



JÖNKÖPING UNIVERSITY  
*School of Engineering*

# Socio-economic sustainable banking

- A study on the transition to cashless banking in Sweden from the lens of socio-economic sustainability

**MAIN FIELD:** *Bachelor thesis within Sustainable Supply Chain Management*

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## Abstract

**Purpose** – This research is investigating the Swedish banks transitioning to cashless bank offices. The investigation is carried out to fully understand the reasons behind the transition and what impacts it brought upon the stakeholders affected by it. The purpose of this is to analyze the transition for social and economic effects so that it can be concluded whether the transition was a move towards sustainable banking.

**Method** – The researchers carried out a case study at one of the biggest banks in Sweden. The empirical data for the research was collected through qualitative interviews and a survey with the bank's employees as participants.

**Findings** – Several reasons for the transition to cashless banking were found. Both positive and negative effects brought up on stakeholders were also illuminated from the transition. The transition could not be deemed entirely as a move towards sustainable banking due to negative effects on stakeholders. However, it provides important information about the negative impacts and the stakeholders affected.

**Implications** – No clear answers can be provided due to many interrelated factors that are surrounding the transition, further studies need to be made to which are more focused on each the role of each and one of these factors.

**Limitations** – The case study is carried out in the Swedish banking sector, therefore, is geographically limited to Sweden as the transition might be different in different societies. The research is investigating the social and economic impacts brought by the cashless transition. Thus, the findings do not provide data regarding environmental impacts.

**Keywords** – cashless banking, cashless transition, sustainable banking, socio-economic sustainability, stakeholder theory

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## 1 Introduction

*The chapter provides a background for the study and the problem area the study is built upon. Further, the purpose and the research questions are presented. The scope and delimitations of the study are also described. Lastly, the disposition of the thesis is outlined.*

### 1.1 Background

There have been many technological advancements in recent decades that were followed by revolutionary changes, many changes have been interrelated and their implementation has affected us in our everyday life as well as our business and organizational operations. Some of these changes were implemented due to events in our societies which lead to different approaches to operations and business. The new innovations and technologies have shown to be an effective way for organizations to reduce costs and wastes in their business operations (Nevens, 1999). One of the main events in the 21:st century that led to a large number of changes was the economic crisis of 2007-2009 (Yip & Bocken, 2018). This event led also to an acceleration of a transition within banking organizations to the adaption of internet banking, self-service technologies and some banks went as far as establishing a vision to become cash-free with help of technology made available at that time (Yip & Bocken, 2018).

It has been found as early as in 1999 that a bank transaction cost can be reduced by more than 80% when handled electronically rather than physically (Nevens, 1999). This detail alone was more than enough to start considering a new way of operating in banks. However, following the unfolding of this evolution towards digital money, the disposition of countries and banks towards cash-free is related to the natural movement towards the adoption of the newest and safest technologies. In Sweden, the movement towards cashless is more commonly motivated through the vision of elimination of financial crimes, illegal money, and even elimination of bribery and other crimes (Wright, 2014).

Overall there are many promoting the cashless operations and cashless societies. It makes it reasonable to promote given the benefits created through cashless operations. Moreover, it is undeniable that in Sweden cash is used less and less, perhaps it will not take long before all cash is systematically eliminated. As our society is digitizing more and more, it is expectable to predict such a future outcome. Nevertheless, what would that mean for the society as a whole? Money is something that affects everybody in the society, if whole organizations start going cashless, followed by societies the more consequences will there be. On the grounds that our societies function as systems, change or alter one part of the system and you are bound to see impacts on the other parts.

### 1.2 Problem statement

The banking sector in Sweden is almost entirely cash-free. In a country like Sweden, it seems inevitable that other sectors will follow this transition soon enough as well especially with the speed that the society is getting digitized. If Sweden is to become entirely cash-free, one has to study this transition in a systematic way. Meaning that one should be aware of impacts, both the positive and the negative this transition might have. Having more knowledge surrounding these impacts provides opportunities to prepare for the negative impacts so that they can either be minimized or eliminated. This is the reason for the purpose of this research, there seems to be a gap in research surrounding the social and economic effects of a cashless transition. Thus, this research will analyze the transition at a Swedish case bank to investigate about the socio-economic impacts this transition inflicted on the society. Analyzing these impacts will illuminate whether the transition to cashless banking in Sweden was a sustainable move for the banks and society.

### 1.3 Purpose and research questions

The purpose of this thesis is to investigate one of the largest banks in Sweden that went into cashless banking years ago, with the aim to examine how the transition to cashless banking contributes to sustainable banking. In order to fulfill the main purpose of the research, the research is subdivided into two sub-purposes. The first sub-purpose is to answer questions related to the desired economic benefits that triggered the transition towards cashless banking, while the second sub-purpose serves the aim of providing an understanding of the social impact of the transition.

- **RQ1: What are the motivations that triggered the transition to cashless banking, and what were the internal consequences on the bank and its internal stakeholders?**
- **RQ2: How does the elimination of cash money in banks impact the external stakeholders on the outskirts of the society?**

**Main RQ: Can the banks' cashless transition be seen as a move towards sustainable banking from a socio-economic perspective?**

### 1.4 The scope and delimitations

The scope of this study is limited to the socio-economic sustainability factors that affect or are affected by cash-less banking in Sweden. The research will not be observing cashless banking in connection to environmental sustainability, due to the reason that banks, in general, have a low direct environmental footprint. The larger part of banks' environmental footprint is indirect which makes it harder to measure and therefore is not included in the purpose. However, Figure 1 elucidates the three pillars of sustainability, and it shows the interaction of the social and economic pillars which is the focus of this study.

Furthermore, this research is investigating the socio-economic sustainability from the perspective of the internal stakeholders of the case bank. In other words, the empirical testing is limited to the opinions of the bank employees and managers. The social impact of the cashless banking will be conducted from the perspective of the internal employees of the bank, therefore, this research will not test the social impact of the cashless transition from the perspective of the external stakeholders (customers).

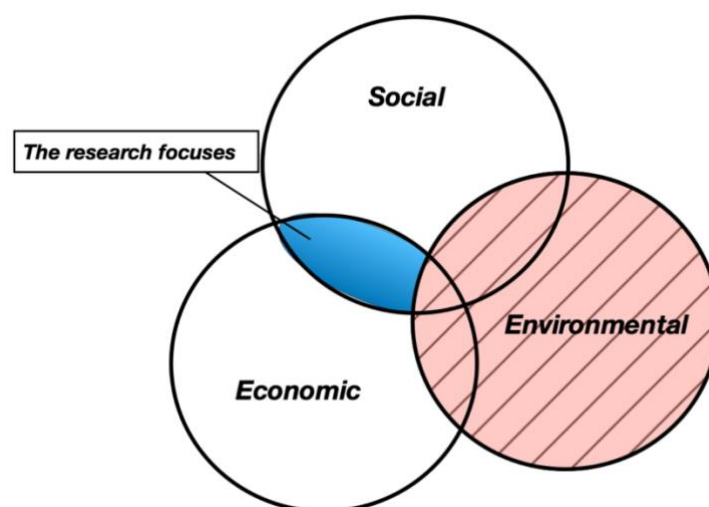


Figure 1: Illustration of the three pillars of sustainability and the focus of this research (own creation)



## 1.5 Disposition

This section provides an overview of this paper. Figure 2 below illustrates the disposition of the chapters of this paper. This paper consists of six chapters. Chapter 1, is the introduction chapter that includes a background behind the purpose of this paper, and there where the purpose and research questions are stated. Chapter 2, contains the methods and implication, this chapter is about the research approach of this paper, and how the research has been conducted empirically. Chapter 3, this chapter includes theories and literature studies of previous researches and scientific articles. Chapter 4, contains the empirical results from the survey and the interviews. Chapter 5, is the analysis chapter where the research questions are answered. And finally, Chapter 6, is the final chapter where the findings and conclusion are located.

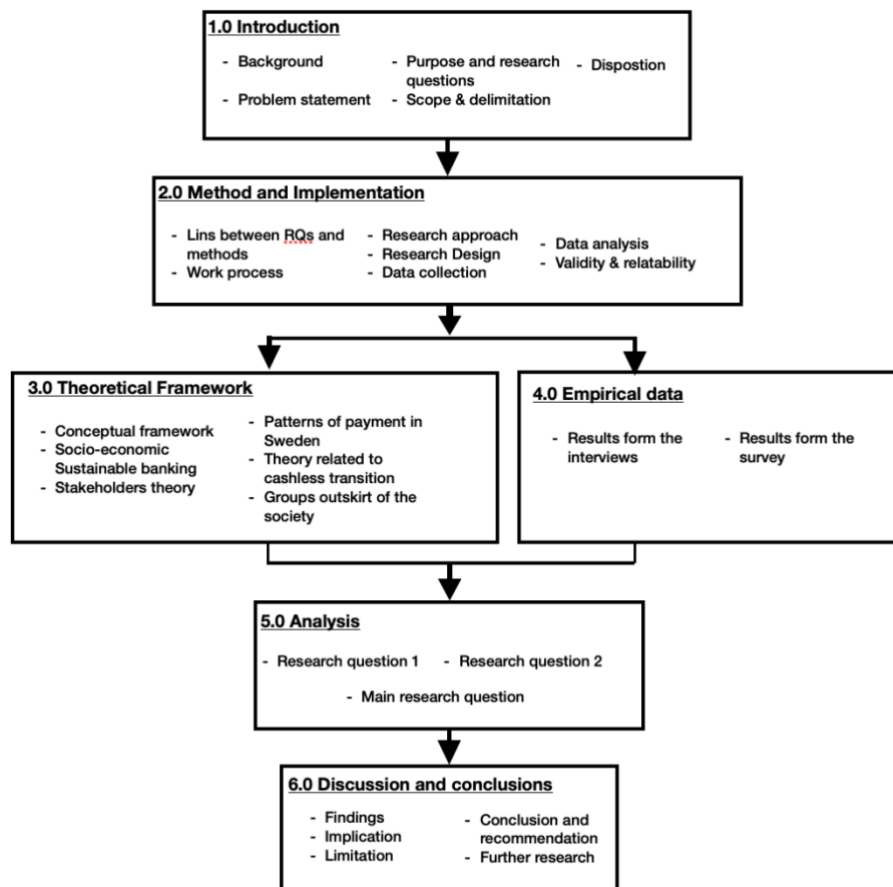


Figure 2: Illustration of the disposition of this paper (own creation)

## 2 Methods and implementation

*The chapter provides an overview of the work process of the study. Further, the approach and design of the study are described as well as the data collection and data analysis. The chapter ends with a discussion about the validity and reliability of the study.*

### 2.1 The link between research questions and methods

This chapter describes the connection between the chosen methods for extracting data and the research questions. This chapter shows how did the authors employ these methods in order to answer the research questions of this study. Figure 3 below visualizes the connection between the research questions and the methods for data collection

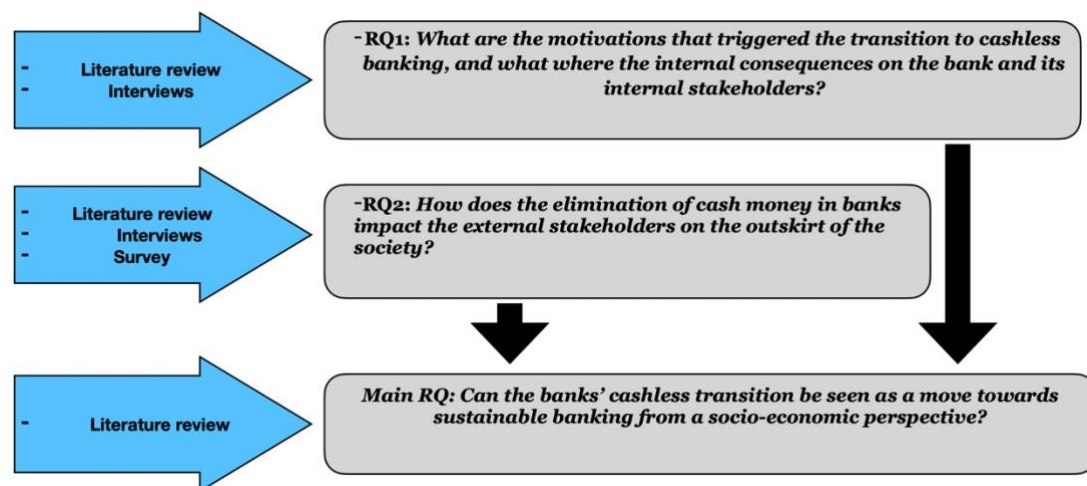


Figure 3: Link between the research questions and used methods (own creation)

To answer the first research question, the authors have used the theory that has been developed from the literature review to develop a semi-structured interview. The semi-structured interviews have been tested empirically in the case bank, and later, the results of the interviews have been analyzed and combined with the literature review in order to come out with findings that answer the first research question.

Concerning the second research question, in addition to what has been applied to the first question, an additional research method has been applied to the second question. After the interviews were executed, a survey was distributed to conduct deeper information and provide numerical data.

Concerning the main research question, this question was answered based on the results of the first and second research questions combined with the literature review.

### 2.2 Work process

Figure 4 below shows the overall layout of the work process of this study. This study has a time frame of 16 weeks. The authors of this study have been working intensively during the time frame. At the early beginning of this study, the authors had a common interest to execute a study concerned with the cashless transition of banking, and the case company was guaranteed through the connections of one of the authors. In other words, the broad area of this study “cashless banking” and the case bank was defined from the early beginning of this study.

Later, the authors had to start searching for a specific problem to be studied. And in order to define the particular problem of the study, the researchers started reading scientific articles and searching for relevant researches to the broad area. The process of problem definition took almost 5 weeks since the problem definition was developing with the development of the study,

and the problem was redefined and shaped many times from the literature review and the achieved results of the empirical study.

The literature review process took 11 weeks. It is the heart of this study and helped to build and develop the other processes. The researchers have been searching for scientific articles and books through the search engines such as Primo, Scopus, and google scholar.

Concerning choosing the method, from the early beginning, it was guaranteed that this study will be executed at one of the Swedish banks. The empirical tools and techniques for conducting the empirical data were changing with the change of the particular problem, at the early beginning, the researchers thought of having interviews and observation sessions, but later when the problem was clearly defined, the researchers have done interviews and distributed a survey.

The process of the analysis followed a simple structure where as soon as any empirical material was collected it was processed, filtered, and documented in a format that could be used to compare with the framework. As the empirical findings were collected on different occasions it meant that the analysis was an ongoing process resulting in a period of 2 months, the closer to the end of the project the higher concentration and effort for the analysis as more data got collected over time.

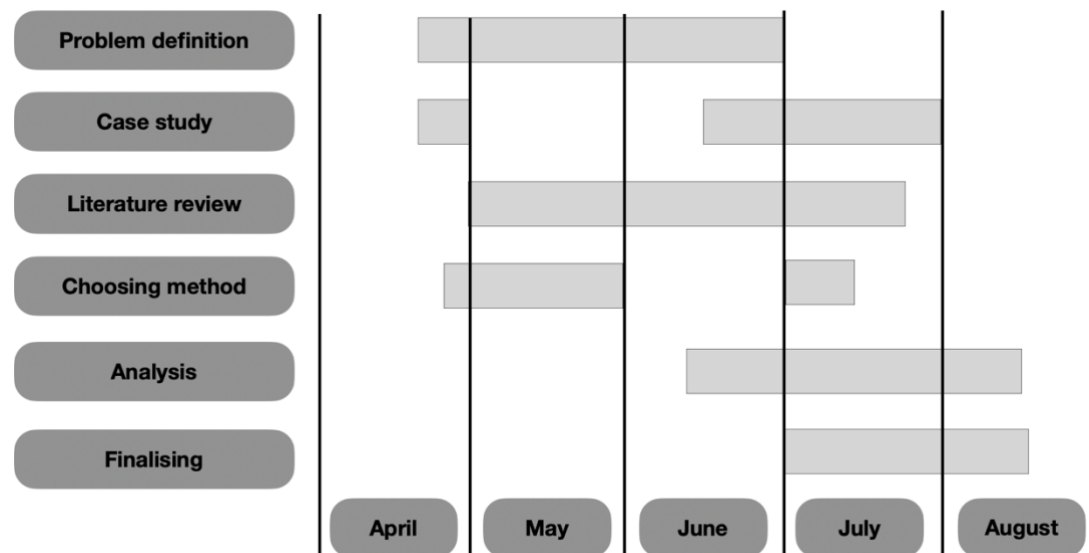


Figure 4: The work process of the study (own creation)

## 2.3 Research Approach

### 2.3.1 Deductive, Inductive, or Abductive research approach

#### *Deductive research approach*

Deductive approaches are concerned with developing a hypothesis basing on current theories, and then trying to test the hypotheses empirically (Dubois & Gadde, 2002). A deductive research approach is about moving from the general to the specific, first by starting from current theory, after that the researchers build a hypothesis relying on the general theory, then the hypothesis is to be tested in real life, and in the end, the findings of the empirical data will be revised on the theory (Woiceshyn & Daellenbach, 2017).

#### *Inductive research approach*

On the contrary, inductive approaches are concerned with building theory in a systematic way basing on a data set that has been generated empirically (Dubois & Gadde, 2002). An inductive research approach is about moving from the specific to the general, this will be conducted by starting from testing a particular phenomenon empirically, and then develop concepts or theories basing on the findings of the empirical testing (Woiceshyn & Daellenbach, 2017).

#### *Abductive research approach*

Woiceshyn & Daellenbach (2017), argues that Inductive and deductive research approaches are complementary to each other. In research, the role of induction approaches is to build in formulate theories and concepts, while the role of deduction approaches is to test and refine the theories and concepts (Woiceshyn & Daellenbach, 2017). However, there is a research approach where induction and deduction are combined creating what is known as “Abductive approaches” (Dubois & Gadde, 2002). In an abductive approach, the researchers can modify the original theoretical framework basing on the resonance of the empirical data. The abductive approach enables the researchers to reorient and redirect the research study basing on the findings from empirical testing. Moreover, an abductive approach enables the researchers to obtain a more efficient analyses for the problem under study, since the boundaries of the study are adjustable (Dubois & Gadde, 2002).

In this research, an abductive approach was followed. During the lifetime of this research, the theoretical model was modified many times as a response to the findings from the empirical testing. The abductive approach enables the researchers to reorient and redirect the research study basing on the findings from empirical testing. During this research, the researchers have built hypotheses basing on the current theories, and then the hypothesis have been tested empirically, then, the empirical findings have driven the researchers to modify the theoretical framework and fulfill the gaps that can make higher efficiency from the empirical findings. However, the problem under study has also been modified several times in order to grant the best usage from the collected data. Moreover, an abductive approach enabled the researchers to test the current theories and concepts and develop them. Therefore, in this research the researchers were able to combine two theories together and develop a concept from these theories. However, in this research the researchers combined the concept of sustainable banking with Freeman’s stakeholder’s theory, and then developed a concept that the researchers called “socio-economic sustainable banking”.

### 2.3.2 Qualitative vs Quantitative research approach

#### *Quantitative research approach*

A quantitative research approach is based in numbers, the researchers approach data so that an analysis can be made based upon these numbers. The general idea is to find relationships and similarities in events given through variables, doing this allows us to create systematic models with the purpose of explaining what has been examined. The tools that provide a gathering of such numerical empirical data are questionnaires, surveys, systematic observations, and other equipment capable of collecting numerical data. According to Clankie (2012), it is appropriate to use a quantitative research approach when one is trying to identify variations of various characters. Another perk of this approach is that it is recognized to be more objective due to the reason that the data is numericized. However, a quantitative approach does not prove itself useful when one is trying to find explanations and causes for the observed scenario. (Clankie, 2012).

#### *Qualitative research approach*

In contrast to quantitative research, qualitative research is of explanatory nature. That denotes that the outcome of the research provides a deeper understanding of the studied event or area, it provides a bigger picture of the matter. The aim of a qualitative research approach is not just to study what is happening, instead, it aims to find understanding of the causes and effects of the event as well (how’s and why’s). Approaching research in a qualitative way provides explanations and thorough descriptions of the examined event. The researchers become the tools used to collect data in this approach. Most often it implies that the researchers are taking

notes of interviews and observations. (Bell & Waters, 2014). The difficulties that occur in a qualitative approach is that it is time consuming and the results are hard to generalize. Moreover, regarding the reason that it is hard to generalize is that such an approach is subjective from the researcher's point of view and depends on the abilities, experiences, and knowledge of the researchers. Furthermore, the research design is in constant development which means the researchers have to be flexible and have to be able to adjust themselves to the discovered data more so than in a quantitative approach. (Clankie, 2012)

In this research, a combination of qualitative and quantitative approaches was used. On the first hand, most of the empirical data were collected through a qualitative interview. The qualitative data helped the researchers in achieving a better understanding for the area under investigation and assisted the researchers in puzzling the big picture. Moreover, the qualitative data helped the researchers in extracting detailed information related to the event under studying which is the transition to cashless banking. While on the other hand, the quantitative empirical data have been collected through a survey. The quantitative data conducted from the survey enabled the researchers to provide numerical data for numerous events and factors. The factors have been first found and identified from the interviews, and later those factors have been quantified using the survey. However, in this research the quantitative data from the survey could not have been extracted without the qualitative data from the interviews, in other words, the qualitative approach assisted the researchers to puzzle the big picture and scratch the surface, while the quantitative data helped the researchers to dig deeper into some particular areas.

## 2.4 Research design

*A research design “is a logical plan for getting from here to there, where here may be defined as the set of questions to be addressed, and there is some set of conclusions about these questions” (Yin R. K., 2018, p. 60)*

The main purpose of the research design is to highlight the logical connection between the evidence conducted from the study and the studied problem (Yin R. K., 2018). Moreover, Yin, argues that the research design is about the logical design of the study, not the logistical design. Thus, the research design shows the logical sequencing that connects the research questions with the empirical data and to the end of the research which is the conclusion.

Since the purpose of this thesis is to investigate if the transition into cashless banking is a move towards sustainable banking. The main research question of this thesis work is to examine if the Swedish banks managed to satisfy all of their stakeholders by the cashless transition. In order to serve the aim of this thesis, a case study at one of the biggest banks in Sweden have been conducted. The reason behind conducting a case study is that a case study would provide a deeper understanding of the empirical findings, and would result in revealing a new seen perspective of the problem under study (Yin R. K., 2018). Moreover, case studies enable the researchers to develop the theoretical model, since case studies provide an in-depth insight over the empirical data which allows the researchers to revise the theoretical model (Dubois & Gadde, 2002).

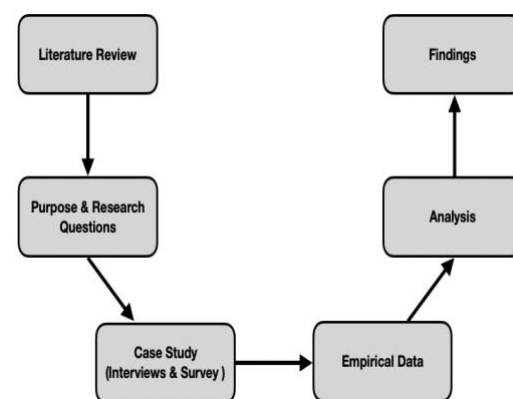


Figure 5: Research design illustration (own creation)

Furthermore, case studies are highly applicable in qualitative researches (Yin R. K., 2018). In this thesis, a combination of both qualitative and quantitative data has been conducted with a majority of qualitative data. The research design in this thesis is shown in figure 5. The bases of this thesis are created from a literature review, the literature review is obtained from scientific literature and previous researches. From the literature review, a concept of the theory was

developed, and the purpose and research questions were defined. After that, in order to fulfill the purpose and to answer the research questions, the concept that has been developed from the literature review was tested empirically in the case bank through interviews and surveys. Later, the data that have been empirically collected from the case bank was analyzed, then finally, the analyzed data have been demonstrated as a final finding of this thesis.

## 2.5 Data collection

*This chapter is describing what different data collection methods were used for this research in order to answer the purpose.*

### 2.5.1 Literature review

*“Secondary or second-hand data is the data produced by a situation of being recorded by someone other than yourself”* (Yin R. K., 2014, p.160). This case studies secondary data was collected through a literature review of published material concerning the topic of the study.

Studying previous literature is an important part of the research, for this research it was used to gather information regarding the topic so that a gap in research could be determined by the researchers and an aim and purpose could be structured. Besides, conducting a thorough review of the literature provides quality and credibility to the research (Bryman & Bell, 2015). For this case study research, the secondary data needed was collected through reviews of academic articles, books, and official reports from parties connected to the research area. The first part of the literature study focused on sustainability in banking in general followed by an investigation of the stakeholder theory. The second part of the literature study consisted of the cashless transition in Sweden in itself with a tunnel approach leading towards cashless banks.

The gathering of literature was carried out through the Jönköping University library and the search engines Primo, Scopus, and Google Scholar. The keywords used in the search were; *cashless banking, sustainable banking, socio-economic sustainability, stakeholder theory*. In addition to this secondary data was also collected from the official bankers' association of Sweden and the central banks of Sweden's websites.

### 2.5.2 Primary data collection

*“Primary or first-hand data is the data produced by a situation without being recorded by someone other than yourself. Colloquially, what you hear with your own ears or see with your own eyes considered as primary data”* (Yin R. K., 2014, p.160) There are a number of different methods to collect data for a case study with none being advantageous of the other on its own. Different collection methods can complement each other and reinforce the reliability of the findings. The primary data collection for this case study was collected through qualitative semi-structured case study interviews and surveys with questionnaires.

#### *Qualitative Interviews*

When it comes to case studies, one of the main methods used for data collection is interviews. Interviews as a method for collection of empirical material are very useful and helpful when it comes to search for explanatory questions as “Why” and “How” in crucial (Yin R. K., 2018). The reason behind the researcher's choice to use interviews lies also behind the advantages that interviews can provide in these specific explanatory questions. Firstly, qualitative interviews provide the interviewer with an opportunity to ask follow-up questions to the interviewee in real-time. This way when the interview provides the researcher with information that previously was not known one can immerse themselves deeper into the topics by following up on the information provided. This scenario provides the interviewer to gain a deeper understanding of the events and the discovered information (Yin R. K., 2018).. Secondly, the response rate through interviews is higher and can be seen as more accurate due to the ability to make digital records and later replay the conversation multiple times for analysis.

The interviews that were conducted for this research were developed according to a semi-structured manner. This implies that the provided question follows the case study protocol all with connections to the purpose in one way or another, nevertheless, the question in a semi-structured interview is to be considered more as “guidance” to not lose track of the topic and allow to have more free-flow (Dalen M., 2008). Moreover, the questions are not in any specific order and they are open-ended which creates room for conversation and follow up questions to receive a deeper understanding of the answers provided by the interviewee (Yin R. K., 2018). Furthermore, the interviews were recorded for the purpose which was mentioned in the previous block. To keep the anonymity during the interviews the names of the informants and the banks were kept anonymous. Moreover, anonymity provides the ability for the informants to be more transparent in their answers as it implies that no consequences will be held against them by their organizations if the information proves to be controversial or sensitive in any way.

Due to COVID19 all of the interviews were conducted through scheduled phone calls. The phone call meetings for the managers and one employee took approximately 1,5h and approximately whereas for the other two employees it took around 1h because (see table 1). The reason for this is that these two employees were not at the bank during the transition itself. However, all interviews were scheduled to take 2 hours so that the interviewees did not feel any time pressure to end the conversation for any other appointments or commitments. The terms and methods of the interview, as well as the purpose of the study, were described to the interviewees at the start of the interview. After providing the informants with an agreement surrounding the anonymity the interview could begin. According to Yip (2018), in semi-structured interviews, it can be easy to misunderstand the informant and therefore decrease the reliability of the information. Therefore, when important information and events were discussed that could be misunderstood, the interviewers made sure to ask the interviewee if the information was received correctly. Furthermore, the phone call was recorded, and the answers were later summarized and sent back to the interviewee for confirmation.

### *Survey*

Surveys are regarded as a type of interview, however, in case studies where qualitative interviews are used it is common to complement the qualitative data with a quantitative data collection method as surveys with questionnaires (Yin R. K., 2018). The survey used consists of 7 structured questions and was distributed to front floor customer service employees in the banks. The purpose of using the survey for this case study was to see whether management's answers were contradicted or supported by quantitative data collected from the front floor employees working in customer service. Besides, surveys are time effective and the data is easily administrated (Yin, 2014). The weakness of a survey questionnaire is that usually, the response rate is rather low, and surveys do not provide any flexibility in the response additionally the answers can be deceitful (Yin, 2014). To increase the response rate the survey was handed out physically in paper format to the employees and collected later on the same or next day.

The survey consisted of 7 questions related to which visitors the bank gets concerning issues related to cash. In total 4 groups could be chosen; Elderly, Immigrant, Disabled/Alcoholic, and Other. These groups were chosen based on the answers from the interviews and findings in the literature review. The answers from the distributed paper survey were digitized using google forms and put into pie charts showing the distribution in answers.

Table 1: Is showing chosen informants for interviews and survey (own creation)

Interviews						
	Manager-A	Manager-B	Manager-C	Employee-A	Employee-B	Employee-C
Role	Branch vice-manager & regional manager for the department of individual customers	Regional manager for the department of individual customer & Premium consultant for private customers	Branch vice manager & regional manager for the department of individual customers	Customer service consultant & Loan consultant	Customer service consultant	Customer service
Years of experience at the case bank	9 years	8 years	10 years	41 years	6 years	5 years
Worked at the transition period	Yes	Yes	Yes	Yes	No	No
Role at the transition period	Premium loan consultant for private customers	Premium consultant for private customers	Premium Invest and saving consultant for private customers	Customer service consultant/ Loan consultant	NA	NA
Still working at the case bank	Yes	Yes	Yes	retired summer 2019	Yes	Yes
Duration of the interview	1.5 H	1.5 H	1.5 H	1.5 H	1 H	1 H
Date of the interview	18/6/20	24/6/20	22/7/20	22/7/20	07/7/20	25/7/20
The Survey						
Number of Participants	Number of branches	Targeted department	Topic	Duration		
24	5	Customer service	Cash related issues with groups on the outskirts of the society	5-10 minutes		

## 2.6 Data analysis

The purpose of data analysis is to make data understandable and meaningful. This is done through interpretation, merging and reducing of data, searches for patterns, and various categorizations by researchers. This provides an opportunity to compare and relate existing and previously known information in theories and concepts with the newly discovered empirical findings, which in turn makes it possible to have a discussion so that one can derive to a conclusion in the studied topic (Bell & Waters, 2014).

Regarding qualitative researches and data analysis, one can find many obstacles and difficulties. The qualitative data can be hard to interpret because of the density and quantity of it. For example, just the interview transcripts or notes can pile up to huge amounts of data which is hard to interpret in itself. For this reason, it was important for the researcher to go through, understand, and summarize the main findings of the interviews that gave value for the research. This way the information is fresh when it is processed and it is easier to avoid human factor mistakes such as memory failure or confusion of context for the findings (Bell & Waters, 2014). The empirical findings were put into an analysis together with the framework which was already prepared for the case. The analysis focused on whether the findings could provide support or contradictions to the framework in the literature study. When important empirical findings were not in the context of the framework, the framework had to be developed so that an analysis of these imperative findings could be made.

The interviews were conducted in Swedish therefore a translation of the interview findings needed to be carried out. We listened through the recordings, took notes and discussed the gathered information regarding the main points of this case study. These main points were translated into English in the findings section. This process was carried out for every interview that was conducted. The essential findings of all interviews are presented in the findings of the research. Tables were created to illustrate the findings from each interview in parallel to each other, this showed whether the gathered information from the informants was in contradiction or concurrence. These findings were put in comparison with the literature review of the research.



Furthermore, doing this allowed to identify similarities and contradictions between empirical data and literature.

The survey was handed out in paper form to the participants and collected on the same or following day. The data collected was summarized through descriptive statistics and visualized in pie charts showing the frequencies of answers. The software used for the analysis and visualization of this data was the Apple program “Numbers”.

## 2.7 Validity and reliability

### *Reliability*

Reliability of research is one of the critical factors that describes how reliable the research is. What this implies is to what ability can the results or outcomes of the study be replicated by conducting an identical study in the same set of conditions. By definition of Bell & Waters (2014), reliability is “*the extent to which a test or procedure produces similar results under constant conditions on all occasions*”.

This research’s empirical data is collected through qualitative interviews, this implies that the interviewees are supplying research with data. Every human being has their own experience, level of knowledge and opinion, this influences the answers that they provide in such circumstances. This affects the reliability of the data in a negative way. To improve the reliability of this research multiple interviews and surveys were distributed to multiple people to see whether there is a big inconsistency in answers or not. Moreover, the empirical data was not extracted from people in the same positions at the bank, the information was extracted from 3 different positions of the organizations, and if the data is not contradicting it adds to the reliability of the findings and results of the research. However, it must be mentioned that qualitative data from interviews cannot be regarded as of high reliability, increasing the number of interviews and survey participant would increase the reliability of such data. (Bell & Waters, 2014). Furthermore, to analyze the survey for quality of the answers, the first question was designed as a test for quality, it meant that the answer of the first question could be contradicted in the remaining questions if that happened the survey was deemed as unreliable and the data from it was not used.

The studied literature in this research can be deemed reliable due to all of the literature being selected from reliable sources recommended by the university, moreover, the amount of references with supporting data makes the data more reliable. Furthermore, the research had data collected from the official central bank of Sweden and the official bankers association of Sweden both of whom can be ruled as reliable sources in this sphere of research when it comes to reports and financial numbers.

### *Validity*

According to Bell & Waters (2014), validity is the measure that shows how well the researcher designs the method, tools, and technique to answer the aim and purpose. It is what measures the accuracy of the research describes whether the area that was supposed to be studied is studied in research. This research is aimed at studying the cashless transition at the case-bank from the perspective of socio-economic sustainability. To achieve higher validity for this purpose, the questions in the qualitative interviews were designed to target this specific area. More validity could have been achieved by conducting more interviews at different banks and at different locations. Analyzing whether findings and understandings of the transition are something generalizable or the scenarios and effects are different in different companies and locations.

### 3 Case study of Sweden

*This chapter provides information related to the patterns of payment in Sweden. This chapter will also describe the case bank where the relevant theories have been tested empirically. In addition, this chapter presents the groups on the outskirts of the Swedish society.*

#### 3.1 Patterns of payment in Sweden

##### 3.1.1 Cash money

In 2007, the usage of cash money in Sweden was at the highest pick, but since that, the usage of cash in Sweden has halved (Riksbanken, 2019b). The reduction of cash usage came as a result of the reduction of the supply and demand for cash from banks, merchants, and consumers (Arvidsson, 2019). According to Riksbanken (2019b), cash is still considered as a legal and accepted payment method everywhere in Sweden, but the agreement that is known as “*freedom of contract*” enables merchants to decide if they will accept cash payment or not.

##### 3.1.2 Point-of-sale (POS) terminal

The adoption of card payments in Sweden has spread on a large scale during the 1990s, during that period, the Swedish retail stores started to adopt payment terminals at the point-of-sale (POS). This adoption came to provide the customers of the retailers with the opportunity of paying using the bank cards at the POS. (Arvidsson, Hedman, & Segendorf, 2016). The statistical data of Riksbanken shown in table 2 shows that the number of payment terminals has increased by almost 56% between 2005-2018. Moreover, the value of POS transactions has grown by almost 60% in the year 2018 comparing to 2005 (Riksbanken, 2019c).

*Table 2: the increasement of (POS) terminals in Sweden (Riksbanken, 2019c).*

Year	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
<b>Payment terminals</b>														
Number of payment terminals	176 637	184 590	187 330	194 776	217 760	203 117	209 631	198 388	195 709	196 985	183 548	257 874	219 158	275 411
Number of transactions (Million)	801	1 000	1 154	1 358	1 490	1 646	1 799	2 048	2 239	2 370	2 501	2 807	3 004	3 009
Transaction value (Billion SEK)	312	423	463	488	496	557	598	654	666	717	747	997	881	778

##### 3.1.3 Bankcard

There are numerous technological solutions and payment services that function in a similar way of cash. These solutions substitute cash in payment (Arvidsson, 2019). Other technical solutions grant access to cash money. Bankcards is a solution that substitutes cash in POS payment, and at the same time, bankcards grant access to cash through ATMs.

##### 3.1.4 ATMs

The purpose of ATM machines is to grant access for households to cash money sources (Riksbanken, 2019c). ATMs were already existing in Sweden before the cashless transition wave of banks. As shown in Table 3 below, the number of ATMs in Sweden at the year 2011 had a pick of 3566 ATMs, then after this year, the number of ATMs machines became to decrease rapidly until the total numbers of ATMs in Sweden became 2672 at the year 2018. In other words, the distribution of ATMs over the Swedish map has reduced by almost 25% during a period of 7 years between 2011-2018. Furthermore, Table 3 demonstrates that at year 2013-which was the year when the major banks in Sweden started to eliminate cash services- the value of ATMs' transactions was 219 Billion SEK when at the year 2018, the value of ATMs' transactions decreased almost 50% and became 108 billion SEK.

Table 3: The reduction of the number of ATMs, and ATMs' withdrawals in Sweden (Riksbanken , 2019c).

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
<b>ATMs</b>														
Number of ATMs	2 814	2 816	3 085	3 236	3 319	3 351	3 566	3 416	3 237	3 231	3 285	2 850	2 655	2 672
Number of transactions (million )	321	313	320	295	269	241	225	214	209	214	154	139	121	91
Transaction value ( Billions SEK)	289	270	240	239	232	225	209	193	219	213	153	110	130	108

### 3.1.5 Swish

Swish is an electronic payment service that runs through a mobile phone application. Swish service was launched in Sweden in 2012 as a person-to-person payment service. Later in 2014 Swish service became a payment method for companies and retailers, and today, Swish is considered as an alternative of both cash and cards payment (Swish, 2019). Swish service enables real-time transactions within 1-2 seconds, it's similar to cash from the concept that the transaction takes a couple of seconds (Arvidsson, 2019). In 2018, 6% of the total electronic payments in Sweden were via Swish. (Riksbanken , 2019d). And as seen in figure 6, the usage of Swish increased shapely until the users of the service became around 7.4 million people in 2019 (Swish, 2019).

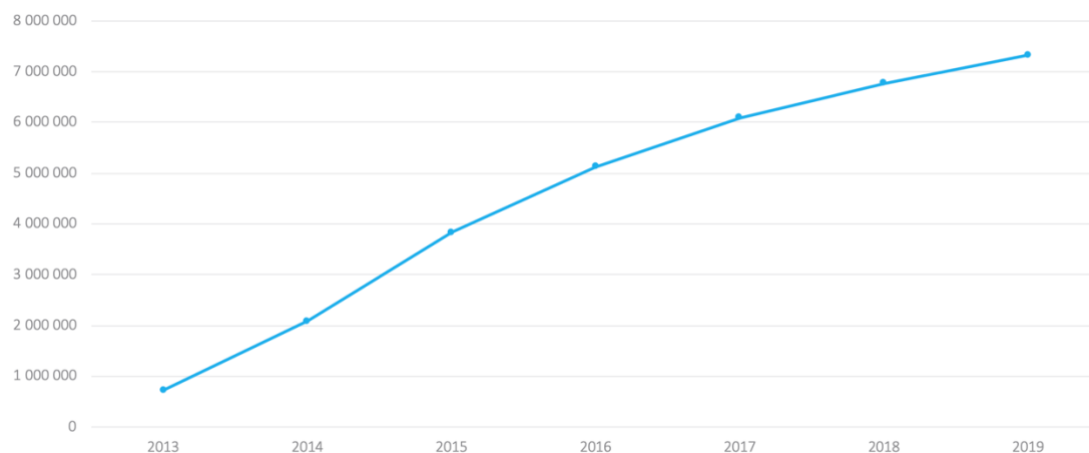


Figure 6: The increasement of Swish users between (2013-2019) (Swish, 2019)

## 3.2 The case bank

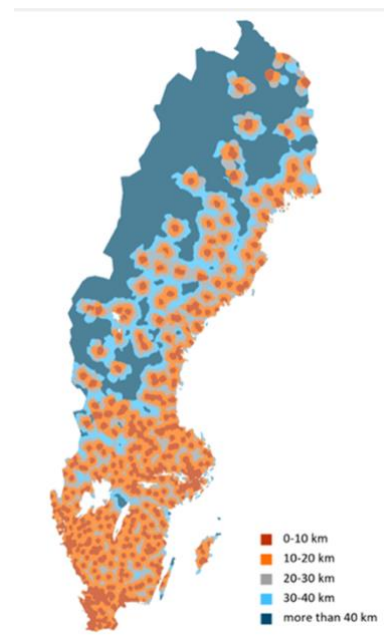
This research we conducted a case study at one of the largest banks in Sweden. The case bank has more than 300 bank offices in Sweden, and over 6000 employees. Moreover, the case bank is one of the oldest banks in Sweden, in other words, the chosen bank has been into the banking business for a long period of time and has had physical cash money before. And today, like the other banks in Sweden, the case bank in this thesis is a cashless bank. Furthermore, one of the reasons behind choosing this bank that it is was one of the first banks in Sweden that started to adopt the cashless transition in 2013. Therefore, the authors of this study believe that the chosen bank for the case study will serve the main aim of this research, where the authors can extract data empirically from the case bank, and employee the empirical data to fulfill the aim of this research. However, in this research, the identity of the case bank will remain anonymous due to the research ethics. Moreover, it was the will of the interviewed managers to not reveal the name of the case bank due to the sensitive information, not even revealing the region where the study has been conducted. The reason behind hiding the region of the study is that the case bank is the dominant bank in that region and mentioning the region might reveal the identity of the case bank. However, during this study, anonymity helped in providing higher transparency when the research is digging into sensitive information.

## 3.3 Groups on outskirts of the society

According to Arvidsson, (2019), The tendency toward reducing cash in Sweden have started in 2007 and continuing. Most of the Swedish population seems to be capable to deal with the cashless transition and adapt the other alternatives of payment, but still, there are some groups in the Swedish society facing real problems due to the development towards a cashless Sweden. These groups are still struggling to get access to alternative digital payment channels or still favoring cash money. The major negatively impacted groups are those groups that live on the outskirts of society (Arvidsson, 2019). The groups that live on the outskirts of society are mainly concerned with elderly people, homeless people or people with physical/cognitive disabilities, new arrivals, and immigrants (Riksbanken, 2019b). Arvidsson (2019), argued that concerning elderly people, they have been using cash money for their entire life, cash usage is a habit for them in their age, and it is not an easy task to change that habit and adapt the elderly of the society with digital money instead of cash. On the other hand, other groups such as tech nerds and the younger generations are discarding cash money, on the contrary, these groups are perfectly adapted with digital payment especially mobile payments (Arvidsson, 2019).

Andersson & Essunger (2018), argued that even though the reduction of cash in Sweden is seen in general as a positive phenomenon, three out of ten inhabitants in Sweden have a negative attitude concerning the cash reduction in the Swedish society.

Riksbanken (2019b), emphasizes that the groups outskirts of the society such as elderly people, people with certain disabilities, and new arrivals are having an essential need of receiving personal help to manage the difficulties of alternative payment methods than cash. The difficulties of those groups to receive personal help is increasing when the more points that provide personal services such as bank branches and payment service mediators are closing their offices. Moreover, in some parts in Sweden, the geographical distances to the physical bank branches or the other payment mediations are considered as a struggle to the individuals with poor access to the fundamental payment services, and as shown in figure 7 the northern part of Sweden has a scarcity of bank branches and payment mediators comparing to the southern part where the density of payment points is high (Riksbanken, 2019b). Therefore, when the cash circulation is rapidly decreased by the Swedish banks in Swedish society, the groups outskirts of the society is left underprivilege (Andersson & Essunger, 2018).



*Figure 7: Distances to bank branches or payment mediator in Sweden (Riksbanken, 2019b)*

The geographic size of Sweden is around 447,000 square kilometers, and Sweden as a country is divided into 21 counties (Länsstyrelserna, 2020). According to Arvidsson (2019), in the year 2017, 11 of the 21 counties have reported that access to the basic payment services for elderly people is not accepted, and 8 of the counties reported that the situation getting worse compared to the year 2016. Furthermore, 13 counties of the 21 reported that access to the basic payment services does not meet the minimum requirements of people with disabilities. Moreover, immigrants and small firms are not an exception, where 15 of the 21 counties reported that small firms are lacking acceptable access to the basic payment services. Small and micro firms in the field of tourism are facing sometimes problems with foreign bank cards since the payment terminals do not accept some forging cards, moreover, in some rural areas, the wireless connection is not always reliable, which might sometimes affect the process of card payments services (Riksbanken, 2019b). Thus, small firms such as street vendors, small kiosk, and small retailers are still preferring cash money and not favoring the digital development of payment methods, especially those small firms in rural areas (Arvidsson, Building a Cashless Society The Swedish Route to the Future of Cash Payments, 2019). And when the small firms have cash, they might face difficulties in depositing their daily earnings (Riksbanken, 2019b).

Allot of voices in Sweden call to stop the reduction of cash usage since there are some groups of the society that got negatively impacted by the rapid decrease of cash (Arvidsson, 2019). Sweden is well known for supporting weak citizens, groups in the outskirts of the society should

get accepted access for depositing and withdrawing cash. And according to Arvidsson (2019), this is the responsibility of the state and the other players in the society such as bank branches. Thus, according to Riksbanken (2019b), the Swedish government proposed that Swedish and foreign banks that operate in Sweden with deposits over 70 billion SEK should have the obligation of ensuring functional and accessible cash services over the Swedish map. The obligation involves providing locations for cash withdrawal and cash depositing. The Swedish parliament approved on the government proposal, and the six largest banks in Sweden will be obliged from the 1<sup>st</sup> of January 2021 to ensure a certain minimum level of access to cash services for both consumers and companies throughout Sweden (Riksbanken, 2020)

## 4 Theoretical framework

*The chapter presents the theoretical foundation for the study. It continues theories and literature studies of previous researches, books, and scientific articles.*

### 4.1 Socio-economic sustainable banking

#### 4.1.1 Sustainable business firms

The consumption of the global natural resources is rapidly increasing since the year 1970, and in 2019, the earth consumption was calculated of what is equivalent to 1,75 planets (Earth overshoot day, 2019). This means that in the year 2019 humanity consumed 1,75 times of what the planet earth can produce natural resources during that year. And despite all the voices that are calling to put rigid emphasis on the unsustainable activities of business firms, the global consumption of resources continues growing (Yip & Bocken, 2018). The importance of social and environmental issues related to societies and firms' practices has rapidly grown during the past 50 years (Lange, Busch, & Delgado-Ceballos, 2012). Especially after the term of "sustainability" entered the business field, the more organizations realized the importance of sustainability as a need for their future existence, therefore, more firms started to extend their goals beyond the goals of making a profit by focusing on the other pillars of sustainability (Lange, Busch, & Delgado-Ceballos, 2012).

Freeman et al. (2010), argues that sustainability for business firms is about considering the impact brought by the organization on all stakeholders of the company internal as well as external. Thus, sustainability in business firms can be defined as "*an approach to business that considers economic, environmental and social issues in balanced, holistic, and long-term ways that benefit current and future generations of concerned stakeholder*" (Lange, Busch, & Delgado-Ceballos, 2012). In other words, the sustainability of an organization is about looking after the Triple Bottom Line (TBL) or the three pillars of sustainability which are; Profit, Planet, People (Yip & Bocken, 2018).

According to Yip & Bocken (2018), the unsustainable practices of business firms cannot be limited to those firms in production industries only, while in fact, unsustainable practices are also concerned with firms in service industries as well. And banking firms are not the exception of business firms that are seeking sustainability.

#### 4.1.2 Sustainable banking

The term of Sustainable banking can be defined as "*delivering financial products and services, which are developed to meet the needs of people and safeguard the environment while generating profit*" (Yip & Bocken, 2018). Furthermore, banks as service firms play an important role in providing a steady and sustainable economy for societies, since banks are considered to be a key player in allocating the financial resources in societies to satisfy the demand of the present and future (Alexander, 2014). According to Yip & Bocken (2018), the direct impact of banking operations on the environment is considered to be very low but the indirect impact might be high. Despite that, adapting environmental sustainability into the banking operations would provide opportunities for the bank itself, for example, distributing e-statements for the bank's customers can save up to 5% of the total operational costs by reducing costs such as paper, postage, and labor (Yip & Bocken, 2018).

More voices from the Non-Governmental Organisations (NGOs) are raising to put emphasis on the importance of sustainability in the financial and banking field. According to Yip & Bocken (2018), a global network of NGOs called BankTrak have in 2003 launched a declaration that states: "*Financial Institutions must expand their missions from ones that prioritize profit maximization to a vision of social and environmental sustainability. A commitment to sustainability would require financial institutions to fully integrate the consideration of ecological limits, social equity, and economic justice into corporate strategies and core business areas (including credit, investing, underwriting, advising), to put sustainability*

*objective on an equal footing to maximization of shareholder value and client satisfaction, and to actively strive to finance transactions that promote sustainability ”*

Yip & Bocken (2018), argue that the financial crises of 2008 was a crisis of unsustainability, At that time, banks were more biased towards gaining profitable benefits for owners, shareholders, and managers in the senior levels, while the benefits of other stakeholders were less on focus. Thus, after the crisis, banks realized the importance of adopting sustainability into their business model. The economic crises pulled the trigger for banks to reformulate the sustainable business models that can assess them in cutting wastes, creating higher stakeholders' satisfaction, and provide competitive advantages (Yip & Bocken, 2018).

## 4.2 Stakeholders theory

Freeman's stakeholder theory is a theory that suggests that firms and organizations are supposed to create value for all stakeholders of the organization. It is considered as a theory of business management and business ethics. The Freeman Stakeholder Theory therefore also approaches an organization's way of managing values and morals (Freeman et al., (2010).

Freeman (2001) states that organizations should create value for all of its stakeholders, and this will in return create profit and longevity for the organization itself. This makes the definition of stakeholders in the theory an important factor. Freeman (2001) defines the stakeholders to be “those groups of individuals who can affect or be affected” in the actions taken by the organization in their attempt to create value. This implies that stakeholders are both internal and external, internal stakeholders are in that case such as owners/shareholders, managers, employees and on the external part, it can be customers, partners, suppliers, competitors, external shareholders, and all other individuals in the society affected by the organization whereas directly or indirectly. Every type of organization has different stakeholders as organizations create value through different means and in different spheres. Meaning that the groups of people affected are also different from one company to another (Freeman, Harrison, Wicks, Parmar, & Colle, 2010). Figure 8 below illustrates an example of the different stockholders of a company.

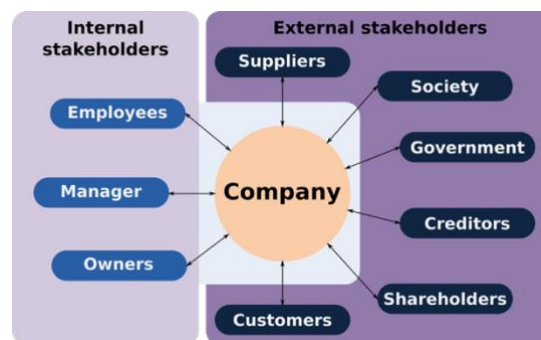


Figure 8: An example of how the different stakeholders can look in a company

The theory connects the ethics and profit objectives which removes confrontation of their interests and competing concerns. This way these two are not in a confrontation of profits vs ethics or ethics vs profits, rather the focus is on generating mutual benefits between the two. Jensen (2002), argues this part of the theory emphasizing that trade-offs will always exist. Satisfying all stakeholders equally is an impossible task as there will always be contradicting interests for stakeholders. Freeman (2010) does not deny this and highlights that the aim is to consider all stakeholders' interests when it comes to the organization's activities that might affect them. To what Venkataraman (2001) compliments that in the short term the trade-offs are inevitable however, businesses must put together “deals” where over a longer period of time all stakeholders gain.

Furthermore, an essential part of the theory is that there must be a good relationship between the organization and the stakeholders, thus generating mutual benefits in profits and ethics is one part of accomplishing that. This part makes communication between firms and their stakeholders a pivotal element. Accordingly (Peltokorpi, Alho, Kujala, Aitamurto, & Parvinen, 2008) communication allows stakeholders to understand the firm's decisions and actions so that trust can be maintained especially in a period of change or transition. Thus the authors (2008) conclude that when engaging in organizational changes a crucial step is the providence of communication and teaching to various stakeholders so that they can adapt to the changes implemented. When it comes to banks, customers are vital stakeholders as in any other business. However, the relationship with the customers is of higher importance than in a number of other spheres because of the fierce competition (Yip & Bocken, 2018). In light of the above Yip & Bocken (2018) suggest that the value of the stakeholder theory can be of high significance if applied in strategic management in the banking sector.

## 4.3 Theory related to the cashless transition

### 4.3.1 Transition to cashless payments and cashless banks

An essential part contributing to the function of our society has been payments between buyers and sellers in exchanges between goods and services for money (Niklas , Jonas , & Björn , 2016). For a long time, money has been something physical in these exchanges such as coins or banknotes of which the value has been assured by for example the central banks or states (Bernardo & Leonidas, 2016). Over recent decades an ongoing worldwide transition can be seen to digital payment systems, a transition in which the Nordic countries are the leading actors (Niklas , Jonas , & Björn , 2016).

The definition of digital payments itself is a way of payment that is carried out through a digital form. This indicates that neither the payer nor the receiver is in contact with any physical money throughout the whole transaction, no currency notes or "cash" is implicated in action. The transaction is carried out online and is an instant way to carry out a payment (Martina & Sahayaselvi, 2017). There are many means to carry out these sorts of digital payments, according to Swedish central bank "Sveriges Riksbank" Riksbanken (2019e) the Swedish central bank the most common ways in Sweden are card payments, electronic giro payments and Swish payments (*the latter ones reliant on bank id/mobile bank id*). As mentioned above the use of these digital payments has been in a rapid increase during the past decades, thus, decreasing the use of cash money in society. The data on the official site of Riksbanken illuminates this transition of payment methods in several ways. Between the years 2008 and 2018 yearly card payments per citizen have increased from 176 payments to 349 payments. Furthermore, as shown in figure 9, between 2012 and 2018 it is also illustrated how yearly cash withdrawals from ATM's per citizen have gone from 18504 SEK to 10391 SEK and the mobile payment application SWISH launched in 2012 went from 2 SEK to 20524 SEK in transaction per person (Riksbanken , 2019e).



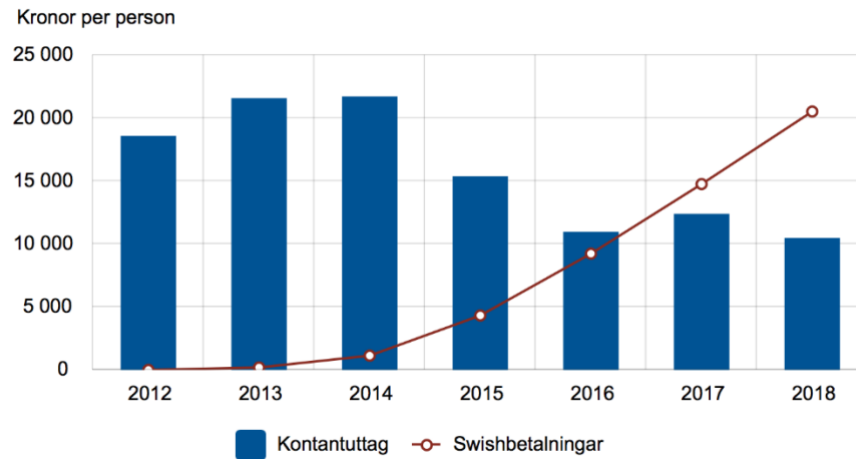


Figure 9: The amount of SEK/person cash withdrawals and the amount in Swish transaction per person between 2012-2018 (Riksbanken, 2019a)

This development has sparked a debate regarding a cashless society however, this development has not unfolded without influence from the banks. In a number of decisions from 2013 taken by Sweden's biggest banks to remove all cash services in their offices and thus beginning to operate their business in a cashless manner meaning, no cash is stored in office and transactions, deposits or withdrawals of cash are not permitted over the counter in the offices. The motivation behind this transition by the banks is both from the economic perspective as well as from a security point of view, such as lower operational cost and removing the possibility of cash robbery in the banks or during cash transportation (The Economist, 2016). According to Arvidsson (2019), many organizations in Sweden in merchant industries, public transportation and most importantly banking unions have a negative view on cash money due to the number of robberies in the 2000s, such as the extensively publicized helicopter bank robbery which harmed the banking sector and its employees.

The transition to cashless banks created a change in the bank operations but also in the physical setting, in this case, the number of bank offices. According to statistics, at the end of 2012 before the transition to cashless banks in Sweden, there were a total of 1839 bank offices whereas the most up to date report at the end of 2019 the number of offices was 1265 (Bankföreningen, 2020). This constitutes a decrease of approximately 32% of all bank offices in Sweden regardless of the branch. The statistics regarding employment within the banking sector are different in this matter, the number of people employed in banks at the end of 2012 was 39284 whereas at the end of 2019 the number was 40989, which is an increase of employment within the banking sector of approximately 4.3%. (Bankföreningen, 2020).

However, DiVanna (2004), argues that when societies shifting towards a cashless society, three significant things should be considered to adapt the consumers with the shifting towards cashless. First, the consumers must be educated about how a cashless system can create value in their day to day life. Second, realizable technological infrastructure must be existed to make the shifting easier and fill the gaps that are left from eliminating the cash. Third, the technology must be common accessible and convenient for the consumers (DiVanna, 2004).

#### 4.3.2 The strengths and weaknesses of a cashless society

Banks are playing a vital role in a transition to cashless society however, the impacts of this transition can be seen both as positives and negatives depending on which specter one lays focus on. Society consists of people and today it is almost inevitable that a citizen is not a member of the bank. This makes the people in the society customers of banks and their stakeholders, which makes it important to bring to light both positive and negative impacts inflicted on the society as well as the banks themselves.

*Related to crime*

The idea of a cashless society introduces the scenario where people do not carry any physical money with them (cash) or use it for instore payments and so forth. This means that cash related robberies are slowly fading away with the cash itself. According to Riksbanken (2019a), during the last decade between 2009 and 2018 banks, stores and taxi robberies have decreased rapidly due to the lesser use of cash. Also, the higher number of digital payments increases the transparency in transactions overall in the society, this makes it easier to detect criminal activities such as money laundry, economic crimes, and funding of illegal organizations, according to Ogbodo & Mieseigha (2013). Nevertheless, at the same time, financial fraud and digital thefts of money from private individuals have almost quadrupled in the same amount of time (Riksbanken, 2019a). The biggest part of these crimes comes from thieves getting access to other people's card numbers and their CCV codes as well as bank account details, these crimes are called computer frauds and thefts through the internet, (Riksbanken, 2019a). According to Arney et al. (2014), the biggest difference in these crimes which is of high importance is that the personal security increases greatly with cashless payments systems, even though money can still be stolen the chances of getting hurt in physical cash robbery are of exceedingly higher probability than in a computer fraud or internet theft. In Sweden, this kind of new internet theft and fraud have struck two groups of society more than others according to the Swedish police (Polisen, 2020). The elderly and the disabled people have become the major victims in these crimes where they are tricked to either give out their personal information regarding their bank accounts, cards, or being lured to use bank id. In the period between 2019 and 2020 the increase in these sorts of crimes towards the above mentioned two groups has been 45% (Polisen, 2020).

#### *Related to costs*

One of the reasons that the banks are steering the world towards a cashless society is that operational cost is much lower than when dealing with cash (DiVanna, 2004). The same goes for retailers and other businesses in our society, it has become more profitable to work with digital payment systems than with cash (Arvidsson, 2019). A study made as early as in 2009 showed that a cost per payment by card at that time accumulated totally to 5 SEK/payment whereas a payment with cash would accumulate a cost of 8 SEK/payment. Furthermore, there is evidence that suggests that costs for digital payments have decreased even more in Sweden since the introduction of Swish and cost for cash purchases has grown due to the decreasing use of it (Riksbanken, 2019)

#### *Cashless transactions and economic growth*

in a study conducted by Slozko and Pelo (2015), the researchers found a positive correlation between an increase in GDP growth with cashless payments. Additionally, it was found that the economic development was accelerated through cashless payments in paths such as increased purchases and consumption due to the convenience of cashless payments systems. Other factors that were found to increase the GDP through cashless transactions were the possibility of fast and direct transactions globally and quick & swift access to global financial markets. (Slozko & Pelo, 2015). Moreover, an increase of 983 billion dollars in GDP of 56 countries could be seen due to the usage of card payments according to Zandi et.al. (2013).

## 4.4 Conceptual framework

*“the conceptual framework is the foundation on which the entire research project is based on”* (Williamson, 2002, p. 58)

The concept shown in figure 10 has been developed from the literature review above. The term of Sustainable banking is defined as “delivering financial products and services, which are developed to meet the needs of people and safeguard the environment while generating profit” (Yip & Bocken, 2018). While Freeman et al. (2010), argues that sustainability for business firms is about considering the impact brought by the organization on all stakeholders of the company internal as well as external. Moreover, Freeman's theory added that every type of organization has different stakeholders as organizations create value through different means

and in different spheres meaning that the groups of people affected are also different from one company to another. (Freeman, Harrison, Wicks, Parmar, & Colle, 2010).

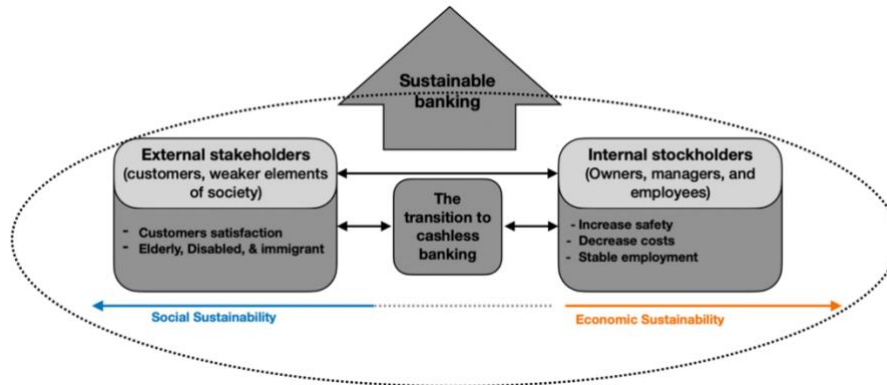


Figure 10: Illustrate the concept that has been derived from the literature review

However, in this study, and at the case company, the term stakeholders are divided into two sub-categories. On the first hand, internal stakeholders represent owners/shareholders stockholders, managers, and employees. This category of stakeholders often seeks to obtain economic value from the bank. The owners/shareholders, stockholders, and a part of the senior managers are seeking profitable values, while the other managers and employees seek the stability of employment which would result in a stable economy for them. On the other hand, the category of external stakeholders represents customers in general, while customers are expecting to receive financial services and products that meet with their needs and create value for them.

Thus, from a socio-economic perspective which excludes the environmental pillars of sustainability, and by reflecting the definition of Sustainable Banking on the stakeholder theory of Freeman. It can be said that socio-economic sustainable banking is about creating values for internal and extrarenal stakeholders, where economic values are delivered for the internal stakeholders, and financial products and services that meet the customers' needs are delivered for the external stakeholders. Not to mention that the value creation needs to assure the continuity in the future and must consider the impact brought on the stakeholders concerned with bank practices in the long term.

## 5 Empirical data

*The chapter provides an overview of the empirical domain which forms the basis of this study. The empirical data are structured according to the empirical methods that have been used. First, the results from the interviews will be demonstrated, and later, the results of the survey will be visualized and described in the text.*

### 5.1 Results from the interviews

#### 5.1.1 Concerning the transition period

All the interviewees that have worked for the case bank before the transition to cashless approved that the case bank changed to cashless banking in the year 2013. Two of the managers and the Employee-A believe that the vision of the top management from the transition to cashless banking was to decrease the costs of dealing with cash money, while the Manager-A thinks the vision of the top management was to achieve higher security.

*“as any other company in the world, we are seeking to decrease costs that would help us in providing better services ...also I think everybody knew that we are moving towards a digitalized world and the bank had to also evolve its operations... in my opinion, it was one of the best decisions of the top management” (Manager-C)*

*“I did not sit with the top management at that time, but I think the top management choose to stop dealing with cash to get higher security ... dealing with cash requires allot of security procedures” (Manager-A)*

All the interviewees see that the vision of the top management is accomplished, and regardless of the interviewees' opinion concerning the vision behind the cashless transition, they all agree that the cashless transition led to reduction in the operational costs, and have also led to increase the security levels since the cash is eliminated.

*“absolutely, it was a fruitful change from my perspective... the operational costs of today for sure are not the same as what the bank had before ... I’m pretty sure that the operational costs have been cut down ... this allowed us to invest in the development of our other services.” (Manager-B)*

*“I totally agree that the change towards cashless helped on reduction the operational costs of the bank” (Manager-A)*

Table 4: The results concerned with the transition period

	Manager-A	Manager-B	Manager-C	Employee-A
<b>Year of transition (2013)</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>
<b>Cost reduction as a vision for the cashless transition</b>		<b>X</b>	<b>X</b>	<b>X</b>
<b>Higher security as a vision for the cashless transitions</b>	<b>X</b>			
<b>Fruitful results</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>
<b>Cost reduction as an impact of the cashless transition</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>
<b>Higher security as an impact of the cashless transition</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>

### 5.1.2 Concerning the reduction in costs

All the interviewees who witnessed the transition era confirmed that the number of branches has been decreased rapidly with the transition to cashless banking. Moreover, allot of branches have decreased their opening hours for the drop-in customer service. And on this, all the interviewees agree that the reduction of the number of branches and the reduction of the opening hours are two direct impacts of the cash elimination in the case bank.

*“Some branches have disappeared directly at the transition period, especially those small branches in the small cities... some small branches have reopened their doors as cashless branches, they had to open once or twice a week, but later they closed down total ... yes, it’s true that we open for shorter periods of time after that transition, each bank branch has its own opening hours.. but the majority open drop-in from 10:00 to 13:00 every working day, and of course we have some branches that open longer until 15:00, or until 18:00 o’clock”* (Manager-B)

*“in our region, I think almost 6-7 branches have closed down after our bank moved to a cashless bank. Mainly, the small branches in the small cities are the ones who closed... concerning our opening hours after the change, it has changed allot, and now we open the customer service department for fewer hours comparing with the old days”* (Manager-A)

*“allot of branches went out of service that time ... at least 5 branches closed in this region due to the cashless transition... we used to have our opening hours from 8:00 to 18:00 every working day, but now we open from 10:00 to 13:00 every working day, except Thursdays the bank open longer until 18:00 o’clock”* (Employee-A)

Concerning the cash related costs, all the interviewees that did work before and after the transition period emphasize that the transition to cashless banking has a direct impact on cost reduction, especially the operational costs related to the security and transportation of cash.

*“It is hard to say if all cost-related goals were achieved in line with the cashless transition, but the robbery risk became zero, it got safer. Security van robbery risks got less, as we have less cash being transported in the world and this must have affected the costs for the bank. Probably, a lot of smaller costs also went down, as the people that went to the bank to withdraw or deposit cash disappeared some of these smaller costs disappeared with them...the no longer necessary branches getting closed also lowered some big costs for organizational operations”* (Manager-A)

*“we got less safety procedures after the cash was eliminated ... but of course, we are still a bank and have high standards for safety, but the safety procedures became fewer after we stopped dealing with cash... I think the process of transporting cash was one of the most costly areas...”* (Manager-B)

*“One of the big costs that the bank had before was the cost of transporting the money and the cost of actually providing safe transportation both for the money and the people that did these transportations. When we eliminated cash from the equation we achieved something big.....yes of course there are cost for managing security for online channels and making sure we do not get penetrated by a hacker attack and making sure of keeping our servers safe and things like that, but you see all the costs related to this already existed long time before we went cashless”* (Manager-C)

*“in our branch, we used to have eight cash desks for cash withdrawals and deposing ... we used to have three protected safe rooms -Safes- ... while after our branch stopped dealing with cash, we got only four nun-cash desks ... and the safe rooms are not used anymore for saving cash money”* (Employee-A)

Moreover, Employee-A thinks that dealing with cash money had wasted many of the employees’ time.

*“At that time, we used to have eight cash desks ... and at the end of each day we used to make the balance for each cash desk... can you imagine the required time needed to make the balance report for eight cash desks every day, and imagine when it's the closing time and you discover that your cash desk has a difference and not balanced... it was the biggest nightmare” (Employee-A).*

Table 5: shows the results concerned with the reduction of costs

	Manager-A	Manager-B	Manager-C	Employee-A
Reduction in number of branches	X	X	X	X
Reduction of cash related costs	X	X	X	X
Decreasing opening hours for the bank branches	X	X	X	X

### 5.1.3 Concerning the impact on the employees

Concerning the impacts on the employees of the transition to cashless offices all of the manager interviewees that were working at that time felt that overall the workload had decreased since the transition and this was contradicted by Employee-A. Managers main opinion on this matter was that the opening hours were decreased this allowed the workers to work in a calmer pace and relieve them of some of the stress factors a full office can bring.

*“Yes, I think we had a less stressful environment because we got less visitors but the visits we started to get took longer time and were a bit harder to deal with than before...our duties as employees had increased, for example, I worked my entire life as a customer service consultant, but later when the cash was removed I had to come to the area of loan consulting and work as a loan consultant in parallel to the duty that I had before...overall, I think we had much more work to do which wasn't really in our tasks” (Employee-A)*

Also, all of the interviewees except for Manager-A believed that there was a rejection period from the employees.

*“I could sense that a number of employees did not like this change especially the older generation of workers... some of the old generation employees have been mainly working with cash, papers, and pen their entire life...” - (Manager-B)*

*“Any change related activities will face a rejection one way or another, this transition was no exception and I am not surprised by it.” (Manager-C)*

*“I know I was against the change and we discussed it a lot in the office about it, some people were afraid to get fired, some did not know if we would be able to deal with it...” (Employee A)*

*“We were afraid that we would have it (rejection from employees) and that our employees would somehow show it in acts but in our office nothing like that happened. It seemed as if everybody accepted the change and tried to do their best and help with the transition.” (Manager-A)*

Only Manager-B acknowledged that some of the employees were let go because of the change. None of the other interviewees that experienced the change first-hand knew of anybody who got fired due to the cashless transition. Instead, it was found that as many regular tasks of the employees they were given different tasks or moved to other offices.

*“We knew we had to close a number of offices due to the decrease in visits and customer pressure, but the employees from the shutdown branches were redistributed to bigger branches...we gathered the competences from the branches that closed and moved those competencies to the bigger branches that kept opened ... I don't think the total number of employees in our bank has decreased” (Manager-A)*

*“No, I don’t think so, I was not in management at that time but don’t recall them fire anybody some left but it was of their own reason or they got new jobs .... I would say that no one was left out of the game... the employees that have been working for the branches that closed got positions at the branches that kept open... after the transition we needed human forces in new areas “(Manager-C)*

*“I remember that one of the highly competent colleagues had been reassigned to work partly in two different branches in this region... that colleague was excluded from our home branch which was kept open ... he complained about the decision..... in the end he chose to resign... I think the total number of employees has decreased especially at the front-line department - customer service-... I can’t say if the total number of employees in the bank as an organization has decreased or increased because of going cashless.”(Manager-B)*

*“Even though we were thinking about it at first and as I said before, some people were afraid of losing their jobs nothing like that happened at my workplace that I know of, on the contrary, we saw even new faces which is always fun”. (Employee-A)*

Table 6: shows the results concerned with the impact on employees

	Manager-A	Manager-B	Manager-C	Employee-A
Rejection from employees		X	X	X
Workload Decreased	X	X	X	
Workload Increased				X
Firings of Employees		X		

#### 5.1.4 Concerning the impact on the customers

All the interviewed managers and employees confirmed that customers are not satisfied due to the elimination of cash from the bank. And until the date of the interviews, customers are complaining about the elimination of cash. Moreover, it could arise in situations where customers threaten to change the bank as a reaction of their dissatisfaction from the cashless system. Furthermore, all the interviewees said that the unsatisfied customers often say that the bank looks more as “mobile phone shop “rather than a bank.

*“Because we were one of the first banks moved to cashless, we were prepared for receiving dissatisfied customers... small business owners changing banks... mostly people complaining that how could a bank be cashless .... We spent a lot of time on finding best ways to teach our customers to adapt to this transition most were able to do it but some decided to leave for banks that did handle cash.....Nowadays, we have much less complaints and many customers have returned since in our region all the banks are not providing cash services anymore” (Manager-A)*

*“Yes of course we had many customers that were dissatisfied with us... After we removed cash, we had to teach people how to use internet banking more and sometimes these people did not want to use it at all... Some customers got angry at us and many did not want to accept the fact that our bank stopped dealing with cash ... therefore we had to explain all of this to them and then teach them how to do things themselves through ATMs and depositing machines ...and when we could not help them because they came with cash they get angry and dissatisfied... Until I retired over a year ago, we had frequent complaints about not working with cash” (Employee-A)*

*“I am not sure how many complaints we had before this and what they mostly were about... Today the complaints that I know we get are mostly about that we can’t help customers with cash, so our employees educate them in how to do all of these things online themselves, but it is not easy for everyone...” (Manager-B)*

*“customers might express their anger and dissatisfaction in hilarious ways... such as -I have more cash in my back pocket than the cash you have in your deep safe- ... unfortunately, not all the customers are hilarious, often we hear harsh comments from the customers... and it*



*could lead sometimes that the customer really change the bank to another cashless bank just to demonstrate the dissatisfaction” (Employee B)*

*“we do have a number of dissatisfied customers... most of the complains comes from elderly people... when redirecting them to using ATMs and depositing machines many get dissatisfied...” (Employee-C)*

Table 7: shows the results concerned with the impact on the customers

	Manager-A	Manager-B	Manager-C	Employee-a	Employee-B	Employee-C
Dissatisfied customers	X	X	X	X	X	X
Customers changing bank	X	X	X	X	X	X
Telephone shop	X	X	X	X	X	X

### 5.1.5 Concerning the negative impact on society

Concerning the negative impact of cash elimination on the surrounded society. All the interviewees agree that elderly people, immigrants, and disabled people with special needs are directly impacted by the transition. Moreover, all the interviewees confirmed that elderly people come often to the case bank during the drop-in opening hours just to get help from the bank employees in making a cash withdrawal from the ATM beside the bank door.

*“it’s very often that elderly people come and wait in the queue for a long time just to get help from us in withdrawing cash money from the ATM “(Employee-B)*

*“we have temporary bank cards that we call Emergency card... this card can be used only for one-time withdrawal from ATM machines... we issue these temporary cards for people who have an urgent need for money and have lost their cards or have gotten their cards blocked ... we often issue the temporary cards for elderly people or people with special needs because they often insert the wrong pin code so they get their bank cards blocked “ (Employee-C)*

*“it can happen sometimes that the customer forgot the pin code of his bank card... but sometimes when we check the records of the issued cards for some customers, we see that the customers have asked for 2-3 or more new cards in couple of weeks, this often happen with elderly people “ (Employee-A)*

Furthermore, all the interviewees have agreed that immigrants and new arrivals people are having problems to adapt to the cashless system.

*“ it happened to me that once a guy from outside of Sweden came with a big amount of euro cash money and wanted to have an account in our bank... at the beginning he thought that we rejected the cash because he had euro cash... then he understood that we are cashless bank “(Employee-B)*

*“there are customers that have complications with internet banking .... in many cases it is also immigrants that have cash but don’t know how to put everything in their bank account at once...” (Manager-B)*

Manager-B believed also that the SMIs have been affected as it makes it harder for them to keep their operations relying on cash payments. The other two managers did not believe that this was something that was highly affected as there are other third-party solutions for handling of cash between SMIs and banks.

*“the small businesses can’t come directly with their cash to us but there are companies like Loomis that take care and solve this issue” (Manager-C)*

Table 8: shows the results concerned with the negative impact on society

	Manager-A	Manager-B	Manager-C	Employee-A	Employee-B	Employee-C
Elderly	X	X	X	X	X	X
New arrivals (immigrants)	X	X	X	X	X	X
Disabled people		X		X	X	X
Small-Micro Business		X				

### 5.1.6 Concerning the positive impact on society

Concerning positive impacts on the society inflicted through the cashless banking transition, all interviewees shared the opinion that safety has increased dramatically through this. Moreover, it was agreed that it is easier to avoid financial crimes such as money laundering and different kinds of fraud as they work closely with other government agencies who investigate related criminal activities. Besides, one of the discussed positive effects partly related to cashless transition was that the customers did not need to go to the bank as frequently as before and that in many cases after they learn to use internet banking they do not return to the office. The impact on society was discussed mainly theoretically by interviewees as they did not know what the exact impacts were and only shared their opinion.

*“the robbery risk became zero, it got safer. Security van robbery risks got less, as we have less cash being transported in the world...Customers have access to our services wherever they are” (Manager-A)*

*“We are no longer a threat to a robbery and in my opinion the employees feel safer... We are carrying out evaluations of customers activity and can alert the right authorities if we find something suspicious which we can't get a reasonable explanation for” (Manager-C)*

*“It is safer to work in bank nowadays even though we have less security personnel...people can serve themselves and don't need to go to the bank very often...” (Manager-B)*

*“Most of our services are online and that makes it easier for the majority of the society and us as employees” (Employee-B)*

*“I think the change they did led to a safer environment for us workers and the customers that come in here” (Employee-A)*

## 5.2 Results from the Survey

The results from the survey are showing the distribution of answers of 21 participants, initially, 24 employees participated in the survey however, three of them were exterminated. The reason for this is that the answers were contradicting each other and therefore were not used in the results.

In order to make the results understandable for the readers, the terms that have been used in the survey are defined by the authors as the following:

- *Cash related cases/issues*: the drop-in visits in the bank offices with cases concerned with information about cash deposit/withdrawal, helping customers to withdraw cash money from ATMs, issuing emergency bank card for cash withdrawal, or coming with cash SEK or foreign currency money for deposits.
- *Withdrawing cash from ATM's*: when a customer visits the bank to get help from the bank employees in withdrawing cash from an ATM.
- *Temporary/emergency card*: when a customer comes to the bank with a blocked/lost bank card and asks for an urgent solution to withdraw cash.

- *Coming with cash money for deposits:* when a customer comes with Swedish or foreign cash money and asks to deposit the cash into a bank account.
- *Other cases:* could be many cases related to cash such as information about depositing/withdrawals. In this option, the cases related to helping with ATM withdrawals, coming in with cash money, and asking for the temporary card are excluded.
- *Elderly customers:* are customers of old age.
- *Disabled customers:* are customers with special needs, physically or mentally disabled customers, or even customers with an alcoholic condition.
- *New arrival customers (Immigrants):* are foreign customers who recently came to Sweden, customers that can hardly speak Swedish, cannot speak Swedish at all, or the English-speaking customers.
- *Other customers:* are all the customers except the elderly, disabled, and new arrival people.

### 5.2.1 Distribution of customers in cases related to cash.

Figure 11 shows the most visiting groups of customers with cash related cases. This figure visualizes the results of the first question in the survey. The results showed that the elderly constitute a major part (48%) of customers that visit the bank for cash related issues. This group was followed by the group of “other customers” on the second place with a percentage of (33%), the third-place new arrivals (14%) and lastly disabled (5%)

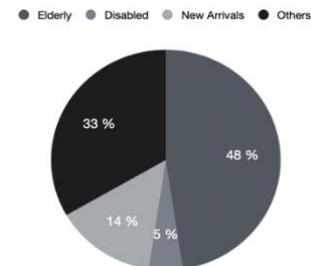


Figure 11: Shows the most visiting group of customers with cash related cases.

### 5.2.2 Results related to elderly customers

Figure 12 below shows the results from the participants concerning the questions related to the frequency of elderly visits with cash related issues, in addition to the questions concerning the most common cash related issues that the elderly often asks for. As seen on the left side of figure 12. The results show that (48 %) of the participants see that they deal with 2-4 a week with cases related to cash issues from elderly customers, which (24%) of the participants answered that they deal with 2 or more cases a day from elderly. While the right side of figure 12. Shows the most common cash related cases for elderly, (38%) of the participants see that elderly comes the most for having help with withdrawing cash from the ATMs, while (29%) see that elderly comes the most for having the emergency bank card for withdrawing cash money when another (29%) see that elderly comes the most for asking to deposit cash into their bank account.

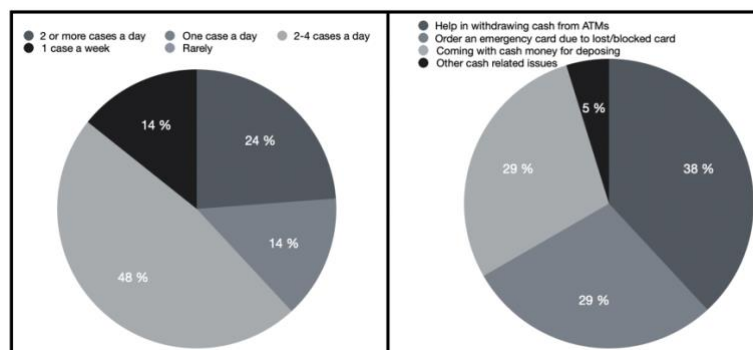


Figure 12: Illustrates the frequency of elderly visits with cash related issues, and the most common cash related issues.

### 5.2.3 Results related to new arrival customers

Figure 13 below shows the results from the participants concerning the questions related to the frequency of new arrivals visits for cash related issues and concerning the most common issue that new arrival visits for. On the left side, the bigger part of the participants (38%) answered that they received 2-4 cases a week from new arrivals. In this field only (14%) answered they had daily cases, the rest (48%) answered 1 case a week or rarely. On the right side the most common cases are customers coming with cash for depositing (38%), and (57%) answered that new arrivals visit mostly for other cash related issues.

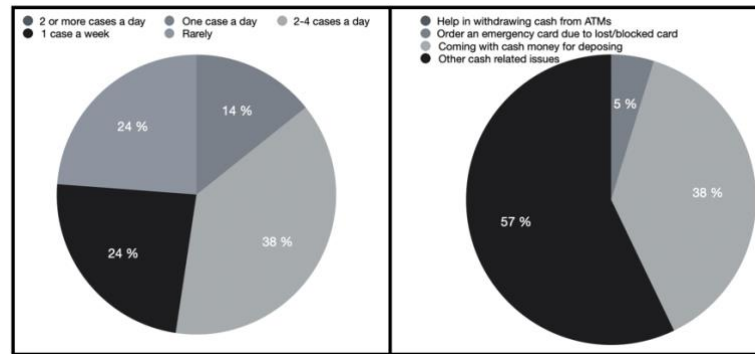


Figure 13: Illustrates the frequency of new arrivals' visits with cash related issues, and the most common cash related issues.

### 5.2.4 Results related to disabled customers

Figure 14 below shows the results from the participants concerning the questions related to the frequency of disabled visits for cash related issues and concerning the most common issue that disabled customers visit for. On the left side of the figure, the majority of (52%) answered that they receive visits once a week from disabled customers with cash related cases, while (33%) answered that they rarely receive cash related cases from disabled people. The right side of the figure illustrates that the most common cases from disabled customers are regarding orders of emergency cards (due to blocked or lost card (43%) and the second most frequent cases are regarding deposits of cash (29%).

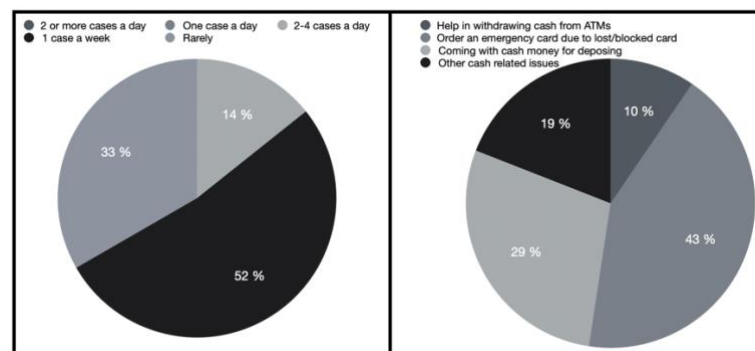


Figure 14: Illustrates the frequency of disabled customers visits with cash related issues, and the most common cash related issues.

## 6 Analysis

*The chapter answers the research questions by processing the collected empirical data and the theoretical framework. In this chapter, the authors have carried out an analysis based on the chosen theories and empirical data. However, the formulate of this chapter is based on the research questions of this study. The first and second research questions are answered first, then comes the answer to the main research question which is based on the first and second research questions.*

As the purpose of this thesis is to investigate one of the biggest banks in Sweden that went into cashless banking years ago, with the aim to examine how the transition to cashless banking contributes to sustainable banking. In order to fulfill the main purpose of the research, the research is subdivided into two sub-purposes. The first sub-purpose is to answer questions related to the desired economic benefits that triggered the transition towards cashless banking, while the second sub-purpose serves the aim of providing an understanding of the social impact of the transition.

### 6.1 Research question 1

***What are the motivations that triggered the transition to cashless banking, and what were the internal consequences on the bank and its internal stakeholders?***

Arvidsson (2019), demonstrate that cash money is seen as a threat of robbery in the banking sector, and the Swedish banking union has a negative point of view on cash money for the number of robberies that happened in the 2000s. The Economist (2016), argued that the motivation behind the cashless transition by the banks are both from the economic perspective as well as from a security point of view, since cashless banks have lower operational cost, and the possibility of cash robberies in the banks or during cash transportation is eliminated. On this, the results from the interviews support this argument, where two of the interviewed managers and one of the employees believe that the vision of the top management behind the transition to cashless banking was to decrease the costs of dealing with cash money, while one manager thinks that the vision of the top management was to achieve higher security.

However, regardless of the interviewees' opinions concerning the vision behind the cashless transition, all the interviewees confirmed that the vision of the top management is accomplished. And the cashless transition led to "fruitful" results in reducing the operational costs, as it also led to an increase in the security levels since the cash was eliminated in 2013. Concerning the reduced risk of cash robbery in the banking sector, Riksbanken (2019a), stated that between 2009 and 2018 robberies in banks and the other business have decreased rapidly due to the lesser usage of cash. While concerning the reduction of costs, DiVanna, (2004) stated that in cashless banking, operational costs are much lower than when dealing with cash. Moreover, Arvidsson (2019), motivates that it's more profitable for the banks to work with digital systems than with the cash system.

Furthermore, the transition to cashless banks created changes in the bank operations and also in the physical setting, in this case, the number of bank offices. According to statistics of the Swedish banking union, the number of bank offices in Sweden was a total of 1839 at the end of 2012, whereas the most updated report shows that the number of offices was 1265 at the end of 2019 (Bankföreningen, 2020). This constitutes a decrease of approximately 32% of all bank offices in Sweden. All the interviewees who witnessed the period of the cashless transition confirmed that the number of branches has been decreased rapidly with the transition to cashless banking. And on this, all the interviewees agree that the reduction of the number of branches is a direct impact of the cash elimination in the case bank. And in the region of the case bank, at least 5 branches have closed after the transition period.

Moreover, the statistics of the Swedish Banking Union regarding employment within the banking sector is different in this matter, the number of employees in the banking sector at 2012 was 39284, whereas at the end of 2019 the number was 40989, which is an increase of

employment within the banking sector of approximately (4,3%) (Bankföreningen, 2020). The results from the interviews showed that when the case bank went into cashless banking and had to close several offices, that time the employees who worked at the bank offices that got closed have redistributed to the other offices that kept open. All the interviewees confirmed that the employees were redistributed on the offices that kept open, and only one of the interviewees mentioned a case of reduction, that case was an employee that did not like to be reassigned to another office. In other words, during the transition period, the employees were not sent home due to closing some offices.

To this end, the case bank managed to create higher levels of security and to decrease the potential areas of robbery by eliminating cash money, also, the case bank managed to increase profit and decrease the operational costs from the elimination of cash money. On the first hand, the reduction of the number of bank offices is one of the ways that the case bank managed to decrease operational costs, while on the other hand, the case bank did not release employees due to the reduction of the bank offices, and have reassigned the employees to the other offices that kept open. On this, Freeman (2001) states that organizations should create value for all of its stakeholders, and this will, in turn, create profit and longevity for the organization itself. And on this, the case bank managed to create value for the employees by sustaining their employment in the bank, and at the same time, the case bank managed to make a profit by decreasing the operational costs mentioned above.

## 6.2 Research question 2

### ***How does the elimination of cash money in banks impact the external stakeholders on the outskirts of the society?***

Andersson & Essunger (2018), argued that although the reduction of cash in Sweden is seen in general as a positive phenomenon, three out of ten inhabitants in Sweden have a negative attitude concerning the cash reduction in the Swedish society. While, Arvidsson (2019), argued that most of the Swedish population seems to be capable to deal with the cashless transition and adapt the other alternatives of payment, but still, there are some groups in the Swedish society facing real problems due to the shifting towards a cashless Sweden. According to the interviews and the survey, there are groups of stakeholders that are negatively affected by the transition to cashless banking. The interviews showed that most of the complaints and dissatisfaction from customers in issues surrounding the elimination of cash paper currency from the bank comes from elderly and immigrant customers. This can be confirmed by the literature, according to Arvidsson (2019), these groups of stakeholders that are struggling because of the transition are called “*groups on the outskirts of society*”. Groups consist of elderly, immigrants, disabled or homeless people. The struggle of these groups to cash reduction has also been emphasized by (Riksbanken, 2019b).

Riksbanken (2019b), emphasizes that the groups outskirts of the society such as elderly people, people with certain disabilities, and new arrivals are having an essential need of receiving personal help to manage the difficulties of alternative payment methods than cash. The results from the survey show that (48%) of the visits to the case bank with cash related issues are from elderly people. Moreover, the majority of the answers with (48%) see that the frequency of visits for cash related issues from elderly people is (2-4) cases a week, while (24%) of the participants answered that the frequency is (2 or more) cash related cases from elderly per day, (14%) answered that the frequency is (1) case a day. Moreover, the survey conducted that the most common cash related cases for elderly are having help with withdrawing cash from the ATMs with a percentage of (38%), While (29%) see that elderly comes the most for having the emergency bank card for withdrawing cash money when another (29%) see that elderly comes the most for asking to deposit cash into their bank account. This is in harmony with the literature review of Arvidsson (2019), where he argues that it is not easy for the groups on the outskirts of society to adapt to a cashless transition, especially as they are used to deal with it their whole life. Furthermore, the need for these customers to visit the offices is a bigger difficulty now than before because there are fewer bank offices nowadays as well as fewer channels where one can deposit/withdraw cash (Riksbanken, 2019b). And as empirically

confirmed, the opening hours of the banks are also shorter for drop-in visitors now compared to before.

Furthermore, the police sources from the literature review illustrated also that financial frauds and digital thefts of money targeting the elderly and disabled have increased rapidly in recent years as these two groups seem to be the easier targets (Polisen, 2020). In the interviews, the empirical data showed that safety has increased for both staff and customers that visit the bank due to the decreased risk of robbery. This scenario is studied by Armey et al. (2014), where it is described that there is still a risk of being a subject to a robbery/theft through the internet or other distant ways, however, those kinds of robberies don't pose a risk for the victim of getting physically hurt. On this point, the answers in the interviews pointed to that the transparency achieved through eliminating cash from the equation helps the bank to identify financial crimes and later provide the right authorities with this information so that investigations can be made. Ogbodo & Mieseigha (2013) argue for the exact the same pros of aiming towards cashless banking and cashless societies in general, the authors describe that it makes it easier to detect criminal activities such as money laundry, economic crimes, and funding of illegal organizations. Other positive impacts discovered in both interviews and literature (Slozko & Pelo, 2015) is that the regular groups of customers of the bank can get access to the banks' service using digital means, meaning they get access to most of the services provided by the bank in convenient ways instantaneously.

Other stakeholders found to be facing difficulties by banks cashless transition in the study by Riksbanken (2019b), where the small business owners which are relying on cash operations, something that Manager-B agreed on. These difficulties were contradicted by the rest of the interviewees as they did not believe there was a direct impact between the two. Manager-A described also that the banks work closely with third party organizations such as "Loomis", those third parties provide solutions in scenarios between the bank and small business owners that want to deposit paper currency. Thus, it is hard to conclude whether the banks being cashless nowadays pose difficulties for smaller businesses or not, in that case, one must at least find out more about the solutions that the cash-services providers offer to their customers and analyze them whether they are reasonable or not.

### 6.3 The main research questions

***Main RQ: Can the banks' cashless transition be seen as a move towards sustainable banking from a socio-economic perspective?***

The term of Sustainable banking is defined as "delivering financial products and services, which are developed to meet the needs of people and safeguard the environment while generating profit" (Yip & Bocken, 2018). While Freeman et al. (2010), argues that sustainability for business firms is about considering the impact brought by the organization on all stakeholders of the company internal as well as external. Moreover, Freeman's theory added that every type of organization has different stakeholders as organizations create value through different means and in different spheres meaning that the groups of people affected are also different from one company to another. (Freeman, Harrison, Wicks, Parmar, & Colle, 2010).

Thus, from a socio-economic perspective which excludes the environmental pillars of sustainability, and by reflecting the definition of Sustainable Banking on the stakeholder theory of Freeman. It can be said that socio-economic sustainable banking is about creating values for internal and extrarenal stakeholders, where economic values are delivered for the internal stakeholders, and financial products and services that meet the customers' needs are delivered for the external stakeholders. Not to mention that the value creation needs to assure the continuity in the future and must consider the impact brought on the stakeholders concerned with bank practices in the long term.

#### **Concerning the value brought to the internal stakeholders of the bank**

Yip & Bocken (2018), argue that the financial crises of 2008 was a crisis of unsustainability, that time, banks were more biased towards gaining profitable benefits for owners, shareholders,

and managers in the senior levels, while the benefits of the other stakeholders were less on focus. Therefore, more firms started to extend their goals beyond the goals of making a profit by focusing on the other pillars of sustainability (Lange, Busch, & Delgado-Ceballos, 2012). However, firms in the banking sector are not an exception, after the crisis, the banks realized the importance of adopting sustainability into their businesses, and Yip & Bocken (2018), stated that the economic crises pulled the trigger for banks to reformulate the sustainable business models that can assess them in cutting wastes, creating higher stakeholders' satisfaction, and provide competitive advantages. Empirically, the first research question shows that the case bank went into the cashless banking seeking reduction in costs and achieving higher levels of safety.

Concerning the economic benefits, as Freeman et al. (2010), emphasize that sustainability is about creating value for all of the firm's stakeholders, and create profit and longevity for the organization. The first research question shows that the move towards cashless banking have fruitful results on the economic phase since the case bank has managed to cut the operational costs related to cash and reduce costs by closing several offices. On the first hand, this reduction of costs has for sure led to increasing the profit of the case bank, which has resulted in satisfying the economic stakeholders (owners/shareholders, senior managers, and stockholders). On the other hand, the results from the first research question show that the employees were not sent home due to the reduction of the number of offices, even though there has been some rejection from the employees for normal reasons such as unwillingness for changing position or office, but still, no one left out of the game according to the interviewees. However, since the employees were not released due to the elimination of cash, it can be said that the case bank kept on generating value for its employees by giving stability of employment for the employees which would result in a stable economy for them. Furthermore, concerning the higher level of security, it's also seen as a reduction of costs since the interviewees have mentioned that the safety costs were high when cash was existed. And beyond costs, the higher level of security is seen as value creation for all the different stakeholders the internal and external ones.

### **Concerning the external stakeholders *on the outskirts of the society***

It has been stated that banks as service firms play a significant role in providing a steady and sustainable economy for societies since banks are considered to be a key player in allocating the financial resources in societies to satisfy the demand of the present and future (Alexander, 2014). Earlier in the literature review, it has argued by Arvidsson (2019), that there is a part of the Swedish society that got negatively impacted by the rapid decreasing of cash, however, Sweden is well known for supporting weak citizens, groups in the outskirts of the society should get equivalent opportunities as the other groups of the society. Empirically, the second research question has shown that there are still complains concerning the elimination of cash, and some groups of the Swedish society are still favoring using cash, and visiting the bank offices to get assisted by the employees to withdraw cash money from the ATMs, or to get assistance with other cash related cases. However, the case bank is still supporting its client, and providing them with the required helps that satisfy their needs.

Besides the fact that groups outskirts of the society needs to receive personal help to manage the difficulties of alternative payment methods than cash, Arvidsson (2019), argues that the difficulties of those groups to receive personal help is increasing when the more points that provide personal services such as bank branches and payment service mediators are closing their offices. Furthermore, Arvidsson (2019), added that in the year 2017, 11 of the 21 counties in Sweden have reported that access to the basic payment services for elderly people is not accepted. Thus, when the cash circulation is rapidly decreased by the Swedish banks in Swedish society, the groups outskirts of the society is left underprivileged (Andersson & Essunger, 2018).

To that end, since socio-economic sustainability in business firms is seen from the definition of Lange, Busch, & Delgado-Ceballos (2012), as an approach that considers economic and social issues in balance, holistic, and long-term ways that benefit the future current and future concerned stakeholder. And concerning the social issues and economic benefits, the stakeholders' theory connects the ethics and profit objectives which removes confrontation of their interests and competing concerns. In other words, the two objectives are not in a confrontation of profits vs ethics or ethics vs profits, rather the focus is on generating mutual benefits between the two. Besides this, Jensen (2002), argues that this part of the theory



emphasizing that trade-offs will always exist, and satisfying all stakeholders equally is an impossible task as there will always be contradicting interests for stakeholders. However, the first and second research question demonstrates that the internal stakeholders of the case bank have achieved value from the transition, while apart from the external stockholders - particularly elderly- still have unsatisfied needs. Therefore, since this research did not test the satisfaction of the other groups of the Swedish society the groups outskirts of the society, the answer for the question “*if the cashless transition is a move towards sustainable banking form a socio-economic perspective*” cannot be stated due to lack of empirical proves. And the empirical pieces of evidence that are at hand do not fully cover the criteria to conduct if the case bank has moved towards sustainable banking.

## 7 Discussion and conclusion

*This chapter summarizes the results of the study. Further, it describes the implications and limitations of the study. It also describes the conclusions and recommendations of the study. Suggestions for further research are given at the end of the chapter.*

### 7.1 Findings

The bank had several reasons to go cashless, the lower operational cost, higher levels of security, and safety are not easy objectives to achieve, and therefore going cashless is a move that has a good ground of reason behind it. Moreover, the transition proved to be quite beneficial to a big number of stakeholders affected by the above-mentioned factors, including customers, employees, owners, shareholders...

The bank's financial gain of this transition is undeniable. However, the value was created for regular customers as well as the bank, employees were not let go because of the transition. The transparency allows for more control in the legality of the movement of money. Therefore, it is hard to categorize as only “for-profit move” as the value is not found only from the bank's perspective. For most people the use of internet banking or digital transactions is very convenient and value-adding services in their lives. Thus, the transition towards cashless banks and the shift towards digitized services created value for many stakeholders.

The research could not find many difficulties that the cashless transition poised to regular customers, all interviews, survey, and literature studies showed that dissatisfied part of the society and customers of this transition were the groups defined as the groups of people on the outskirts of the society.

In the light of the chapter above, a deduction of the impacts of the cashless transition upon the groups on the outskirts of the society can be made. Observing that the empirical findings are in line with the literature study it is clear that the impact on these groups of people is negative. It shows that it creates mainly difficulties for them with simple tasks such as withdraw/deposit cash, cash being something that they are used to have and use in their daily lives. This is something that is not strange at all, considering the fact that these people have used cash their whole lives and transitioning to only digital payment channels for them is not as easy as for “regular people” in society. Groups on the outskirt have difficulties in memory, communication, cognitive abilities, vision, movements, and many other things. Using digital payment channels will create difficulties as you need many of these attributes that are often taken for granted. Considering, this it is hard to say if the bank considered the needs of these stakeholders enough or not. The banks' employees spend time explaining and teach these groups of people how the new cashless bank works but sometimes it seems to be not enough or not possible.

More on the negative impacts on society are regarding the rising number of financial crimes and frauds being committed. It seems that going cashless in banks pushes people to go cashless overall. Meaning that people are keeping their money “online” instead of in their wallets/safes/homes. This is where criminals with access to new technology and schemes designed to steal that money get the ability to actually do that.

Furthermore, one of the findings regarding the group on the outskirt of society is that they became an attractive target for criminals through this transition. As they are not fully adapted to the cashless system perhaps it makes them easier victims for criminals to target.

### 7.2 Implications

Considering that the transition itself is recent few in-depth studies have been carried out on the effects or impacts of this transition, the right research material can be hard to get by. Also, studying this transition is not an easy task as it is a highly complicated dilemma due to the many factors surrounding the transition. For example, internet banking and mobile bank id are two factors that were around before the transition to cashless, the impacts of these two are not studied in this research. However, it may be that some of the impacts found in this paper are

more related to these than to banks going cashless. Therefore, it would be interesting to try and find out the root causes of different impacts in future studies.

Besides, the empirical data gathered from the interviews is relying on the interviewee's knowledge, experience, and opinions as well as the researchers, this limits the study in objectiveness. Thus, less conclusive answers can be drawn from this research, instead, the answers in this research provide more questions to study in the future.

This research provides no clear answers or conclusions on the topic. However, it provides managers and organizations that are planning to transition, or researchers that study a transition to cashless the knowledge of what people who will be impacted by it most heavily. Thus, it will be those people that they will have to take into a special account.

### 7.3 Limitations

The limitations of this study that it is studying the transition to cashless banks and the effects of this transition, many other factors are overlooked such as digitalization. However, the study is also limited to findings of what the impact is on case bank stakeholders, it is in no manner trying to generalize the findings of this research in all cases related to cashless transitions, only for cases with similar conditions to the case study. Another limit of this research is that it is not taking into consideration the environmental stakeholders and the impacts inflicted on them. To be able to restrain some of the limits of this research, the empirical material could have been collected from other banks as well. Studying only the transition to cashless in one banking company gives less ground to draw general conclusions in the matter. Moreover, as mentioned before this research was not entirely objective due to the interviews finding being under influence from informants and researchers. Thus, it would be recommended to have more quantitative data for such research in the future

### 7.4 Conclusions and recommendations

The conclusions for this research that can be made are not of a specific nature. It can be concluded that the bank going cashless can be motivated through positive effects of lower operational cost, higher security, and society moving towards a more digitalized world. However, the impacts are both positive and negative on the stakeholders affected by the change. Thus, perhaps the transition cannot be regarded as a socio-economically sustainable transition. However, the transition cannot be deemed unsustainable either. During the transition, the tools provided from the bank (*internet banking in general*) and by other third-party companies as Loomis (*cash deposits for businesses*) the needs of current and future stakeholders can be met. It is more of an issue on how to change people's behavior, teach them, and help them to adapt to a transition of such nature. It seems that the transition happened too fast for some of the stakeholders. Perhaps a recommendation for the future organization in other countries when carrying out transitions like this would be to allow the process to take a longer time. This way, the stakeholders would have time first of all to learn and then to adapt in a manner so that their needs are met. Then there would always be stakeholders from generations that will not change and cannot change, giving the transition longer time would a decision keeping these stakeholders of higher consideration.

There are also many inconclusive results regarding banks transitioning to cashless operations, such as whether small businesses are affected negatively or not. The reason for these inconclusiveness' is that the transition itself is interrelated with other factors affecting our society happening simultaneously. Thus, concluding something is impacted only because of banks going cashless, can be somewhat unreasonable and conclusions drawn to fast.

### 7.5 Further research

The study showed that there are stakeholders that are negatively affected. Further study areas should be done regarding how a cashless transition can take place where this can be avoided. This can be done through more in-depth research regarding the social sustainability of cashless banking. Moreover, a transition to cashless is bound to have an impact on the environment and this should be studied so that these impacts can also be considered when discussing a transition

to cashless. As also mentioned previously, further research can be conducted with informants with a higher position at the bank when this transition was happening to find out the exact reasons and goals for the banks going cashless and to understand how the needs of different stakeholders were dealt with. Another implication of this study was that many factors are interrelated, thus research regarding the separation of these factors to understand what is causing what affects exactly and how to control these factors would be of value.

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## Appendices

### Appendix 1

Interview Questions that were used as discussing topics in an open discussion with the interviewees

**Questions related to the participants background:**

- Who are you?
- How long have you been working for this bank? And what position do you have today?

**Questions related to the transition and the reasons for the transition**

- Did you work for the bank during the transition period to cashless banking? And what position did you have at that time?
- What was the vision of the top management from the transition? Any tendency towards gaining competitive advantages or cost reduction?
- What are the major Internal/External factors that helped the transition to cashless banking?
- In which manners did the transition meet the top management vision?
- What are the biggest areas of operational costs that the bank managed to reduce through the transition?
- Can you tell us more about the changes related to the physical branches and the number of employees?
- What are the biggest competitive advantages that the bank gained from this transition?
- Do you think that closing some of the physical branches hindered or helped in the growth of the bank?
- Has it become easier to monitor suspicious behaviour when it comes to money laundry and tax evasions? How
- Since there is more transparency available about the transactions, do you report suspicious behaviour to the government authorities? If yes, how? If no, why?
- 

**Questions regarding impact on stakeholders**

- Did the decision of transition face any resistance from the internal stakeholders? If yes, how?
- From your own perspective, was it positive or negative resistance?
- What did the top management do to motivate and adapt the internal stakeholders to the transition?
- What happened to the employees that had to leave their positions?
- Before the transition, how many offices did the bank have in this region? And how many now?
- Before the transition, how many employees (approximately) did the bank have in your region? And how many today?

- Did the transition face any resistance from the customers? If yes, how?
- How did the bank act to meet the customers' satisfaction and encourage the customers to adapt the change?
- Today, do you still face resistance from the customers?
- After all those years, do you see an increase/decrease/or no difference in customers satisfaction?
- How do you deal with money entering or being sent to and from accounts from abroad?



## Appendix 2

The survey that was distributed to 24 customer service employees in paper form.

### Undersökning om ärenden relaterade till kontanter

Tanken bakom frågorna är att identifiera vilka kunder det är som har flest problem med frågor som relaterar kontanter. Dessa kontant relaterade frågor innebär; Insättning eller uttag av kontanter, hjälp med bankomatuttag, begäran av ett nödkort, Annat.

Kundgrupperna i focus är: **Äldre, Funktionsnedsatta, Ny Ankomna, Andra**

Definitioner för undersökningen:

- **Kontantrelaterade fall:** Dropp-in besök till banken angående information om kontanta uttag/insättningar, hjälp med kontanta uttag/insättningar från bankomater, beställning av nödkort vid blockerad/förlorat kort för kontanta uttag, besök angående insättning av svenska eller utländska kontanter direkt till bankkonto.
- .....
- **Äldre kunder:** Helt enkelt kunder som är gamla (pensionsålder och upp)
- **Funktionshindrade kunder:** Kunder med speciella behov, handikapp, fysiska eller mentala svårigheter, alkoholism
- **Ny ankomna:** Utländska eller migrant kunder som är begränsade i det svenska språket
- **Andra:** Alla andra kunder som inte är nämnda ovan.
- .....
- **Uttag från Bankomat:** När en kund behöver hjälp med att ta ut pengar från bankomaten
- **Begäran av NödKort:** När kunden besöker för att begära ett nödkort för akuta uttag av kontanter vid blockerat/förlorat kort
- **Insättningar av kontanter:** när en kund besöker för att sätta in svenska eller utländska kontanter direkt på ett bankkonto.
- **Annat:** alla andra fall som har något att göra med kontanter, så som information kring insättning/uttag. (i detta fallet ingår inte hjälp med att sätta in eller ta ut kontanter från bankomater, eller begäran om nödkort.

*OBS: Alla frågor är på andra sidan av pappret*

#### Fråga 1

Vilken kundgrupp besöker banken mest med kontantrelaterade frågor? **Välj En**

☐ Äldre      ☐ Ny ankomna      ☐ Funktionsnedsatta.      ☐ Andra

**Fråga 2.1**

Hur många **kontant relaterade** fall får du hantera från den **äldre** gruppen? **Välj en**

☐ 2 eller fler fall per dag      ☐ 2–4 fall per vecka      ☐ sällan  
☐ Ett fall per dag      ☐ 1 fall per vecka

**Fråga 2.2**

Vilket fall är vanligast för de **äldre**? **Välj en**

☐ Uttag av kontanter från bankomat      ☐ Angående insättning av kontanter  
☐ Begäran om ett nödkort pga. blockerat/förlorat kort      ☐ Annat

**Fråga 3.1**

Hur många **kontant relaterade** fall får du hantera från **ny anlända** gruppen? **Välj en**

☐ 2 eller fler fall per dag      ☐ 2–4 fall per vecka      ☐ sällan  
☐ Ett fall per dag      ☐ 1 fall per vecka

**Fråga 3.2**

Vilket fall är vanligast för de **ny anlända e**? **Välj en**

☐ Uttag av kontanter från bankomat      ☐ Angående insättning av kontanter  
☐ Begäran om ett nödkort pga. blockerat/förlorat kort      ☐ Annat

**Fråga 4.1**

Hur många **kontant relaterade** fall får du hantera från **funktionsnedsatta** gruppen? **Välj en**

☐ 2 eller fler fall per dag      ☐ 2–4 fall per vecka      ☐ sällan  
☐ Ett fall per dag      ☐ 1 fall per vecka

**Fråga 4.2**

Vilket fall är vanligast för de **funktionsnedsatta**? **Välj en**

☐ Uttag av kontanter från bankomat      ☐ Angående insättning av kontanter  
☐ Begäran om ett nödkort pga. blockerat/förlorat kort      ☐ Annat