motivation for engaging in GVC appeared low. The motivation for engaging in GVC appeared to be external to the extent that it was present, seeing as so many of the informants cited lack of business potential as a reason for not engaging in it. The fact that many of the informants felt that it was not the bank’s responsibility to bear the extra costs for green products or impose extra criteria on loans counts in favour of external motivation.

The integration of responsibility into the core activities of the company has already been discussed several times in this study. The empirical evidence in chapter 6 showed a distinct difference between the efforts made in internal operations, products & services, and risk management. While there was a strong focus on environmental sustainability in the bank’s own operations, this was present to a much lesser degree in the two latter categories. One potential reason for this could be that environmental sustainability is still a new area of focus for SpareBank 1 SMN, so the easiest place to start is with the bank’s own environmental footprint rather than with its products and services, or so-called “good housekeeping”.

However, on the basis of the informants’ answers, it is likely that this is due to a conscious decision. Because many of the informants believed it was unlikely that a business case could be made for for example sustainable products, the bank is unlikely to have an impetus to offer green products and services. The cooperation between SpareBank 1 SMN and the EIB to provide loans to SME’s with low interest rates is an example of how the bank could implement more sustainable products into its portfolio. Nonetheless, it appears as if such commitments are dependent upon external financing. The interviews indicated that the bank did not see it as its responsibility to incur lower revenues to subsidize green products. Because
of this discussion, the conclusion is that GVC is not integrated into SpareBank 1 SMN’s core activities as they are defined in this study.

The third criteria looks at the effect of responsibility on the bottom line. Jørgensen & Pedersen (2013) distinguish between direct and indirect effect on the company’s bottom line on the one hand, and no effect or negative effect on the other hand. It is difficult to identify exactly how environmentally sustainable measures affect the bottom line. Firstly, because the exact results are not stated in monetary terms in the annual report. Secondly, intangible assets such as reputation and a recognized brand is difficult to quantify. Lastly, since there are a lack of examples of GVC in SpareBank 1 SMN it is difficult to evaluate whether it has any effect on the bottom line. In terms of environmental measures, there are some indications that it that it can potentially affect the bottom line of the bank. In Moa’s (2013) study, an informant said that certain customers such as public sector clients and some large companies demand that SpareBank 1 SMN has environmental certifications such as the Eco-Lighthouse in order to do business with them. Although no research has looked at what the financial implications of not having these certifications would be for SpareBank 1 SMN, it is reasonable to assume that having such certifications in place has a positive effect on the bank’s bottom line. Additionally, the empirical evidence showed that there had been an improvement in 8 out of 9 environmental indicators in the bank. It is likely that some of these improvements leads to extra costs for SpareBank 1 SMN, rather than a decrease in costs. Efforts such as Eco-Lighthouse certification of offices and instalment of video conference rooms are likely to incur costs rather than savings in the beginning. However, it is reasonable to assume that such measures can lead to cost reduction in the long run. Because of the lack of GVC in SpareBank 1 SMN it is challenging to determine its effects on the bottom line. There is no doubt that the potential is there. Due to the lack of GVC in SpareBank 1 SMN, there can be little or no effect on the company’s bottom line.

This analysis found that SpareBank 1 SMN is externally motivated to act environmentally sustainable, that GVC is not integrated into the core activities of the bank, and that GVC has little or no effect on the company’s bottom line. According to the three-dimensional model of corporate social responsibility, SpareBank 1 SMN can be placed in the category which is called “superficial non-harvester” (Jørgensen & Pedersen 2013: 122, my translation). This describes a situation in which “externally motivated responsibility measures that do not affect the core activities, but which does not lead to positive effects on the profitability either” (Jørgensen & Pedersen 2013: 122, my translation).
7.3. **Summary and conclusion of analysis**

Based on the empirical evidence and the following analysis, the conclusion is that SpareBank 1 SMN is externally motivated to act responsible. However, the results differed somewhat between the study from 2013 that focused on CSR as a whole, and this study, where GVC is singled out. Both found that responsibility appears to be externally motivated in SpareBank 1 SMN. Additionally, the motivation for engaging in GVC is low amongst the informants. In terms of integration of responsibility into the core activities of the bank, the analysis showed that SpareBank 1 SMN adheres to the traditional approach to responsibility. This entails that the prime focus is on “good housekeeping,” which is the bank’s internal operations. The core competences, which was earlier identified as being products & services, and risk management (Schroek 2002), had little GVC embedded in them. It is difficult to evaluate the effect of GVC on SpareBank 1 SMN’s bottom line. This mainly because there amount of GVC is so low that it is difficult to measure any effect from it except from in internal operations. Based on the attributes of SpareBank 1 SMN, they can be placed in the category called “superficial non-harvester” (Jørgensen & Pedersen 2013: 122, my translation).
8. Discussion

This section will look at the risks and opportunities presented in chapter 4 and discuss this in relation to the answers given by the informants and other relevant information. In addition, there will be a discussion regarding whether having a conscious strategy to increase green value creation can make banks better equipped to handle the consequences of climate change.

8.1. Can green value creation influence banks’ ability to manage consequences that stem from climate change?

It is important to discuss whether GVC can be a useful tool for companies. The danger of introducing yet another concept to the debate about sustainability and corporate social responsibility is that green value creation could end up being another buzzword in a field of study that is already saturated with concepts, standards and initiatives. The GVC concept seeks to integrate environmental sustainability into the core activities of the bank in a way that could minimize the potentially negative consequences of climate change while creating value for the company. Nonetheless, a critical evaluation of its de facto potential is needed in order to continue to develop GVC as a tool.

8.1.1. Risks

Chapter 4 identified several risks for companies because of climate change; legal risk, competitive risk, reputational risk, physical risk, regulatory risk and social risk (KPMG 2013). Due to its lack of relevance for the Norwegian context, social risk will not be included in this discussion.

Markets are not static, and they are continuously changing to reflect the changes in society. Companies need to adapt and innovate to keep up with the shifting market dynamics. Competitive risk in this context can mean two things; not adapting to changing market conditions and that it becomes more difficult to do business because climate change affects the price and availability of important commodities (KPMG 2014). Money is naturally a very important commodity for the banking sector. Banks are dependent upon access to money that they in turn can lend to their customers. Kreutzer (2014) argues that it is possible that the risks that comes with for example climate change will be priced into the capital market. This in turn can influence the price of money, which can lead to smaller profits for the banks because the margins between the borrowing rate and the lending rate decrease. Providing products and services to customers is one of the main responsibilities of a bank; failing to do so could pose a competitive risk. However, the competitiveness can also be reduced if one bank is lagging
behind in terms of what it can offer its customers. Kiron et al (2012) conducted a survey with 2874 respondents from companies around the world. Their research found that 67 % of managers believed that a sustainability strategy is a necessary in order for a company to be competitive, while 22 % believe that it is not important now, but it will be in the future (Kiron et al 2012). These numbers indicate that there seems to be a consensus that sustainability is an important issue to safeguard the future profitability of a company, which counts in favour of introducing GVC as a strategy. These results, however, are in contrast to the results from the GVC study. The informants in this study argued that it was not seen as a competitive disadvantage not to offer green products to consumers and corporate clients; rather, being first movers was associated with risk. Providing green products and services that consumers do not want or imposing stricter environmental terms on for example loans than is the case today was associated with unwanted risk. With the latter, the argument was that stricter criteria would only result in the corporate customer looking to a competing bank for a loan. There are already examples of banks that are realizing more rigorous criteria aimed at their corporate customers. The bank Nordea has already implemented stricter environmental criteria as a part of their credit strategy (Nordea 2014). A number of banks have incorporated environmentally sustainable strategies into their operations and ultimately their products, services and risk management. It might be perceived that taking steps towards GVC to be riskier than doing nothing. However, lagging behind on environmental sustainability while other banks successfully integrate it into their core activities could prove as detrimental to SpareBank 1 SMN’s competitiveness as trying and failing at environmental sustainability. Although some of the informants from SpareBank 1 SMN did not see any benefits from being positively differentiated from the other banks in terms of sustainability, being negatively differentiated is unlikely to be beneficial either. What constitutes a competitive advantage depends on the sector and the business model. Midttun (2013) identifies two types of competition: cost-based competition and differentiation-based competition. The latter implies that a company will gain a competitive edge by providing products and services that are positively differentiated from its competitors (Midttun 2013). Cost-based competition is focused on “efficient production optimising processes, and flawless organisation in order to be able to sell profitably below average industry prices” (Porter in Midttun 2013: 24). The banking industry is most likely in the latter category because they are generally compared on the basis of the conditions that they offer to their customers. The 2014 Finance Survey conducted by TNS Gallup confirms this: of the people who changed banks during the last year, 46 % said the reason was poor conditions on loans (TNS Gallup 2014b). This emphasizes the importance of price when it
comes to retaining customers. Ten percent of the respondents said that the reason for changing banks was that the bank did not offer the products or services they were after (TNS Gallup 2014b). This indicates that price is far more important than the selection of products and services when customers switch banks. However, it must be noted that only 4% of the respondents changed their main bank in 2014 (TNS Gallup 2014b), which means that the customer retention rate in the banking sector is generally quite high. The fact that the number of customers that switch banks is so low might mean that the banks have little incentives to develop sustainable products and services in an attempt to keep customers from leaving. This also suggests that it is difficult to capture new customers, which could be an argument in favour of why it is important to differentiate itself from the competitors.

The financial industry in Norway is heavily regulated, and is subjected to both national and international rules. The aftermath of the financial crisis of 2008 has seen a host of new regulations, most notably the Basel III directive from the EU, which amongst other things aims at increasing the bank’s ability to cope with financial and economic shocks (European Banking Authority 2014). Additionally, 11 countries from the EU are now trying to implement a so-called Robin Hood-tax on financial transactions, which according to its proponents will force the financial sector to behave more responsibly (NTB 2014). Barannik argues that one of the new trends one is now seeing is stricter regulations, where “taxes, charges and permits, are rewarding clean and well-managed companies and punishing non-performers” (2001: 263). That sustainable companies can be rewarded and those who are not will be punished adds a new dimension to the discussion on GVC. These mechanisms are not in place today, which leaves the responsibility of sanctioning non-performers on the consumer. Therefore, regulatory risk is a highly relevant issue for the financial sector and its customers. Figge & Schaltegger (2001) argues that the most likely regulatory measure is a levy on CO2 or a tax on energy, which is likely to influence all sectors of the economy. The risk is not only regulations aimed at the banks themselves – regulations that affects the banks’ customers can also influence the profitability of the banks. The interviews showed that Helland (2014) believed that stricter regulations could potentially hamper SpareBank 1 SMN, and regulations aimed at the fossil fuel industry was mentioned specifically in this regard. The Norwegian environmental organization Framtiden i våre hender warns that the financial sector has not yet discovered the carbon bubble, which entails there will be severe consequences for the value of funds with oil and gas companies in their portfolio if it is decided that the remaining reserves of oil and gas should remain in the ground (Jorde 2014). Fremtiden i våre
hender reviewed the five largest providers of stock funds, and found that SpareBank 1 SMN’s fund provider Odin fund management was one of two fund providers with the fewest number of energy companies in their portfolio (Jorde 2014). It is beneficial for the bank’s reputation to use a stock fund provider with a more environmentally friendly profile than its competitors as it avoids negative media attention. There are several ways in which engaging in green value creation could potentially lower regulatory risks for SpareBank 1 SMN. If banks show that they take environmental concerns seriously by integrating green value creation into its core operations it might make regulations in this area superfluous. This stance is supported by Finance Norway (2010), which has emphasized the need for pre-emptive actions to avoid regulations. This is also a common discussion within the topic of CSR; it is argued that by taking responsibility, companies can show regulators that they are able to regulate themselves without outside interference (Porter & Kramer 2011). Therefore, if a bank is to integrate GVC into its core activities, regulations are unlikely to have much influence on the bank’s day-to-day operations or hamper its competitiveness. Additionally, this provides the benefit of being able to move at one’s own pace rather than having to implement measures as a response to new legislation. However, avoiding legislation is only beneficial if the company perceives that the legislation will hold it back. For some of the informants at SpareBank 1 SMN it appeared as though waiting for legislation was preferable to a more proactive approach, thus rendering GVC to be of little use to them in this case. Some of the informants in SpareBank 1 SMN did not see regulatory measures as being of any threat to their operations yet. The only thing that was mentioned by informants as potentially hampering for SpareBank 1 SMN’s business was stricter regulations on fossil fuel, which is a politically contentious issue.

However, it is likely that regulatory measures will increase in scope and depth as the effects of climate change increases, which may affect the profitability of the banks’ customers as well as the banks themselves. The questions is whether it is preferable for SpareBank 1 SMN to be pre-emptive about these changes or not.

Banks are dependent upon trust from both regulators and consumers, and therefore reputational risk is of prime importance for this sector. Negative press attention regarding high levels of pollution from the bank’s corporate customers could reflect badly on the bank’s reputation. The interview with Helland (2014) revealed that SpareBank 1 SMN did not exclude companies from their customer portfolio for polluting as long as the companies kept within the legal limit. Nonetheless, one does not need to look far for examples where the public’s perception of what is ethical and the law do not necessarily coincide – which results
in negative media attention for a company. One such example is of the Norwegian company BAMA, which deals mainly in fruits and vegetables. BAMA chose to start selling their leeks packaged and trimmed, when they had previously sold the item unpackaged. This sparked a widespread Facebook-campaign from consumers who reacted to the unnecessary use of packaging and that the trimmings from the leek was disposed of, which ultimately resulted in BAMA retracting their packaged leek from the market (Norli 2014). BAMA responded that they have previously developed a sustainable environmental and packaging strategy in collaboration with the environmental organization Bellona to ensure that their packaging solutions are as sustainable as possible (BAMA 2014). This shows that even though the company followed the law and had a strategy for sustainable packaging they still did not avoid negative attention in the media because they breached with the public’s perception of what is right and wrong. For this reason, SpareBank 1 SMN should take into account that merely following the law does not make the company immune from negative reputational consequences from the public. This can potentially become acute for SpareBank 1 SMN, as it is a regional bank with a strong, local anchoring. Should they have corporate customers that contribute to high levels of pollution or otherwise damage the environment in the region, it could be perceived as deceptive. For sustainable investment in the financial sector, one usually speak of negative and positive screening; the former entails removing the least sustainable companies from one’s portfolio, while the latter concerns actively seeking companies that perform the best in terms of environmental sustainability (Finance Norway 2013d). Incorporating GVC into the strategies and risk management of the bank would necessitate that such considerations are being taken. However, since the interviews revealed that few such regards were taken today, the SpareBank 1 SMN should assess whether at least negative screening should be implemented to protect them from the most serious reputational issues. The Climate Survey found that 40 % of the population had large or very large expectations of the financial industry in terms of climate, but that the proportion of those who felt that they succeeded in reducing greenhouse gas emissions was low (TNS Gallup 2014a). The disproportionate relationship between the expectations and what the public perceives as being achieved can become an issue if the gap continues to grow. Nonetheless, the real question is whether this reputational damage can lead to a loss of customers. According to the 2014 Finance Survey, 3 % of the respondents who changed banks during the last year reported that they did so because of media coverage (TNS Gallup 2014b). Although this shows that a small amount of customers changes their bank due to negative press coverage, the survey does not indicate whether positive press coverage helps attract customers. The
director of communications, Tronstad (2014a) told during the interview that SpareBank 1 SMN has previously been challenged by the media about why SpareBank 1 SMN has not offered any green products. He also told that he has never experienced that SpareBank 1 SMN has received any negative press coverage for financing on the basis of climate change. Tronstad (2014a) believed this to be because SpareBank 1 SMN does not finance many companies in the sectors most likely to receive negative attention, such as oil, gas or aviation.

Physical risk is risk associated with physical damage to assets (KPMG 2013). By integrating GVC into the strategy of the bank it is likely that the bank is able to reduce environmental risk and take protective measures against for example natural disasters. It is possible to reduce the impact of physical damage by having strategies in place and conducting preparatory measures ahead of events. Applying environmental criteria in addition to the ordinary risk management might make the banks less vulnerable to the physical risk, partially because it can take the risk into account when deciding the interest rates on for example loans. SpareBank 1 SMN is in a position where it can influence regional development and it is likely to have a strong impact on the business community. Thusly, the banks’ credit policy and not to mention the assessments done by the bank prior to approving loans can possibly influence whether or not green or environmentally friendly companies gain a competitive advantage. Finance Norway argues:

"[t]he banks have the best opportunities to influence their customers and other actors to take climate friendly choices through the credit market. Environmental risk should therefore be priced into different financing contracts” (2010: 11, my translation).

This way, banks are less susceptible to the additional costs that might come as a result of physical risks. Additionally, they can encourage their customers to properly secure their physical assets against the consequences of climate change.

Legal risk concerns the scenario where legal action is taken towards a company. Although this was one of the least feared risks in the KPMG (2013) survey, there is still a potential that banks will find themselves in a more precarious situation as the consequences of climate change increase. They might be held responsible for contributing to the deterioration of the environment should they not try to mitigate the consequences to a greater degree than what they are doing today. It is difficult to foresee if this will become an issue in the future. However, there are already examples of banks that have experienced legal ramifications due
to the secondary pollution of their customers, as mentioned in the literature review. In the US in the 1980s:

“banks could, under CERCIA, be held directly responsible for the environmental pollution of clients and obliged to pay remediation costs. Some banks even went bankrupt under this scheme” (Jeucken & Bouma 2001: 24).

Such examples show that it is possible for banks to be held accountable for the actions of their corporate customers, which could potentially have large ramifications for the bottom line. Both Helland (2014) and Tronstad (2014a) mentioned that SpareBank 1 SMN has been involved in clean-ups after their corporate customers, albeit voluntarily. GVC could lessen this risk because it makes the company more aware of the potential environmental risks attached to its customers. Firstly, a bank can take a radical approach where corporate customers are subjected to positive screening where only the best are chosen, and thus avoiding the customers that could make them liable. Secondly, banks can employ a more complex risk evaluation that considers environmental risks. Helland (2014) stated that the bank only take in corporate customers who follow the law when it comes to pollution. As long as the customers of the banks adhere to the law, it is unlikely that the banks will face any legal risks. To conclude, GVC can potentially have effect on the legal risk of SpareBank 1 SMN because it can make the bank better equipped to identify and evade corporate customers with large environmental risk.

8.1.2. Opportunities

Climate change is universally perceived as a negative phenomenon. Paradoxically, there are some potential benefits for companies that choose to focus on sustainability. Innovation was the most frequently mentioned opportunity to arise from climate change according to large companies that participated in KPMG (2013) survey. Offering new products and services to both retail and corporate customers could be a source of new revenue for the banks. A broad range of such products has been mentioned already in this study, ranging from green funds to green loan products. Other innovative products include The Co-Operative Bank’s Greenpeace credit card, where the bank donates money to Greenpeace when the user opens an account and continues using the credit card (Greenpeace 2013). An additional benefit for the The Co-Operative Bank is that strengthens its ties with a renowned environmental organization, which can be positive if the bank wishes to be perceived as environmentally friendly by consumers. Environmental sustainability is likely to play an important role in product development if green value creation is incorporated into the business model of the bank. There is no shortage
of products and services a bank can offer if it wishes to become more sustainable. The question is how the banks can benefit from offering it. Chang & Fong’s (2010) empirical study found that companies that offered green products or had a green corporate image had positive effects on both the satisfaction and loyalty of customers who were concerned with sustainability. Chang & Fong’s (2010) study does not answer what effect green products or a green corporate image has on those who are not concerned with sustainability. Whether people are interested in green products is one of the most important issues because the argument from the majority of the informants was that there is no market for these kinds of products. Climate change was considered the sixth most important challenge Norway is facing according to survey by TNS Gallup (2014a). Those under 30 consider it the third most important challenge (TNS Gallup 2014a), which indicates that climate change is perceived to be a more pressing problem by younger people. Considering the low percentage of customers who change banks as mentioned earlier, it is all the more important to capture the young customers in the process of choosing their main bank for the first time. Integrating GVC into the strategies of the bank could thus help recruit new customers who are concerned with climate change and environmental issues. However, as Schmidheiny & Zorraquin (1996) argue, banks are traditionally very conservative when it comes to involving themselves in new products, services and markets, which might explain their reluctance to offer green products and services.

The interviews conducted in this study showed that there was a large degree of uncertainty regarding the profitability of green value creation through green products and services. The competitive advantage of being a first mover was not immediately perceived as being a benefit from the informants’ point of view. In fact, making a commitment in terms of sustainability appeared to be associated with risk rather than opportunity for some of the informants. An example that was mentioned during an interview was green loan products. One way or arranging such a product could be to give the customer a better interest rate on a loan to build an energy-positive house, to promote a more sustainable behaviour from the customer. This necessitates that the bank foregoes some profit to help the customers make greener choices. However, there is a disagreement in the academic community as to whether there is a connection between sustainability and profitability. Louche (2001) argues that even if there is positive correlation between financial performance and environmental measures, it is difficult to determine the causal relationship between the two. A frequently mentioned objection mentioned during interviews was if it was possible to make a business case for
green products. As previously mentioned, ethical funds did not gain any popularity in the population; in 2007, merely 1% of Norwegian savings were placed in ethical funds (Dagens Næringsliv 2014). Additionally, a survey conducted by the Norwegian environmental organization Framtiden i våre hender showed that Norwegians were not interested in investing in ethical funds (NRK 2007). Several informants were sceptical as to how large a share of the public would be interested in investing their money in green funds. Overall, the belief that such products would have a broad appeal appeared to be low amongst the informants. In order for their assertions to be correct, two conditions need to be fulfilled. Firstly, it presupposes that green or sustainable funds are less profitable than existing funds. According to Knörzer (2001), the profitability of the fund depends on whether they choose companies based on wide or narrow sustainability criteria. He argues that from the sustainable funds in German-speaking countries, those who have chosen wide sustainability criteria have performed better than average in terms of growth (Knörzer 2001). Secondly, the informants’ assertions necessitates that the majority of the population will choose funds based on profitability rather than personal conviction. An argument raised by some of the informants were that it was not a part of the bank’s responsibility. Whether one agrees or disagrees with this stance, it is still an important debate. Nonetheless, the example of loans to SME’s earlier in this study shows that it is possible to achieve such products – with the support of external financers such as EIB. As previously mentioned, 40% of the Norwegian population had large or very large expectations of the financial industry when it comes to climate (TNS Gallup 2014a). Contrastingly, only 10% changed banks because it did not provide the services and products that the consumer wanted (TNS Gallup 2014b).

Building a corporate brand and improving the reputation of the company was the second most cited opportunity in the KPMG (2013) survey. SpareBank 1 SMN’s brand is built upon its role as a regional bank. One of its strategic goals is to “[f]urther develop and renew the brand and position in the market area” (SpareBank 1 SMN 2014: 6). One way of potentially doing this would be to position itself as an environmentally friendly bank. A green brand identity “is defined by a specific set of brand attributes and benefits related to the reduced environmental impact of the brand and its perception as being environmentally sound” (Hartmann et al 2005: 10). Improving reputation is generally accepted as a strong reason for engaging in responsible behaviour. Doing so may improve the company’s intangible assets “such as reputational capital, corporate culture, and legitimacy, which buffer and protect companies from negative actions” (Gardberg & Fombrun 2006: 330). Building up a buffer of positive
reputation can be a good way of insulating the company against negative attention. Issues concerning sustainability and the financial sector are no longer delimited to academic literature and reports from international organizations – debates on this topic is progressively becoming more common in the printed media as well. This might indicate that there is a level of awareness concerning this topic in the public. It is possible that this awareness could negatively influence the reputation of banks that fail to integrate sustainable measures into their products, services and risk management. In Norway, the discussion has to a large degree centred on investments, and especially those of the Norwegian Government Pension Fund Global. Although not immediately comparable to investment in the banking sector, it indicates that the topic raises attention in Norway. Nonetheless, it is clear that Norwegian banks and investment companies have started to take responses from the public into account; for instance the largest manager of savings and investment funds in Norway, Skagen Funds, has decided to reduce their share of stocks in the oil sector in favour of renewable energy (Lewis 2014). Although such measures doubtlessly leads to a better reputation for the company, it is difficult to say whether this leads to more customers for the bank and in turn, value creation. The issue with concepts such as CSR is that it can have the reverse effect on the company’s brand and reputation if consumers perceive it as insincere. The concept of green value creation explicitly states that the goal is to unite economic growth and sustainability. The belief that it is necessary to unite both economic and sustainable considerations to reshape the economy is gaining momentum in the international community. The need to make room for both economic development and a more sustainable way of living is supported by important international actors such as Organisation for Economic Co-operation and Development (OECD), UNEP, the World Bank and the Global Green Growth Institute through the international network Green Growth Knowledge Platform:

“[G]reen growth discards the traditional convention of "grow first, clean up later" and discourages investment decisions that entrench communities and countries in environmentally damaging, carbon-intensive systems” (Green Growth Knowledge Platform 2014).

Cost reduction was the third opportunity mentioned by companies (KPMG 2013). The definition of GVC states that in order to gain the most benefits, measures should be a part of the company’s core activities. Cost reduction is a typical part of “good housekeeping”, which focuses on the own internal operations of the bank by reducing consumption and environmentally damaging activities. It is possible to cut costs by decreasing the use of
resources, for example through decrease in travels. The empirical evidence shows SpareBank 1 SMN has implemented a number of measures in this area that has improved the sustainability of their own operations. One of the benefits of cost reducing measures is that they are often tangible, meaning that they are easy to measure and quantify, which makes them easier to justify. Schmidheiny & Zorraquin (1996) argue that one of the reasons that sustainability has been so slow to penetrate the financial sector is because the consequences of environmental concerns are difficult to quantify. The interviews revealed that SpareBank 1 SMN has a team for continuous improvement. This team employs the Lean-methodology, for which “[t]he core idea is to maximize customer value while minimizing waste. Simply, lean means creating more value for customers with fewer resources” (Lean Enterprise Institute 2014). It is clear from the definition that GVC and Lean have similarities that make them compatible. Although the definition states that the goal is to use fewer resources, it is important to note that this is not only material resources, but also human resources. Even though GVC mainly focuses on the overlap between economy and sustainability, Lean addresses issues concerning efficiency and the streamlining of production. As such, if SpareBank 1 SMN does not wish adopt concepts such as GVC, it should still be possible to extend the Lean-methodology to incorporate some of the aspect of GVC.

Sejleseth (2014) mentioned that the risk side of business has potentially very large, negative consequences for SpareBank 1 SMN – and that these harmful consequences would outweigh the expected benefits from green ventures. This is especially true in terms of insurance, because of the scope of the consequences are so vast. One example is the storm called “Dagmar”, which hit mainly the middle region of Norway in 2011. Finance Norway (2012) estimates that the storm caused 876 million NOK worth of damage, distributed amongst 14 600 claims. Such harmful effects could threaten the profitability of insurance companies. The Financial Supervisory Authority (2014) state that the relationship, or combined ratio between the operating costs & insurance claims in relations to the insurance premium is currently at 88 %; if the combined ratio reaches 100 % or more the operating costs and insurance claims are higher than the revenues of the insurance company and thus no longer profitable. An increase in claims due to climate change would therefore decrease the profitability of insurance companies and banks. However, even though there is an intuitive connection between climate change and increasing costs for insurance companies, this connection is not necessarily grounded in empirical evidence. According to the IPCC, the relationship between climate change and increased insurance claims are not scientifically
proven: “[a]part from detection, loss trends have not been conclusively attributed to anthropogenic climate change; most such claims are not based on scientific attribution methods” (IPCC 2014: 25). The fact that there is little scientific research done on the causal relationship between climate change and loss trends in insurance does not mean that there is no connection. Nonetheless, it makes it more difficult to argue that insurance companies and banks should incorporate environmental concerns into their risk management strategies.

The conclusion is that GVC can influence the banks’ ability to cope with risks that arise due to climate change. However, further research is needed to establish the exact impact of GVC on the mentioned risks and opportunities in monetary terms. Because banks are based on a cost-based competition (Midttun 2013) and due to the low turnover of customers (TNS Gallup 2014b) it is difficult to conclude that green products and services can influence the competitiveness of banks. It is more likely that green value creation can be beneficial when it comes to reducing risk and expenses connected to climate change. This was also mentioned as the area with the most potential by Seljeseth (2014). It appears as though banks have low incentives to improve their environmental sustainability as the situation is now.
9. Recommendations

Taking the step towards a more responsible and sustainable business model is not a simple operation. The evaluation of green value creation in the case of SpareBank 1 SMN showed that there was little evidence of GVC apart from in the bank’s internal operations. There were some examples in terms of products, as illustrated by the green car loan provided by one of SpareBank 1 SMN’s subsidiaries and the loan to SME’s. However, they did not appear to be a part of a strategy towards more sustainability. The viability of a number of measures that SpareBank 1 SMN could implement to become greener has already been discussed in chapter 8, and will not be repeated here. Nonetheless, the discussion found that it is difficult to make an unambiguous conclusion regarding the usefulness of GVC in mitigating consequences of climate change for SpareBank 1 SMN. Due to the complexity of the issue, it is not possible to unequivocally recommend GVC as the only solution to the pressing problem of climate change, although it is clear that it can be useful in some cases. The following recommendations stem from the results of the evaluation of the company’s green value creation, and reflect the areas where the bank has the most to gain by increasing their environmental focus.

9.1. Towards a more responsible business model

Environmental sustainability in the financial sector is a complex and multi-faceted issue. The literature review found that the banks’ role as infrastructure make them pivotal in the shift towards a greener economy. Even so, the question of allocation of responsibility is still largely unanswered. The answers from the informants in this study are more or less congruent with the findings in other studies that have been highlighted in this paper; namely, that banks do not feel that it is their responsibility to take the lead on sustainability towards their customers. This vacuum of responsibility makes it difficult to make recommendations that go beyond the status quo. Firstly, as long as banks do not see it as their role to promote sustainability through their core activities the scope will be limited to the bank’s own operations. This study has shown that “good housekeeping” is already implemented in SpareBank 1 SMN to a large degree so there is not a lot to gain from increasing the efforts in this area. Secondly, it is difficult to come with specific recommendations to the bank because action from the bank beyond “good housekeeping” appears to be contingent upon other actors, such as external financing from the EIB. The findings from this study indicate that the impetus to act must likely come from outside, for example through governmental regulations.
or initiatives to give banks an incentive to act. Nonetheless, a number of measures specifically targeted at the bank will be proposed.

Although the topic of sustainability in the financial sector is a complex issue, there is undeniably benefits to increasing the responsibility of one’s business model. The fact that UNEP (2011) predicts that the green scenario will become more profitable than continuing business-as-usual within ten years indicates that there is only a matter of time before companies will need to adjust. The analysis found that SpareBank 1 SMN is categorized as a “superficial non-harvester” in terms of their environmental sustainability because they are externally motivated to act responsible, but their actions do not touch their core activities, nor does it have any noticeable effect when it comes to revenue (Jørgensen & Pedersen 2013).

Through working towards a more responsible business model, it is possible that SpareBank 1 SMN will be able to unify sustainability and profitability. Jørgensen & Pedersen (2013) argue that in order to achieve this, the company needs to do three things: “a strategic reformulation, a reorientation of company values, and reorganization” (Jørgensen & Pedersen 2013: 34, my translation).

A strategic reformulation can be achieved by finding, reformulating and solving problems (Jørgensen & Pedersen 2013). This study has already identified a number of issues that a bank can face due to climate change, some of which are more likely to happen than others. Additionally, GVC has been proposed as the solution to some of these consequences, both positive and negative. Of the issues that have been discussed in this study, it has been revealed that especially the risk management in SpareBank 1 SMN can become a problem since it does not consider environmental factors in for example their credit policy. In a worst case scenario, this can negatively impact the bottom line of the bank. Risk management in SpareBank 1 SMN in this context is limited mainly to economic risk. Banks such as Nordea has integrated environmental risk into their credit strategy. Their analysts use a number of tools to ensure that their customers take the necessary environmental considerations, including Environmental Risk Assessment Tool (ERAT) (Nordea 2014). This shows that there are already tools available that SpareBank 1 SMN can use to integrate environmental risk into their credit policy. The threshold for implementing such a measure should therefore be quite low. In order to achieve this it is advisable that SpareBank 1 SMN recruits employees with competences on both risk assessments and sustainability to raise the company’s knowledge of these topics. Additionally, the informants perceived that the risk side had more potency than the potential benefits that the bank could reap from providing environmentally
sustainable products and services. By not taking into account aspects such as increased insurance pay-outs due to more extreme weather, risks connected with reputational damage, stranded assets and stakeholder pressures with regards to the environmental impacts of the bank’s clients, the bank is less well-equipped to handle climate change in the future. Therefore, environmental risk management should be considered adopted by the bank.

After having identified the issues for SpareBank 1 SMN and having proposed GVC as a strategy to become more sustainable, the next step is a reorientation of company values. The new strategy of the company will “demand that leadership is exercised that causes a reorientation of the organizational members’ efforts, motivation and attention towards the goals one has set, and the values that underpin these goals” (Jørgensen & Pedersen 2013: 35, my translation). This entails introducing green value creation as an important strategic goal for SpareBank 1 SMN. Based on the answers given by the informants it is unlikely that the bank will re-brand itself as a green bank. However, the bank should still be open to implement any low-hanging fruits, which give sizeable benefits for low effort. Naturally, strategic reorganizations should be properly integrated into the organization should the bank choose to adopt a more responsible business model. It is important that the changes are not only a part of a top-down strategy that fails to involve the employees of the bank. As this study has shown, there is reason to believe that some of the previous efforts to implement sustainable measures, such as reducing paper use, has not successfully permeated the organization. Even if SpareBank 1 SMN decide that they do not wish to implement a more responsible business model this step should be considered in order to get more effect out of the measures they have already introduced.

The last step towards a responsible business model according to Jørgensen & Pedersen (2013) is reorganization. Naturally, new strategic goals necessitates that organizational changes are made in order to adapt to the new goals. The discussion revealed that there were areas within the bank that could benefit from integrating sustainability into their core activities to a greater degree. It could prove beneficial to anchor the environmental issue in the organization in a way that ensures that it is followed through in the bank’s core activities. Jørgensen & Pedersen (2013) uses the example of Storebrand that has its own division for sustainability whose job is to integrate sustainability into the products, services and investments of the bank. This is an example of how green value creation could work in practice. A potential way of doing this for SpareBank 1 SMN could be through employing someone with a general responsibility of the topic of environment in the bank, who can be responsible for following
up the environmental sustainability across the departments. A person responsible for sustainability could ensure that it is integrated into the core activities, which would help the bank towards a more responsible business model. Additionally, Jørgensen & Pedersen (2013) mention the need for developing good performance measures for sustainability. Good measures are important because it gives the company an overview of their efforts, which is a prerequisite for improving. In Moa’s (2013) study, several of the informants expressed that they wished they had more ways of measuring and operationalizing the bank’s own CSR efforts. Schmidheiny & Zorraquin (1996) who argue that the difficulty associated with measuring sustainability is responsible for its slow entry in the financial sector support this view. It is recommended that SpareBank 1 SMN try to identify measures of sustainability with quantitative indicators. It is difficult to know the effect on the bottom line if there is no way of measuring it.

As this research has shown, the need to understand environmental issues and the risks will grow in importance as the consequences of climate change increase in scope and severity. This study emphasizes the need for a holistic approach to environment in the bank that runs across all departments. Albeit whether GVC can mitigate the consequences of climate change varies, the recommendation would be that SpareBank 1 SMN to a greater degree implements environmental concerns into their business decisions. This is relevant for both reducing the bank’s negative impact, but also for increasing its positive contribution to society. A way of ensuring that this is done is by ensuring that people with interdisciplinary knowledge of environmental concerns, risk assessment and business development are employed within the company. Many of the informants argued that the effects of climate change are slow and will increase in the future. It is advisable that the bank continuously evaluates the adverse effects of climate change and their stakeholders’ attitude towards this in order to be able to act once the effects and the public’s opinion reaches a critical level.
10. Conclusion

10.1. Summary

Sustainability in the financial sector is a complicated topic. Like corporate social responsibility, green value creation initially appears to present a win-win situation for everyone involved; it reduces costs for the company and minimizes its environmental footprint, while it increases revenues through new business opportunities. This study has applied the following definition of green value creation:

*Green value creation is present when a company is able to integrate environmental sustainability into its core business activities in a way that creates value. Creating value must be done in a way that does not undermine its future operations, and that safeguards Earth’s life-support system.*

It is difficult to identify any negative side effects of pursuing both sustainability and profitability. The vast amount of standards, reporting initiatives and benchmarks demarcate a trend in which sustainability is unequivocally presented as the solution to a range of issues that companies are faced with. Even so, by critically evaluating the potential impact of GVC on SpareBank 1 SMN it has become clear that the issue is far too complicated to unambiguously state that GVC would benefit the company without first conducting more research on the topic. The interviews revealed that the majority of the informants did not believe that it was possible to make money from providing green products and services. Additionally, several believed that it was not the bank’s responsibility to promote sustainability towards their customers. It could be that the definition of GVC that is used in this study is too stringent. It could also be that a regional bank such as SpareBank 1 SMN is not ready to incorporate drastic environmental measures and should rather aim for incremental steps towards sustainability. Another potential explanation is that the cost-based competition (Midttun 2013) that banks compete on, or the low turnover of customers (TNS Gallup 2014b) discourages banks from innovating and identifying new business opportunities. This study has sought to map out the risks and opportunities that arise for the financial sector due to climate change while proposing green value creation as a possible solution to them. While this study identified a number of risks and opportunities, few of the informants seemed to believe that they were potent enough to act on it. When the benefits appear low and the consequences are more likely to increase in the future, there is low impetus to do anything now. Albeit it is clear that there is potential for green value creation to strengthen SpareBank
1 SMN’s position vis-à-vis these changes, there are also a number of issues that complicates it and makes the solution less straightforward. The scepticism concerning how much money lies in GVC suggests that it is unlikely that SpareBank 1 SMN will integrate this into their core activities in the near future. Nonetheless, even though consequences of climate change are still not as pressing in Norway as it is in other parts of the world at this point, the effects are likely to increase in scope and impact. So even though SpareBank 1 SMN might not see the immediate effects of a commitment to GVC it could still provide vital in the future. Although committing to GVC could be too much for the bank in the current situation, there is no doubt that integrating pieces of it could prove to be financially beneficial for the bank. The likelihood of green value creation to be integrated into the risk perspective is much larger. The financial industry is already seeing the increase in insurance claims due to more extreme weather. Seljeseth (2014) argued that the potential negative consequences on the risk side are much larger than the potential benefits that come from engaging in GVC. From a purely economic perspective it is likely that the focus in SpareBank 1 SMN will be on reducing risks rather than increasing revenue. Nonetheless, by starting to move towards a more responsible business model now it is likely that they will be better equipped to meet the climate challenges of the future.

10.2. Future research
Green value creation runs the risk of becoming just another buzzword if it is not properly rooted in research. The business community needs an impetus to incorporate green value creation and environmental issues further into the core activities of a company – an impetus that must go beyond merely what is considered moral and what is not. This study has sought to establish whether or not green value creation can be used to mitigate the negative consequences of changing environmental trends while reaping the benefits by using qualitative methods. A next step for future research on this topic could be to establish which of the consequences and opportunities that carry the most weight for banks, and try to express it in monetary terms. This research revealed a scepticism amongst informants concerning how beneficial GVC really is. Future research should seek to address this issue in a comprehensive way. The next step to consolidate green value creation as a concept is to create a model of green value creation with quantitative indicators that could measure the effects that green value creation could possibly have on the bottom line. This study has focused on a qualitative evaluation of the current situation in SpareBank 1 SMN. It found that it is definitely room for improvement in terms of green products and services in the bank. By looking at the risk
management in SpareBank 1 SMN it was clear that there was a lack of attention on environmental risk, because the consequences of environmental risk was not expressed in economic terms. A future research project could therefore try to develop quantitative indicators that express environmental risk in monetary terms. Doing this could make it easier to implement the environmental risk perspective into the bank’s risk management.
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Appendix A – Interview guide

Introduksjon:
- Hva er din stilling i SpareBank 1 SMN?
- Hva er dine arbeidsoppgaver?

Oppgaver på avdelingen
- Hva er hovedarbeidsoppgavene til avdelingen du styrer?
- Hvilken funksjon har denne avdelingen i SpareBank 1 SMN?

Risikovurdering og risikohåndtering
- Hvorfor bruker man risikovurdering i banksammenheng?
- Hvilken rolle har risikovurdering i din avdeling?
  o I banken generelt?
- Hvilke kriterier er det som legges til grunn når dere foretar en risikovurdering?

Økonomisk og økologisk risiko
- Hvordan vil du definere økonomisk risikohåndtering?
- Er du kjent med begrepet økologisk risiko?
  o Hvis ja, hvordan vil du definere dette?
- Blir det foretatt vurderinger av økologisk risiko i banken?
  o På avdelingen?
- Finnes det kompetanse i banken på hvordan man håndterer økologisk risiko?
- Hvordan kan økologisk risiko påvirke bankens drift, produkter og tjenester?

Risiko og muligheter som følge av klimaendringer
- Hvilke utfordringer kan banken støte på som følge av klimaendringer?
  o Spesifikt for denne avdelingen?
- Hvilke muligheter kan dukke i banken opp som følge av klimaendringer?
Spesifikt for denne avdelingen?
- På hvilken måte kan klimaendringer påvirke kjernevirksomheten til banken?
- Hvordan kan din avdeling fremme grønn verdiskapning?
- Hvordan kan banken fremme grønn verdiskapning?
- Hva kan banken gjøre for å i større grad inkorporere miljøaspektet i kjernevirksomheten sin?

Avslutning
- Har du noen spørsmål?
Appendix B – Interview guide for internship report

Introduksjonsspørsmål:
- Hvor lenge har du jobbet i SpareBank 1 SMN?
- Hvor lenge har du jobbet med samfunnsansvar?

Hoveddel:

1. Bankens samfunnsansvar:
   - Hvordan definerer du samfunnsansvar?
   - Samfunnsansvar deles ofte inn i filantropi, risikostyring og strategisk samfunnsansvar; hvordan vurderer du banken i forhold til disse nivåene?
     - Hvorfor?
   - Hva mener du er grunnen til at banken tar samfunnsansvar?
   - Hva mener du at banken får ut av å ta samfunnsansvar?
     - Hvorfor?

2. Utforming av CSR strategier i banken
   - Hva inneholder bankens CSR-strategier?
   - Hvordan jobber dere i banken for å utforme en CSR-strategi?
   - Hva er din rolle i denne prosessen?
   - Hvilke aspekter blir prioritert når dere skal utforme en slik CSR-strategi?
     - Interessenter
     - Krav fra ledere
     - Økonomisk lønnsomhet
     - PR
     - Ønske om å bli sett på som velgjører
     - Egne meninger og oppfatninger
   - Hva er det som ligger til grunn når dere skal bestemme satsningsområdene innenfor samfunnsansvaret til banken?

3. Interessentene sin rolle i beslutningsprosessene
- Er du kjent med begrepet interessenter, eller ”stakeholders”?
  a. Hvis ja: hva vet du om dette?
  b. Hvis nei: kort beskrivelse av begrepet
  c. NHO sin definisjon: Bedriftens interessenter er de som berører eller berøres av bedriftens virksomhet
- Hvem er interessentene når banken utformer sine samfunnsansvarstrategier?
- I hvilken grad påvirker interessenter deg i ditt arbeid rundt samfunnsansvar?
  o Hvem påvirker deg?
  o Hvorfor påvirker de deg?
  o Hvordan?
- Hvilke krav har disse interessentene?
- Blir kravene imøtekommet?
- Hva avgjør hvilke interessenter sine krav blir imøtekommet?

4. Avsluttende spørsmål
- Har du noen avsluttende kommentarer?
- Har du noen spørsmål?