# The Significance of Financial Analysis in Minimizing the Credit Loss in Corporate Banking

Master's Thesis

Åbo Akademi

Markus Mäki-Fränti

Subject: Accounting

Writer: Markus Mäki-Fränti

Title: The Significance of Financial Analysis in Minimizing the Credit Loss in Corporate Banking

Supervisor: Jean Claude Mutiganda

Abstract:

The purpose of this thesis was to investigate how banks utilize financial analysis with the aim to minimize credit risks among corporate customers. Firstly, the thesis gives a theoretical framework concerning such issues that are related to this area of study. Secondly, eleven managers who work in close co-operation with corporate customers in banking are interviewed. A summary of the analyses is provided with the aim to demonstrate the role of information related to accounting in credit decisions.

Regarding useful information in the context of credit risk management, the financial statements of a company are the main source. The amount of information is vast, but is it enough? As financial statements are based on numbers, they cannot be considered capable of giving a holistic picture of the situation of a company. Additionally, for example the branch of a company, manufacturing process, and perspective are also something that can be seen as core details. Therefore, the research question in this thesis is formulated as follows:

How does financial analysis affect the credit rating of corporate customers in banking?

The method of the thesis is a case study which was executed by using a semi-structured interview concept, supplemented with problem-driven content analysis. The results of the thesis are based on the point of view. From the researcher’s own point of view, the thesis yielded such results the researcher expected. Nevertheless, the discussions were on a basic level which does not support the aspiration concerning an in-depth analysis.

As a result, the role of financial analysis in credit risk minimizing was found. The benefits that appeared during this process are also handled, as well as the core elements in accounting information from the point of view of banks.

Keywords: Credit Risk, Decision-Making, Financial Analysis, Corporate Finance

Date: 11.11.2021 | Number of pages: 70

## Table of contents

# 1. Introduction

As our human vision is based on our aspects of ethics, our standpoint of what a company really is will affect such aspects as a company's duties, rights, and moral responsibilities. In business ethics, the standpoint of what a company is will have an impact on how a company's responsibilities, moral duties, and rights are perceived from one's own point of view. (Frostenson 2011, 37)

Credit risk, or default risk, is perceived as an inability or unwillingness of a customer or counterparty to face engagements related to lending, trading, hedging, settlement, and other financial transactions (Adamko et al., 2015). The credit risk is based mainly on both a transaction and a portfolio risk. The portfolio risk forms intrinsic and concentration risks and is grounded in both external and internal factors. These internal factors are found in the issues concerning the state of the economy, extensive swings in commodity or equity prices, foreign exchange and interest rates, trade restrictions, economic sanctions, and government policies. The internal factor is instead an incompleteness within such issues as loan policies or administration, the absence of prudential credit concentration limits, inadequately defined lending limits for loan officers or credit committees, deficiencies in the appraisal of borrowers' financial positions, excessive dependence on collaterals and inadequate risk pricing and the absence of loan review mechanism and post sanction surveillance.

Credit risk can be described as the chance of loss which will appear when loan or any other form of credit by a particular debtor is not paid back (Asif Raz et al., 2019). Starting from the year 2008, financial experts worldwide have researched and analyzed the primary factors underpinning the credit crisis to identify problematic act and effective solutions with the aim to help financial institutions to avoid disasters in the future. As a result, banks have started to pay attention to better risk management strategies which may protect them in the long run.

Altman & Saunders (1996) have investigated the development of credit risk measurement during the 1970's and the 1980's in their research. They have focused on key development related to this area and implemented a new approach as well. Their main finding is that the amount of off-balance sheet instruments, for example swaps, options, forwards, and futures, has increased highly during those twenty years. Alongside this development, there have become policies concerning default risk properties. The researchers show a variation of the Altman's Z-Score model to be a new approach, with the aim to determine an equivalent of bond rating concerning all the loans or bonds that may be a part of the portfolio. These equivalents can thus be utilized regarding estimating losses that are excepted. Lastly, they estimate new approaches to be created during the next twenty years. According to them, these approaches would be possible with the help of remarkable development in data bases.

As the research by Altman & Saunders is executed in the 1990's, this thesis will focus on the approaches in the current situation. Like they forecasted, new approaches have been implemented during the last 20 years. Overall, the world is much different than it was in the 1990's, and this kind of phenomenon appears also in banking. The development of information technology and the tightened regulation are good examples of issues that have had their impact on credit management. Due to the fact financial statements are based on numbers, they are not able of giving a holistic picture of the situation of a company. Aspects such as the branch of a company, manufacturing process, and perspective are also something that should be taken into consideration. Therefore, the thesis will investigate how managers in banks use financial analysis at their daily work, concerning credit risk minimizing in 2021.

The context of this study has become more essential during the last years, mostly because of the regulation in banking which is perceived tautly. According to Gorton & Winton (2003), both bank regulation and deposit insurance are based on the private arrangements among banks. The world's first official nationwide government deposit insurance system was established in the USA in 1934. The USA lead was not followed by other countries; instead, it was as late as after the Second World War that countries all over the world began to adopt deposit insurance. Extensive banking crises during the 1980's and the 1990's were the main reason to cause the spread of government deposit insurance.

As the question "What guides a manager to make a certain credit decision?" has an essential role in this thesis, decision theory is also considered a very central object. Wethey (2013, 195) sees decision-making usually to consist of a series of options. This can be described to indicate a process of taking options on board and ranking them, in such a way that in the end it is only making the decision. Instead, choosing is perceived differently. The prospective candidates need to be searched before the right person can be selected. Due to the fact there may be several possible candidates, the selection process should be done with the help of elimination, not by ranking the candidates. After all, selection is considered being easier; any list of options can be reduced to a series of binary comparisons.

The research method of this thesis consists of both qualitative research and literature review. Theory in credit risk management is first investigated with the help of the literature review. Then the empirical research with the interviews is executed, and the results are analyzed with the purpose of determining whether or not they are indicating similar outcomes.

According to Järvinen & Järvinen (2012, 57), Cunningham points out that case research as a survey method is suitable for the empirical context in several studies. Cunningham names different case-methods as follows: comparing the cases, overviewing of the cases, and comparing the cases from an interpretative point of view.

The theoretical review of the thesis is followed by the theory that is related to the chosen research method. The purpose of the theoretical information concerning the research method is to create a theoretical framework that forms a certain basis for the research case. The purpose of the research case is to gather both knowledge and experience from actual operations in real-life circumstances. Due to the ongoing COVID-19-pandemic, the research process was executed both online and in a written form. In addition, the interviewees who answered in a written form were contacted via telephone with an object of possible inclusions concerning the answers, and furthermore owing to a possibility to discuss about the given answers.

According to Bell & Waters (2016), researchers who utilize a qualitative standpoint are mostly interested in to find out how people experience their world. Thus, their aim deals primarily with an insight, instead of statistical analyzes. However, such examples can be found that prove quantitative researchers sometimes using qualitative techniques; and vice versa. Above all, the question is about the information the researcher is looking for. (Bell & Waters 2016, 20)

## 1.1. Research problem

Accounting is considered as a support for management. Instead of being a purpose, it is a method in terms of gathering and analyzing data in both economic and financial contexts. Information related to accounting is created in a way of sequential manners, such as the proceeding of the activity of the big picture, whereas management, in each form of occurrence, requires a data portfolio both during the activity and before the real execution of the operations. (Boghean et al., 2010)

Klomp & de Haan (2012) have investigated the risks and the regulation in banking with the help of the data they gathered from more than 200 banks from 21 OECD countries concerning the years 2002-2008. The aim of the research was to investigate how bank regulation and supervision affect banking risk. Quantile regressions were also used in this research. The core finding of the research was that banking regulation and supervision affect the risks of high-risk banks, whereas most of the measures for bank regulation and supervision have no significant effect on low-risk banks.

Regarding useful information in the context of credit risk management, the financial statements of a company are the main source. The amount of information is vast, but is it enough? As the research method of this thesis is based on the case research, the question is therefore about the relevance of financial analysis in credit decision-making. A second point of view is related to other information concerning a company which is needed in credit risk management; what kind of influence do such aspects that cannot be evaluated by using numbers as measurements have on decision-making?

## 1.2. Purpose of the thesis and the research question

The purpose of the thesis is to investigate if financial analysis is comprehensive enough in the context of credit rating of corporate customers in banking. Firstly, the thesis provides a theoretical framework related to this area of study. Secondly, managers who work in close co-operation with corporate customers in banking are interviewed.

Basel III is the worldwide framework which regulates banks' capital adequacy, stress testing, and liquidity risk (Nordea, 2018). The finalized Basel III framework, often called the Basel IV package, was published in December 2017. The Basel IV package is about to be implemented in 2022 and includes reforms concerning credit risk, operational risk, credit valuation adjustment (CVA) risk, leverage ratio and introduces a new output floor. The consequence with these operations is that banks start to control their credit management with higher quality.

Banking business is becoming more and more complicated due to the financial system risks that increase all the time. This causes banks to be forced to sharp their risk management constantly. This will naturally lead to a perception that when a bank assesses corporate customers, the relationship and influence among the assessment elements cause problems to bank managers. One of the core issues is also that although banks' credit risk management organizations and functions usually appear in different forms, banks should anyway ensure their official positions.

The objective of the thesis is to address the following research question:

How does financial analysis affect the credit rating of corporate customers in banking?

The objective of the question is not only to give a holistic overview of the underlying research area, but also to underlie the purpose to investigate how the role of financial analysis is perceived in supporting credit risk minimizing in banking.

Weissova et al. (2015) argue rating and credit risk to be highly connected to each other. Credit risk is considered a probability of loss caused by the default of a debtor, whereas rating is like a meter which helps to compare two borrowers and determine which one of them more likely pays for that obligation at the end of the process. In the rating, information concerning both companies' developments from the past and the outlooks, is processed systematically. The rating process is executed by taking into consideration both quality criteria (soft facts) and quantitative criteria (hard facts). Hard facts can be calculated with the help of the financial statements of the company, by utilizing the implementation of financial-economic analysis. Therefore, hard facts create a reliable statement concerning the financial stability of the company and its financial health. The values of such indicators that one achieved will be combined depending on their significance, and after that they will be transferred to an internal rating scale.

## 1.3. Method and limitations

This research case is executed by using qualitative research method. The semi-structured interviews are done with the help of an interview guide. The results from the interviews are analyzed by utilizing qualitative content analysis.

As the purpose of the case research is to examine as accurately as possible, certain limitations are done related to the framework of the study. Firstly, the data is collected from the persons who work in banking in Finland, even though some of them work in a bank which has its operations also in other countries than Finland. Secondly, the focus is on corporate customers where financial analysis is needed in the context of credit decision-making. Private customers are not considered in this research.

## 1.4. Structure of the thesis

In addition to the introduction, the thesis consists of five chapters. Chapter two constructs the literature review of the study.

In the third chapter, the research method in this study case and the empirical context will be presented. This chapter will discuss of the research methods used in the study case and introduce the reasons why these certain methods have been chosen. Chapter three also discusses about the reliability of the results.

In the fourth chapter, the research process used to meet the purpose of the thesis will be discussed. The main purpose of the chapter four is to present the methodology used in the research case, and to discuss about the answers that were given during the interviews.

Findings of the research case and answers to the research question are presented in results and conclusions in the chapter five, supplemented with a final discussion in the sixth chapter.

# 2. Theoretical review

In this chapter, theory related to this area of study will be discussed. The chapter starts with a literature review concerning previous research and their approaches. The purpose of this chapter is both to find answers to the questions that are important in the framework of credit decision-making, and to create a theoretical framework for this study case.

Howarth & Quaglia (2015) have investigated the divergent preferences on the Basel III Accord of national regulators in Europe. The Basel III Accord was an essential part of the international regulatory response to the global financial crisis, with the aim to set new capital requirements for banks which are internationally active. Different varieties of national financial systems have caused problems in setting capital requirements; in some cases, this has forced national regulators to select between aspects such as stability of the banking sector, the competitiveness of national banks, and short to medium term economic growth. The main finding of their research was that the Basel III Accord is perceived differently in countries across Europe. For example, in Germany where strong bank-industry ties persist, the economic growth leg of certain problems will be prioritized by policy makers, specifically when banks have a weak capital position, and as a result, stricter capital rules may cause damage in lending to the real economy. Instead, in countries such as the UK, where weaker bank-industry appears, economic growth is considered as less important leg in the context of problems for policy makers, especially in case where domestic banks start with a good capital position.

As regulation has become a significant area for banking research during the last two decades, particularly because of the investigation related to stability, efficiency, and performance, Djalilov & Piesse (2019) have investigated the relationship between bank regulation and efficiency. The purpose of their paper was to contribute to literature regarding banking in the countries of Central-Eastern Europe, South-Eastern Europe banking and the Soviet Union, concerning the years 2002–2014. The approach in the paper was both theoretical and political, and their findings consist of important policy implications. The results of their study imply that banking regulations, capital requirements, market discipline, and supervisory power, cannot be comprehensive enough to improve the efficiency of banking in the transition countries. This implicates those policymakers and supervisors are required to explore the weaknesses related to the on-going banking regulations, and thus improve their effectiveness.

Chen et al. (2020) have investigated how bank regulation and supervision affect individual banks' systemic risk. Their study was executed by utilizing data of banks from 65 countries concerning the years 2001–2013. They argue the financial crisis of 2007–2009 to have caused an increasing interest on bank regulation and supervision among the academic world. The main finding of their study is that more stringent regulation and supervision will lead to a higher systemic risk. Especially countries where more restrictions in bank activities, higher initial capital stringency, or stronger prompt correction power are faced will suffer from the higher systemic risk. They also find the positive impact of bank regulation and supervision regarding systemic risk to be eased in a case where banks hold more capital and own the diversified income flow.

In summary, the previous research papers state that the role of regulation in the banking business varies significantly in different countries. However, the financial crisis in the end of the first decade of the 21st century has had its impact on this business area all over the world. As the purpose of this thesis is focused on the role of financial analysis in minimizing credit risks in corporate banking, the role of the tightened regulation will be discussed in the empirical section of this thesis.

The basis of the research case was implemented according to previous research and the theory section of the thesis. The research question is based on the purpose of the thesis, and thus it is related to the role of financial analysis in avoiding credit loss in corporate banking. Klomp & de Haan (2012) stated in their research paper that banking regulation and supervision affect the risks of high-risk banks, whereas most measures for bank regulation and supervision have no significant effect on low-risk banks. As the focus of this thesis is on commercial banks, instead of investment banks, the research question is based on such a hypothesis that regulation and supervision will have no significant effect on this case.

## 2.1. Credit risk management

As financial institutions are attempting to achieve more market shares and customers, and thus take more risks, the relevance of risk management has a central role. This will cause the implementation of risk management among financial institutions to be essential. The aim with the risk management is not only to try to reduce and manage risks, but also to increase benefits and to avoid disadvantages from taking risks concerning default of loan accounts. Caused by the financial crises of the last two decades, risk management is perceived as highly appreciated in financial sector and in banking industry. There were several reasons to make those crises occur. Nevertheless, the Basle Committee, the international banking supervisory body, sees the core excuse behind serious banking problems to be such credit risks that are resulted from counterparty default. (Chen et al., 2011)

Fatemi & Fooladi (2006) argue that in maximizing the value of shareholders, a company needs to be engaged in risk management practices only if the outcome would be the value of the company to grow, and consequently its value to the shareholders. They see the increase of the value to be based on three various origins:

1) Minimization of the costs related to financial distress.
2) Minimizing the taxes.
3) Minimizing the possibility of the under-investment problem to appear.

As opposed to the value maximization of shareholders, managerial risk aversion hypothesis leads managers to look for maximization of well-being from their own point of view. Thus, in certain circumstances managers can be engaged in the risk management practices from the perspective of shareholders. If the interests of the shareholders are not perfectly qualified with those managers, the outcome may be managers starting to seek risk management strategies with the aim to segregate their own interests from the consequences caused by changes in aspects as interest rates, commodity prices, or foreign currency values. These steps may be taken in a way that the effects of the decisions on shareholders' wealth will not be considered. (Fatemi & Fooladi, 2006).

Allen & Saunders (2002) find distinguishing traditional and new approaches from each other difficult when discussing credit risk measurement. They see four types of models to appear in the traditional framework: expert systems, neural networks, rating systems, and credit scoring systems. An expert system deals with credit decisions which are done by a local officer or a manager of relationships. Thus, decisions are mostly based on one's professional ability and capability to see the situation. Neural networks instead are a form of expert systems related to computer science, after all based on the knowledge of people. As these systems often require time and the possibility of errors increase, human-made decision processes are used in training those systems. Allen & Saunders also see that some cons can be found in neural networks: contribution and time to turn human-based decisions on the computer system, expenses caused by programming and maintaining the system, and the capability of the system to adapt to various situations.

One rating system is created by the U.S. Office of the Comptroller of the Currency (OCC) and is considered as one of the oldest rating systems concerning loans. The system is used by both authorities and bankers with the aim to estimate the probability of credit losses. The system divides a certain loan portfolio into five categories, consisting of four low-quality ratings, supplemented with a high-quality one. In the table below, loss reserve of minimum required is found next to every category.

| | Percent |
|---|---|
| Low-quality ratings: | |
| Other assets especially mentioned (OAEM) | 0 |
| Substandard assets | 20 |
| Doubtful assets | 50 |
| Loss assets | 100 |
| High-quality rating: | |
| Pass/performing | 0 |

Figure 1: *Loss Reserves (Allen & Saunders, 2002)*

The OCC rating system is also expanded by bankers. Internal rating systems are created to defining the category of pass or performing rating. However, implementing internal ratings with a target of assessing regulatory capital requirements includes a possibility to make the integrality of the rating system distorted, specifically if a bank shows capital as costly and wants to minimize that cost. Thus, authorities need to verify the accuracy of several internal rating systems. (Allen & Saunders, 2002)

According to Allen & Saunders (2002), credit scoring system is a system that may appear in all types of credit analysis, due to the fact the idea is in essence the same. In this system, such indicators that are considered as key ones need to be specified with the target to evaluate the possibility of defaults, and after that inset them into a quantitative score. Some of the cases are based on the score that can be considered as a probability of default, whereas the other ones rely on the score used as a classification system; a borrower candidate is situated into a good or a bad group, being grounded in both the score and the cut-off point.

### 2.1.1. Principles

During the last decades, a framework for risk management which would be more comprehensive and all-encompassing has been investigated by many researchers. Consequently, a linkage between the types of default for major corporations and the credit scoring technology has been looked for. Since the paper by Jarrow & Turnbull, "Pricing Derivatives on Financial Securities Subject to Credit Risk, *Journal of Finance, 50(1)*" that was published in 1995, the reduced form modeling framework has increased tremendously. The objective of the paper by Jarrow and Turnbull was to define an approach of modeling that allows valuation, pricing, and hedging of derivatives in the context where a default caused by the asset underlying the derivate security, or a default caused by the writer of the derivate security, to occur. (Imai et al., 2012)

According to Belas et al. (2018), the global financial crisis has caused getting bank finance to be more difficult for SMEs (small and medium enterprises). As difficulties to maintain certain financial circumstances of the SMEs are found, the lack of possible sources of external finance causes financial risks to increase from the point of view of SMEs. Due to the fact the profitability of an SME is mainly based on appropriate utilization of financial resources, proper credit management systems can possibly help that SME to manage default rates, and therefore also access bank credit actively.

### 2.1.2. Tools & techniques

Cancino & Escalante (2019) see the primary function of banks to consist of an intermediary role between investors and borrowers, and by fulfilling this it inevitably undertakes credit risk. In this world of an imperfect capital market, investors have no exact information of a company's prospect of which borrowers possess more information about its trading position than is available to investors. This kind of information gap creates a risk; if a bank has no knowledge about a company´s management, business cycle and industry, the default risk may be significantly high. This means the bank is required to reduce the information gap, besides analyzing, and understanding borrowers default risk, so that the bank can guarantee a good loan quality. Consequently, banks need trained loan officers to investigate applicants, understand their business, and interpret their financial statements.

Kontkanen (2009, 145) sees that with a purpose to eliminate the risks that may appear, corporate finance is based on the fact it is essential for a bank to know its corporate customer. Banks need therefore an essential amount of information concerning both the situation of the company and the development of the company, with the aim to be able to avoid possible credit losses. Financing decisions are broadly based on the perspectives of a company; this causes an evaluation of those perspectives to play a key role in making credit decisions.

Kontkanen (2009, 148) also argues that financial analysis has a core role concerning following the performance of a company, and thus it is considered as a central part of corporate finance. An analysis is based on the financial statements of a company, and those statements should be available concerning the past three years. With the help of financial statements banks can obtain a comprehensive understanding of the economic situation of a company.

According to EBA (European Banking Authority), there are several relevant risk indicators. These indicators are named as AQT (Asset Quality risk indicator). Some of the indicators operate with the level of loan loss provisioning to cover defaulted, whereas the others focus on covering different features of the asset quality concept, like the fair value level based on IFRS and the significance of forbearance or exposures regarding re-securitized products. In addition, some of these indicators point to more granular asset classes or sectors of counterparty, such as corporates, wide or foreign exposures towards borrowers in a certain country or group of countries, in a way which is more elaborated. (The EBA Methodological Guide)

## 2.2. Types of capital structure

Ferdous (2019) states capital structure to be perceived as a mix of debt and equity capital which is maintained by a company. Because capital structure can be related to a company's ability to meet the needs required by the stakeholders of that company, it is considered as a core detail. A capital structure which will both minimize a company's cost of capital, and maximize the value of a company, would be an optimal one. Thus, capital structure decisions have a huge impact on the success of a company.

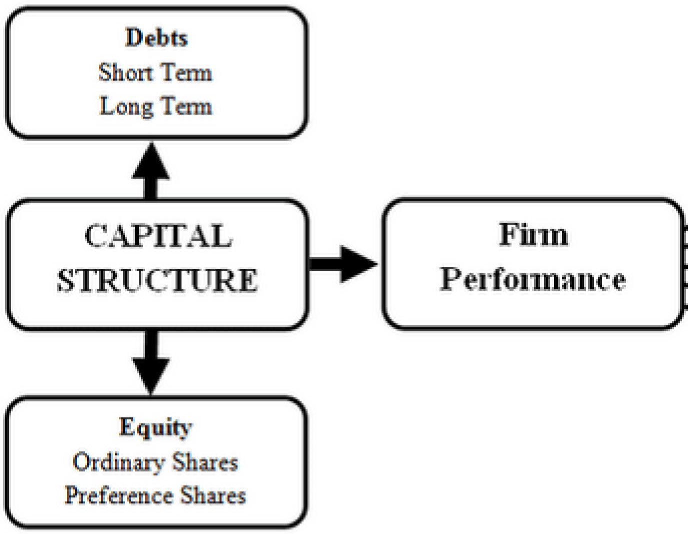


Figure 2: *Conceptual Framework of the Capital Structure (Basit & Hassan, 2017)*

Serghiescu & Vaidean (2014) see the factors affecting the capital structure of a company to be classified into two categories: the first one regards external factors which reflect country-specific macroeconomic conditions, such as instance, inflation rate, and average interest rate. The second one concerns the internal factors specific to a certain business area, such as profitability, the size of a company, the tangibility of its assets, liquidity, and asset turnover. What needs to be taken into consideration is the fact that the external factors are general and common for all the companies in a certain country.

Optimization of a capital structure has been an interesting issue among the academic world for a long time, according to Pahuja & Sahi (2012). The ratio of debt and equity in financing the firm's assets has its impact on stockholder value. The capital structure of a company can be described as a mixture of sources of funds a company uses (debt, preferred stock, and common stock). Capital structure policy can be related to a selection between risk and return. In a situation where more debt is used, the riskiness of the firm's earnings stream also raises, but a higher dimension of debt usually leads to a higher expected rate of return. Hence, the higher risk associated with greater debt is about to lower the stock's price. The higher expected rate of return makes the stock more attractive from investors' point of view which causes the increase of the stock's price. An optimal capital structure creates therefore a balance between risk and return, so that a desirable goal of maximizing the price of the stock would be achieved. (Pahuja & Sahi, 2012)

## 2.3. Decision theory

When discussing decision theory, two main approaches are found: normative and descriptive (Rapoport 1998, 1). Normative decision theory is based on the aim to find out how people will make decisions in certain circumstances if they are willing to be mentioned as rational. Instead, descriptive decision theory aims to describe how those decisions are really made in various situations. One of the most important differences between these two approaches is that normative theory is considered much more formalized one. Thus, normative theory is mostly related to abstract issues and is not focused on forecasting decisions, and their outcomes are not observed in this context. Instead of abstract issues, descriptive decision theory focuses on aspects that happen in real-life circumstances.

Decision theory occurs in a situation where one or several operators need to make a choice considering alternatives they have got. Those alternatives may deal with operations to be set in motion, objects to take over, or an amount of money to pay. The alternatives can also be considered as beliefs which can occur for example in a situation where a jury must make a choice whether an actor is guilty or innocent. (Rapoport 1998, 3).

### 2.3.1. Normative & descriptive

According to Hansson (2005, 6), normative and descriptive theories can easily be separated from each other. Briefly, normative theory is a theory concerning how certain decisions should be made, whereas descriptive theory is focused on how decisions are made in practice. Based on the received opinion, decision theory will malfunction in case the norms of ethical or political are not fixed. When facing uncertainty or too small amount of information, several questions concerning how to act is created by the reminder of normative issues. Questions how an individual or many individuals can be able to coordinate the decisions during the process, and in processes of social decisions, are also found in this context. (Hansson 2005, 7)

As descriptive theory generally starts with points concerning how actors make choices in certain situations among decisions, their behavior is described from a systematical point of view (Rapoport 1998, 7). Therefore, this theory is most considered as an inductive one. The aim with this theory is to investigate rules related to decisions, also in certain circumstances, based on decisions that can be anticipated in those circumstances.

## 2.4. Decision-making in a manager position

Kahneman et al. (2011) argue cognitive scientists to see that there are two modes of thinking: intuitive and reflective. Standpoints such as thinking, impressions, associations, feelings, intentions, and preparations for action flow effortlessly in the intuitive one. It produces a constant representation of the surrounding world and allows us to do issues like walking, avoiding obstacles, and contemplating something else; all of these at the same time. This is a state where we are not constantly focusing on how to do these issues. Instead, we do them without thinking. As concerns the reflective one, thinking is slow, effortful, and deliberate; this kind of mode is needed for example in a situation when it is about to complete a tax form. The intuitive system is considered good at making up contextual stories, and the consequence will be that we are not aware of its operations; thus, it can lead us astray. Cognitive biases are perceived one major, well-documented example. An insidious feature concerning cognitive failures is the fact that we are not aware of them. We rarely catch ourselves in the process of making intuitive errors.

Wethey (2013, 224) sees decision making to be one kind of a contact sport. As all decision-making relies on certain anticipation of how people will react to that decision, the process of decision-making can therefore be seen as one form of chess; an opponent standing for all the issues out there, and who wants you not to win, supplemented with a capability to act so that it will have an impact on the consequence you are about to achieve. Additionally, Hammond, Keeney & Raiffa (1998) argue decision-making to be a process of making certain trade-offs. Having only one objective can be described as luxury, but usually our target is to go for several different objectives. In decision-making, the most challenging circumstance is to make such trade-offs which would be the optimal ones. The more alternatives we must consider, the more objectives we are pursuing. This naturally causes a need to do more trade-offs. What makes decision making so difficult is not only the volume of trade-offs. Instead, it is the consequence of the fact that each one of the objectives is based on its own form of comparison.

Haynes & Gibson (1963) state management decision-making to not classically have been one core point of view in accounting. The role of accounting in business decisions can be investigated with the help of an approach that focuses on the decision-making process. The process is based on several steps:

-observing when a decision is required
-identifying the alternatives within certain action
-the relevant construction of an organization
-estimating all the alternatives
-choosing the right alternative
-controlling the chosen decision.

The role of accounting can be perceived to be clear in the last section. Historical data from past decisions is controlled by both financial accounting and cost accounting. (Haynes & Gibson 1963, 5)

Both descriptive and prescriptive sides can be found in economics. The descriptive ones are attempting to universalize such relations that appear in the context of economic variables. Therefore, a study of actual behavior is required. The prescriptive ones instead go on nonempirically; in the beginning they start with certain presumptions and lead to logical outcomes. Majority of managerial economics follow the second one. Traditionally, it starts by clarifying an assumption that a company is willing to maximize its profits. This will lead to a perception that the analysis is based on logical conclusions, followed from certain assumption. However, managerial decisions will not end at this point, as instead there may be such cases where regulation of other objects is appreciated, instead of maximization of profits. Conclusions from certain logic can also be challenging or expensive to fit into a real-life business, and thus some modifications to face the reality of the business can be vital. In the beginning, managerial economics assumes that information can be gotten free of charge, and therefore a manager is able to set the required data into a logical model and after that wait for the results. Practically, costs in data collection may create an obstacle in using the most advanced analysis. (Haynes & Gibson 1963, 14-15)

Regarding planning or controlling operations, managers can acquire information with the help of management accounting systems (Atkinson & Kaplan 1989, 1). These systems consist of gathering, identifying, processing, analyzing, and reporting information to managers. The aim with this information is to help decision-making in a company, not to inform external stakeholders like financial accounting information. Thus, the idea of management accounting systems is based on aspects behind traditional indicators of the costs and revenues from certain transactions already appeared to provide information on issues such as sales backlogs, unit quantities, prices, demands on capacity resources, and extensive performance indicators grounded in both physical and nonfinancial measurements.

## 2.5. Construction of financial statements

During the 21st century the regulatory environment of Finnish financial statements has changed fast. Accounting Act and the Limited Liability Companies Act are the ones who regulate Finnish financial statements. The regulations of the Securities Markets Act must be followed by those Finnish companies that are listed on Stock Exchanges in the European Economic Area (EEA). The Finnish accounting regulation has been harmonized with the Fourth Council Directive on annual accounts (78/660/EEC) and with the Seventh Council Directive on consolidated accounts (83/349/EEC). Several options can be allowed by these Directives in certain cases. Despite that fact, some of the options permitted by the directives can be restricted by the Finnish regulations. Worth mentioning is also the fact that taxation has its impact on the Finnish accounting practice in some respects. (KHT-yhdistys 2012, 12)

Each company is required to prepare an individual set of annual accounts within four months after a financial year has ended. A group consisting of several companies prepares consolidated annual accounts if certain conditions are fulfilled. Based on IFRS, the structure of profit and loss statement and balance sheet is defined strictly. The Finnish listed companies have been preparing their consolidated accounts according to IFRS since January 2005. Unlisted companies in Finland are allowed to prepare the accounts according to Finnish GAAP which also creates the basis for taxation. (KHT-yhdistys 2012, 18-20)

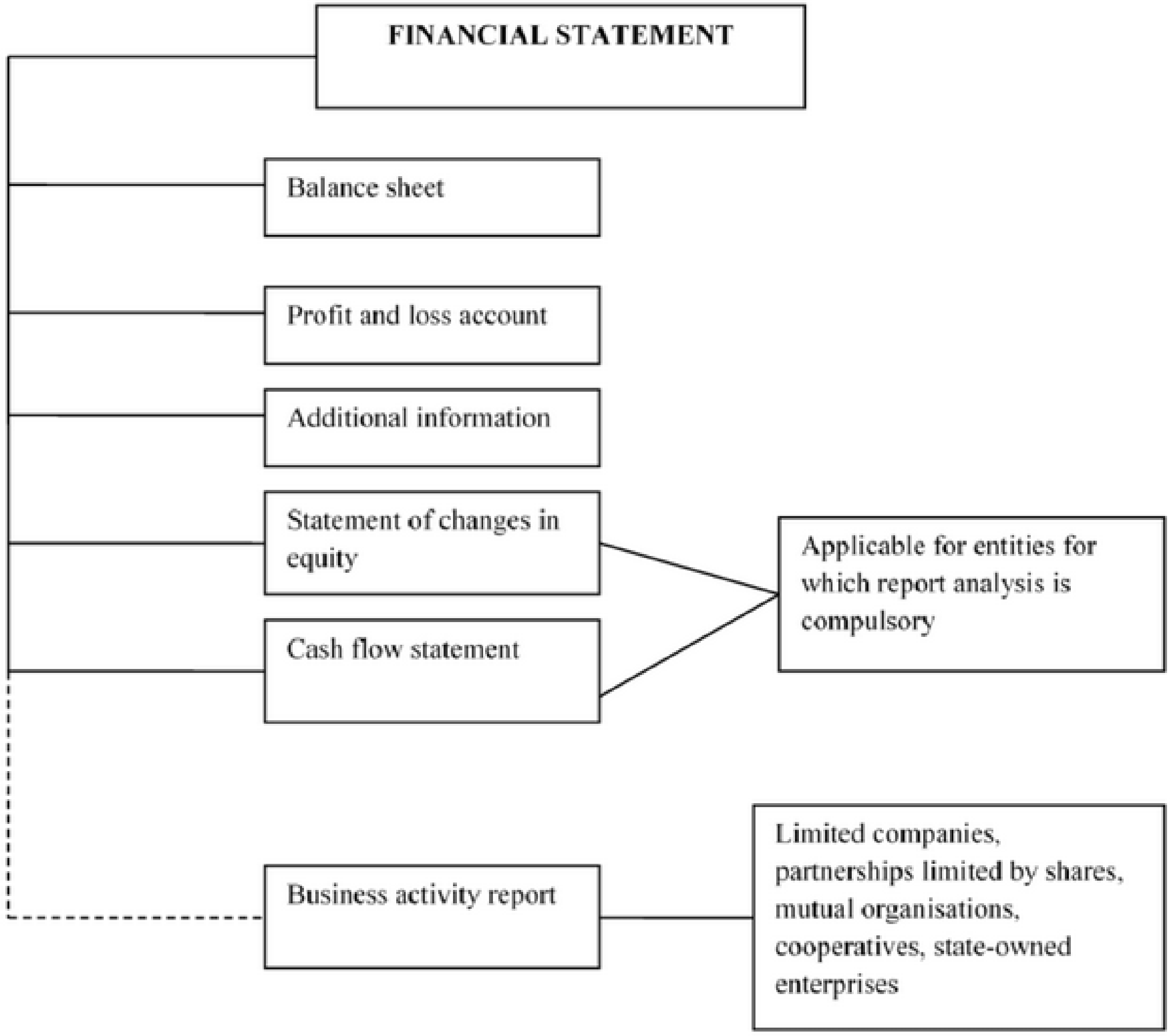


Figure 3: *The structure of financial statement (Szydelko & Biadacz, 2016)*

The notes added to financial statements are required to give all the vital information with the aim of ensuring that the financial statements are giving a true and fair view of the results of operations and financial position. Therefore, supplementary note disclosure requirements concerning issues such as preparation of the annual accounts, profit and loss statement, balance sheet, contingent liabilities, employees, and group companies are defined by The Accounting Ordinance. (KHT-yhdistys 2012, 46)

According to Eilon (1992), the basis for evaluation of corporate performance is typically created with the help of ratios. In most cases, this will be illustrated by relating a measure of output to a measure of input. As a plethora of measures often can be considered challenging, managers and analysts consequently like to concentrate on quite a small number of criteria. Several management consultants recommend three certain performance ratios to be taken into consideration concerning the field of corporate strategy. These ratios are such as:

-ROCE (return on capital employed)

-net profit margin

-asset turn.

To improve all these three ratios is indicated to be a highly appreciated target, and it is therefore typically assumed that these ratios will move at the same time for any given company. (Eilon, 1992)

Szydelko & Biadacz (2016) see that a framework to present the elements of performance management, providing the required characteristics of balance, profit and loss account, additional information, cash flow statement, statement of changes in equity and the business activity report as a supplementary statement of the financial statement of selected entities has broadly been based on the essence of financial statements.

According to Andekina & Rakhmetova (2013), all kind of business entities should monitor their financial and economic activities for distress to be avoided, due to the recent financial crisis. To evaluate business and to forecast the bankruptcy applying financial ratios are such multivariate discriminant analysis approaches that are used in common circumstances. The availability of data and the improvement of econometrical techniques have caused the number of research devoted to the bankruptcy prediction models to be grown tremendously.

The economic position of all business is striven to improve by enhancing the financial results of a company. The plans of a company are based on a specific target set, and are developed from the perspectives of short, medium, and long-term ones. With the aim of controlling the dynamics of financial and economic meters, it is possible to determine the direction of development of a company, and then control this development based on the target plans. This causes entities to be required to establish normative dynamic models, with a purpose to achieve specific conditions of considered economic system through ranking financial-economic indicators. (Andekina & Rakhmetova, 2013)

### 2.5.1. Key indicators from a bank's point of view

Catasús et al. (2017) state not only organizations will implement such factors that concern success. Instead, for example business life in our society or a personality in one's life can also be related to achieving success. But how can it be possible for us to know if we have done something with success? Success is often indicated with the help of measurements. In business life of our society, it can be gross domestic product, for a company a certain profit margin, and certain operational targets for an official organization, supplemented with some economic demands. (Catasús et al. 2017, 11-12)

In the context of an organization, figures have a huge impact on how we are about to act. A simple logic is faced: if something is important it is also worth measuring, and if measurements exist it can be perceived to be essential. Thus, there are at least two approaches how measuring can be executed. The first one deals with a decision about what success is in a certain situation or a framework, and after that evaluate if an organization has achieved success. In business life, it is mostly profit that is considered being a measurement of success. In official organizations, success is often related to qualitative factors concerning the operations of an organization. (Catasús et al. 2017, 42-43)

Demerjian (2007) has investigated the role of choosing financial ratio covenants in debt contracts. He argues loan contracts to consist of covenants with ratios that are considered informative of credit risk grounded in the features of a borrower or a contract, and the results of the study also indicate the same conclusion. As borrowers are assumed to maintain a certain level of specific accounting ratios by financial ratio covenants, lenders are capable to overwhelm the operations in a situation where the borrower is not succeeded in maintaining that certain level. Hence, the lender will be able to estimate the credit condition of that borrower and thus to operate according to the situation. The study case also points out five types of financial ratio covenants traditionally to be included in contracts:

1. Minimum Coverage (earnings / periodic debt-related expense).

2. Maximum Debt to Cash Flow (total debt / earnings).

3. Minimum Net Worth (assets – liabilities = shareholders' equity).

4. Maximum Leverage (total debt / total assets).

5. Minimum Current (current assets / current liabilities).

Each one of these types can be related to the credit risk of a borrower. The first three points are considered as measurements of operating performance. Coverage and debt to cash flow measure using earnings from the income statement, whereas the aim with net worth is to capture shareholders' equity. Operating performance is perceived as an important factor of credit risk. Leverage creates a measurement of overall indebtedness of a company. Leverage is commonly used in the context of evaluating credit quality, with companies of high leverage having higher credit risk than companies with comparably less debt. The object of the current ratio is to capture the short-term liquidity of a company. As debt payments are essentially made from cash, the current ratio indicates the amount of current assets to be available to make payments. Therefore, current ratio is related to credit risk in a negative way. (Demerjian, 2007)

## 2.6. Ethical or moral problems among credit decisions

As interests and contacts are traditionally related to an individual or a group of individuals, it is justified to ask whether a company can have moral responsibilities. This question, and how a company can have moral responsibilities, is something that is used to confuse people in the framework of business ethics. Thus, it is not determined to have only one right outcome, because the question depends much on one's point of view to see a certain company. Despite that fact, there are some researchers who have done their own conclusions in this area of study. (Frostenson 2011, 48)

Subramanyam & Wild (2009, 9) see that creditors lend funds to a company in return for a promise of repayment with interest. The fixed nature of benefits to creditors is an important element concerning pure credit financing. This means that creditor's benefits consist of debt contract's rate of interest or the profit margins on goods or services delivered. Subramanyam & Wild also argue that credit analysis is an evaluation of the creditworthiness of a company; it is about the ability of a company to pay its bills. Thus, credit analysis mostly focuses on risk, not on profitability. Term, type, and purpose of the debt contract affect the tools of credit analysis and their criteria for evaluation.

The stability of financial systems is affected by climate change in several ways. There are two main climate-related financial risks that have been determined: transition risks and physical risks. Transition risks are based on the re-valuation of such assets that are carbon-intensive, caused by shocks concerning the transition to an economy of low-carbon. Instead, physical risks are related to economic damages that can be considered as results from climate-related events. Studies are mostly focused on the implications of transition risks, whereas analysis of physical risks is not taken into consideration similarly. (Dafermos et al., 2018)

In their study case, Dafermos et al. (2018) have implemented an ecological macroeconomic model by focusing on physical effects, followed by climate change, on financial stability. In this case, the researchers have created a new approach grounded in the previous stock-flow-fund model by Dafermos et al. The aim with their model is to demonstrate the effects of climate change concerning financial systems, in a way that certain key points will be considered. The first one of these key points is related to increasing of both temperature and economic catastrophes due to climate change, which may cause companies to be less profitable, and thus undermine their financial position. Alongside this aspect, debt defaults possibly arise which may result in several bank losses. The second point is that the decreased profitability, together with some damages caused by issues related to the global warming, may have its effect on investors. Consequently, liquidity preference may increase causing a sale of corporate-sector financial instruments.

Daniele et al. (2018) have investigated how financial performance of the European banking industry is affected by corporate social responsibility (CSR). CSR engagement should be connected to financial performance in a negative way, but from the perspective of a stakeholder and due to the resource-based view, positive impacts on banks' financial performance should be caused by CSR. The results of their study case consist of both practical and theoretical outcomes. The first of these results is that bank managers should be encouraged to implement and launch such practices that are socially responsible, as this enables an opportunity to fulfil the requirements given by owners in a more effective way. Secondly, due to contribution of CSR when discussing about differentiation and reliability, a win-win model disposes the outcomes of CSR that are seen in an approach of trade-off, causing the expected impact of CSR to be more logical with the stakeholder theory and the resource-based view. Thirdly, the findings of the study contribute to an evolutionary aspect of the interaction between banks and their customers (depositors and financed companies), starting from a transactional and heading to a more relational approach. The fourth point indicates that the results of the current study should attract the attention of policy makers and authorities. As most of the European countries are bank-based economic systems, their state of health is heavily based on banks' competitiveness. Thus, economic benefits may be achieved in a situation where banks are incentivized to engage in practices of CSR. As a fifth point, banks have their impact on the way money is invested. Larger awareness of CSR by banks implicates companies to have an additional inducement to implement more sustainable business operations.

As we are living under these abnormal circumstances, the COVID-19-pandemic must also be noticed. Due to the fact the situation is still running, final effects and conclusions cannot be determined yet. However, some points can be perceived already. Thus, instability of high volume can be found in global capital markets. KPMG points out some certain facts which are caused by the COVID-19. These issues are such as:

-Profitability and credit management risk, which means profitability of banking to be decreased due to low interest rates, together with the impacts of the COVID-19.

-The general view of securitization.

-Customer relationships and business models.

-Flexibility of operative business management.

-The high volatility of stock markets and its effect on banks' valuation.

Although some economic crises can be faced due to the COVID-19, it has also caused some positive features. Better customer experiences can occur as banks are required to invest more in digitization. Strategic priorities are also re-examined alongside that digitization. The COVID-19 has also given a great opportunity for financial institutions to evaluate the use of some relevant Cloud technologies. (KPMG, 2020)

# 3. Research method

In this chapter, the research method is discussed. Thus, the case banks and the case research will be presented. As the research question of the thesis revolves around the relevance of financial analysis in decision-making with the aim of minimizing credit risks, the thesis will rely on a case study occurring in a real-life situation.

The chosen method in this thesis is qualitative research. According to Bryman & Bell (2011, 386), qualitative research can be considered a research strategy that traditionally emphasizes words instead of quantification when collecting and analyzing data. Since this thesis is focused on a truly specific area of study, qualitative research can be seen as a suitable method.

Frohlich et al. (2002) argue case research to be one of the most effective research methods regarding operations management, and especially in developing new approaches. However, various challenges can be faced in the context of case research: the amount of time that is required, skills needed in interviews, indicating generalizable conclusions from a limited sample of cases, and consequently verifying the research to be precise enough. Worth mentioning is the fact that the results of case research may have very tremendous impacts, such as new and creative inspirations, development of new approaches, and may have high validity among the users of the research. Additionally, case research affects not only theory, but also the researchers themselves. With the help of implementing research in a certain field and being exposed to problems in real-life circumstances, the creative ideas of people at all levels of organizations, and the various contexts of several cases, it is possible for the individual researcher to personally benefit from this kind of research process. (Frohlich et al., 2002)

## 3.1. Case banks

One approach to research, describe, or explore phenomena is a case study. Such arguments from a quantitative point of view that concern the lack of rigor and generalizability of case studies conflict with the objective of a case study, also in the framework of how all the learned from a case study is executed practically. In fact, rigor in case studies originates from the research design and the components of that design. In case studies, evidence consist of interviews, documentation, archival records, direct observations, participant-observation, and physical artifacts. Interviews are considered as one of the most important data sources in the field of qualitative case study research. Additionally, documents and archival records can be included to support and strengthen the findings of a study. When trying to understand the phenomenon or the conditions that created it, source of evidence can be supplemented with direct observations that can be operated during the entire study. (Alpi & Evans, 2019)

In this thesis, the data were collected from six banks. The interviewed corporate bankers represented both national and international banks. All the participants in this research case demanded on remaining anonymous. The permission for the citations was asked individually. Eskola & Suoranta (2001, 57) see that dealing enough information, highlighting voluntary, and holding the target group as anonymous need to be ensured when executing research.

The research method in this thesis was qualitative research where the data were collected with the help of an interview guide. The data collection was executed during the spring and the autumn of 2021. Those who responded to the interviews were managers who work in close co-operation with corporate customers in banking. The main reasons the interviews were done in a written form and online were both because of the distance between the interviewee and the interviewer, and because of the authorities' recommendations concerning COVID-19 restrictions. Arranging face-to-face interviews would have been truly challenging because of the abnormal circumstances. The data collection with the help of the interview guide made it possible for many of the managers to participate in this kind of research. The interview questions were sent to each participant before the interview with the aim of improving the accuracy of the interview.

The interview guide in this research is partly based on descriptive decision theory. In other words, the goal is to investigate how decisions are made, as the theory tries to describe the behavior of the subjects as accurately as possible, and in the framework of rational decision-making.

The online interviews were recorded, transcribed, and disassembled. All the online interviews were conducted through the Zoom-online service, where participants had both sound and video on. After the interviews, the disassembled data were categorized according to the themes in the interview guide, which made analyzing and drawing conclusions easier. By categorizing the different parts of the interviews, the researcher had the possibility to highlight topics, and thus was able to better notice the main points among the data. The information was processed confidentially and used solely for this research. The interviews were anonymous, and the recordings were deleted after the transcription.

Bell & Waters (2016, 24) see that although both organizations and individuals have certain mutual features, there also exist some unique ones. Thus, the researcher who uses case study-method has a target to clarify those features, to identify different co-operation processes, to show how those affect both the implementation of changes or systems and organizations or individuals' habits to work.

Van der Stede et al. (2005) argue sample size not to be as critical in terms of the quality of research data as it is usually assumed to be. Instead, the focus should be on the assumption that the data is comprehensive enough, and thus able to give a possibility to create reliable analyzes. In qualitative studies, the size of a sample is used to be smaller than it is in quantitative ones. Additionally, the results of qualitative studies are primarily expressed with the help of words. As the most common way to collect data is to use interviews or observations, the collected data will be written down or recorded in a certain way. Thus, both the researcher and the interviewee can have an impact on the results of the study, due to the fact they have the possibility to influence the questions and the answers.

## 3.2. Implementing case research

Hammarberg et al. (2016) argue qualitative methods usually aim to answer such questions that are related to experience, meaning, and perspective; generally, from the participants' own viewpoints. Thus, this kind of data is usually not relevant in the framework of counting or measuring. Qualitative research techniques consist of small-group discussions heading to research beliefs, attitudes, and concepts related to normative behavior, semi-structured interviews to investigate standpoints within a focused area or, with core sources of information, heading to a target to get background information or an institutional perspective. In depth interviews, the aim is to understand a condition, experience, or event from one's own perspective, supplemented with an analysis of texts and documents, for example government reports, media articles, websites, or diaries, with an object to learn about the knowledge of distributed or private.

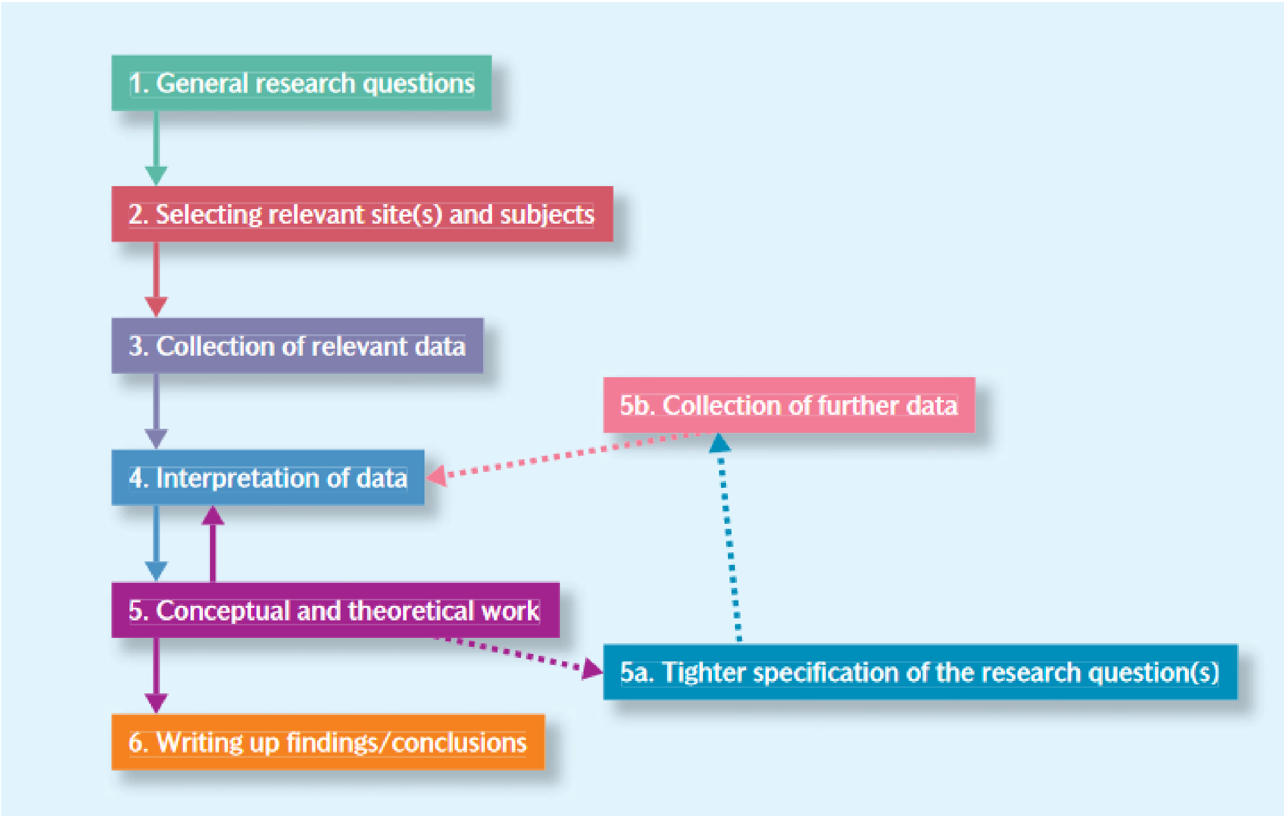


Figure 4: *An outline of the main steps of qualitative research (Bryman & Bell, 2011)*

In this thesis, the interview questions are semi-structured. With the help of these questions, standpoints, experiences, beliefs, and motivation of an individual can be found. The small amount of data within a small group can be considered as a disadvantage in the context of this case research, alongside the fact that the accuracy of the data is related to one's own experiences only. The data collection was executed by using a semi-structured interview concept which can be found in Appendix 1.

According to Bryman & Bell (2011), semi-structured interview is a term covering a wide selection of instances. In most cases, it is based on the context where the interviewer has a series of questions that fit into the general form of an interview schedule, but where it is possible to vary the sequence of the questions. The questions in a semi-structured interview are traditionally partly more general in the framework of reference when compared to a structured interview schedule. Additionally, the interviewer usually has a kind of possibility to ask further questions in response to the statements that are considered as significant replies. (Bryman & Bell 2011, 205)

According to Kvale (1983), a paradox can be faced in interviews. Although an interview is one of the most common methods in psychology, in the field of the theory of science it is meanwhile one of the least analyzed psychological methods. As concerns the psychological profession, an interview is based on an extended application: personnel selection and counseling, taking of an anamnesis, besides also as a therapeutic method. Although an interview does not have such a central position in psychological research, it can be applied in both clinical and social research, and in the framework of pre- and post-experimental interviews.

## 3.3. Reliability and validity of the research

At this point it is necessary to discuss the reliability and validity of this research. The reliability and the limitations of the research are highly depended on the used research methods. The theoretical review with information collected from the academic publications can be considered a reliable document. The reliability of the literature review can be increased by using multiple resources or documents, and by carefully reviewing the reliability of a certain paper or research.

Bryman & Bell (2011) argue the terms “reliability” and “validity” to have quite different purposes when evaluating measures of concepts, despite the fact these terms usually seem to be more like synonyms to each other. Reliability is related to the coherence of a measure of a concept. The following three factors should be noticed when evaluating whether a measure is reliable:

1) Stability. This point of view consists of the question if a measure is stable over time, so that it could be possible to be convinced that the results related to a certain measure for a set of respondents will not vacillate.

2) Internal reliability, which aims to indicate whether or not one’s scores on any one measurement tend to be related to their scores among other measurements.

3) Inter-observer consistency. When a significant deal of subjective judgement is included in activities such as the recording of observations, or translating the data into categories, and where more than one person is included in these activities, this could lead to a situation where a lack of consistency is faced in the decisions. (Bryman & Bell 2011, 157-158)

Instead, validity concerns the fact whether or not an indicator (or a set of indicators) devised to being a measurement of a concept really measures the concept. (Bryman & Bell 2011, 159)

As this thesis has a specific field of study and a certain target group, it cannot be expanded into a larger context, due to the discussions concerning the personal preference within a small sampling of individuals. The relevance of financial analysis for credit risk minimizing in this thesis is high but had this study case been conducted in financial institutions other than banks, the results might have indicated different outcomes. Therefore, validation depends highly on the extension of the thesis. With the aim to improve the reliability of this study, the interviews consist of questions of easy wording, ensuring that the meaning of questions would not be confusing. Alongside the theoretical review, one indication concerning the reliability of the study is the reliability of the case research. This study focuses on asking such questions in the research process that are relevant for the area of the study. The reliability of the process will be strengthened with the help of discussions, in addition to the written answers.

Using literature from the same field of study, using professionals in the research with a target of obtaining as relevant data as possible, and the cohesion of the results between these two methods are such factors that positively affect the reliability of this thesis. If both studies are indicating the same outcomes, this could be considered a significant aspect in terms of the reliability of the thesis. Such factors that have a negative effect on the reliability are, for the most part, related to the reliability of the qualitative research where the data were collected with the help of eleven persons. Additionally, the qualitative research method is generally highly linked to one's own opinions and standpoints, and thus the given answers have a noteworthy impact on the conclusions.

# 4. Research process

In this chapter, the information gathered from the research is presented. The chapter starts with a short description concerning each one of the interviewees, after which the results related to the key aspects of the questions will be discussed.

The data were collected with the help of the interview guide which was based on open questions. One benefit with open questions is the possibility for an interviewee to present such approaches which were not anticipated when the questions were created. According to Hirsjärvi et al. (2016, 199-200), open questions are traditionally and broadly used in qualitative research cases.

The interview questions are grounded in both the theoretical framework gathered in the literature review and own observation concerning central parts of this research area. The aim of the interviews is to identify factors that can be linked to decision-making process and financial decision-making.

Qualitative research is usually based on quite a small sampling (Eskola & Suoranta 2001, 61). The material in this research case helped to understand the phenomenon that was researched, and this is the aim of the material in qualitative research (Eskola & Suoranta 2001, 62). The broader material could have become content earlier, and thus new approaches to the research question might not have appeared.

As the native language of both the researcher and the interviewees is Finnish, the interviews were executed in Finnish.

## 4.1. Backgrounds of the interviewees

The data for the empirical section were collected from eleven persons who work at manager level in banking, in close co-operation with corporate customers, and in various banks. Due to the ongoing COVID-19-pandemic, seven of the interviews were implemented in a written form, supplemented with a telephone discussion. Two of the interviews were implemented both in a written form and online via Zoom. Two of the interviews were implemented only online via Zoom.

In this thesis, these persons are named Individuals A-K:

Individual A: a 56-year-old woman who holds a vocational degree, works as a customer relationship manager, and has been working in her current position for 25 years.

Individual B: a 43-year-old woman who holds a Bachelor of Business Administration-degree, works as a customer relationship manager (both with private and corporate customers). She has been working in her current position for 2 months, before that she worked with corporate customers in another bank.

Individual C: a 41-year-old woman who holds a Master of Economic Science-degree, works as a customer relationship manager, and has been working in this kind of position for 12 years.

Individual D: a 39-year-old man who holds a Bachelor of Business Administration-degree, works as a senior relationship manager, and has been working in his current position for 8 months (before that as a relationship manager for 5 years).

Individual E: a 49-year-old man who holds a Bachelor of Business Administration-degree, works as a CEO in a local bank, and has been working in his current position for 10 years.

Individual F: age and gender are not public, holds a Master of Economic Science-degree, has been working with corporate finance for 20 years.

Individual G: a 61-year-old man who holds a vocational degree, works as a senior relationship manager, holds long experience in banking, and has been working in this position since 2012.

Individual H: a 63-year-old man who holds a Master of Economic Science-degree, holds long experience in banking, lastly worked as a branch region risk manager for 3.5 years (retired since 2018).

Individual I: a 63-year-old man who holds a degree of Master of Business Administration, works as a local manager, and has been working in this position for 32 years.

Individual J: a 62-year-old man who holds a Master of Economic Science-degree, works as a senior relationship manager, and has been working in this position for 6 years.

Individual K: a 56-year-old man who holds a degree of agrologist, works as a CEO in a local bank, and has been working in this position for 18 years.

## 4.2. Processing financial statements

The first question in the interviews concerned the role of financial analysis (percent) in credit decision-making. The given answers revolve between 50-90 %. There were also two individuals who did not give any numbers as measurements, but instead answered *"very high"* and *"too big"*. One answer assumes that situations are often specific, and thus the role of financial analysis may vary, depending on the target company:

*"When discussing about corporate finance, it is mostly approximately 50 %. Nevertheless, there may be cases where it can be stated that the role is 100 %. This happens in a situation where the numbers in financial statement are completely awry, and it seems to be clear that the company is going bankrupt soon."*

Each one of the interviewees answered that although the role of financial information is remarkable, it is not possible to make decisions only with the help of numbers. This was also something many of them wanted to highlight during the telephone discussions. The general view which creates a basis for the final decision is a combination consisting of both financial information and discussions with the owners or leaders of a company. Information related to such aspects as the current situation of a company, future forecasts, and market outlooks is also needed.

The interviewees had different views concerning the second question "Do you find financial statements comprehensive enough?". Some of them had positive answers:

*"With annual reports and attachments, I would say yes. It is a positive signal that the number of annual reports has increased during the last years, because there you need to talk both about remarkable happenings in the future and the outlooks of the company."*

*"Yes, they are, if you also take into account attachments, and you can get more information from the customer."*

Instead, some of them saw the situation as follows:

"*No, they are not. You need to know the company and how the company works, so that you would be able to read and analyze financial statements. In most cases, the long income statement and balance sheet that are asked from the customer will open up business activities in a more comprehensive way.*"

*"No. You are not able to create a big picture concerning the situation of a company only with the help of numbers from previous financial years. Instead, financial statements can be seen as a basis for discussions where you have to understand all the issues that have had an impact on those numbers."*

There were also a few individuals who did not have such a comprehensive answer:

*"They give a comprehensive overview of the previous situations."*

"*Approximately they are comprehensive enough. Sure, it is also important to analyze both qualitative aspects and the risks of a company (for example ownership and leadership).*"

Three out of all the interviewees also highlighted that it is possible to get a comprehensive overview of a company's previous businesses with the help of financial analysis, but it is not easy to see how the future will look like. Situations can change very quickly, like this COVID-19-pandemic has proved. One of the individuals also argued that the role of future outlooks started to be more important after the financial crisis in the beginning of the 1990's.

### 4.2.1. Core issues

In the context of core issues concerning financial analysis, the research method was divided into two separate questions:

1) What are the key figures from the point of view of your bank?
2) What figures / ratios are the most important in your job?

Ten out of the eleven interviewees did not see some significant difference between these questions. Thus, most of the answers in the second questions were *"same as above"*. The one who had a different answer argued:

*"It depends on the age of the target company. When it is about old companies, all the ratios are important, because they are like "the big picture". The information that is highlighted depends on the lifecycle of the target company. Business plans and profitability calculations play a key role in the context of new companies, as there are no financial statements available from previous financial years."*

There were a few ratios that were named in all the answers. These ratios are such as: operating profit (EBITDA), and equity ratio. The other ones that were mentioned were such as gearing, accounts payable, accounts receivable, liquidity, working capital, treasury, viability, and business result.

Many of the interviewees also saw that there is a certain “tripod” concerning the financial information of a corporate customer. This “tripod” consists of three parts: liquidity, profitability, and financial solidity. Each of these parts should be in order, so that the continuance of the customer will not be risky. In case one of these starts to worsen, the other ones are also in danger. For example, decreased profitability causes problems concerning liquidity.

According to Catasús et al. (2017), it is mostly profit that is considered being a measurement of success in business life. Although it is not only the profit of a company which matters in credit decision-making, it can easily be linked to that “tripod”. Liquidity, profitability, and financial solidity are very difficult to achieve without certain profit.

The approaches concerning the question “How do you take into consideration the environmental issues and the ethical aspects (child labor etc.) of the target company in decision-making?” depended a bit on the bank the individual is working in. Those who work in a smaller, national bank had naturally different answers compared to those who work in a bigger, international bank.

*“Our customers consist of local companies, and we know them very well. That is the reason why this kind of issues are usually not central. Sure, we consider them if the case company is working with export. Generally speaking: these issues have to be considered during discussions if the company works in a business area which affects the environment.”*

*“KYC (Know Your Customer) has a key role. You need to know possible subcontractors and to ask for more information from the target company. Companies that offer services related to background information can also be utilized in this case (for example Standard & Poor’s).”*

*“These issues become more and more important. A bank does not want to finance such companies / operations which are ethically doubtful. Practices in this area develop*

*continuously. In the future, it is necessary for a company to make sure that these issues are in order if they want to acquire some finance."*

*"When it is about small and medium-sized enterprises, things come up fast. Companies and the owners of those companies are well-known. In the context of bigger, international companies more information is surely required, but I do not have that experience."*

*"We operate only at local level when discussing about corporate customers, so it is very difficult for companies to hide some facts, because we know them very well."*

*"Sometimes knowing your customer can take many working days, although it is only one customer. Backgrounds of the owners, possible business associates etc. may be very challenging for a manager to find out."*

*"In bigger banks, there usually exist "on/off"-operating models, so that everyone in every office knows where the bank can be involved."*

### 4.2.2. Possible hazards or warning signs

All the individuals who participated in this research case were unanimous about the question "How much does the tightened regulation concerning financial institutions affect your amount of work?". Each of them highlighted that the significance of the tightened regulation plays larger and larger role. Those who have been working for many decades in this business area saw that the atmosphere is completely different than it was for example at the end of the 1980's. Those who have not worked such a long time in this business area also saw that there is a distinct difference between the current situation and the situation during the first decade of the 21st century.

"*It has increased very much. 50 % of the working hours consist of drawing reports or updating such information which is related to knowing your customer (KYC)*."

*"The amount of work caused by the tightened regulation has increased tremendously during the last 10 years."*

*"Requirements concerning documentation have increased significantly because of the financial crisis of 2007-2008."*

*"Quite difficult to estimate, but during the last decade at least one third more work has appeared when it comes to KYC (Know Your Customer), evaluating securities, and the regulations concerning financial statements."*

*"The amount of work has increased due to the tightened regulation, but on the other hand it can be seen as one method of securing."*

*"The big picture is sometimes missing when discussing about small banks, in other words: the amount of regulation is not in balance with the risks of a small bank."*

Some of the individuals argued that although the idea behind the large amount of regulation is understandable, it takes time which otherwise could be used for taking care of customer relationships. The tightened regulation has also caused some situations where a manager has not such a big mandate to take care of own customers in a wanted way.

There was a clear deviation among the answers concerning the question if one has made negative decisions that are based on ethical aspects only. Seven out of eleven answered that they have made this kind of decision during their career. Instead, two out of eleven answered that they have not made such decisions. There were also two individuals who did not want to give a straight answer to this question. The negative decisions were related to situations where the business area of a company is something that is not ethically acceptable from the point of view of the bank.

The answers concerning the question about possible hazards or warning signs were mostly at the same level, but there were quite a wide range of different issues the interviewees wanted to name:

*"Operating profit has to be big enough, so that debts can be paid within the agreed time. Debt periods vary between 3-10 years. In case the company has too much debt with low equity ratio, it is considered as a negative signal. Then you have to find out if some capitalization is needed for better equity ratio."*

*"Negative operating profit, general downtrend concerning all the numbers in the financial statement. Negative equity is definitely no."*

*"It is possible to find those issues when you go through the whole trend. If those are faced, then a discussion is needed with the aim to clarify if there would be such issues which*

*could be sharpened. These issues can be related to the business area, economic trends, or the business operations of the company."*

*"If there is too much debt compared to the ability to pay back, it is not clever to fix the situation by using more debt, because the risks concerning the continuance of the company will be too big. In a situation like this, it is usually better to utilize finance related to equity which brings certain flexibility for cash flow. Then it is easier to return the cash flow to a healthy level."*

*"Decreased profitability is always a remarkable worry."*

*"It is not possible to completely avoid credit losses in banking, but it is important that the amount of them is in balance when comparing to the size of a bank."*

*"If equity ratio starts to be almost zero, or even negative."*

Four out of eleven also added that is important to face the facts in different situations. If the numbers in financial analysis indicate that there is no chance to keep on operating, this should be told to the customer honestly and in a clear way:

*"The situation has to be realistic, "artificial respiration"-projects will not be possible."*

The last question before the free comments concerned the impact of the COVID-19-pandemic. The interviewees saw that the ongoing COVID-19-pandemic has some certain impacts on their work. One of the core aspects was the fact that the business activities of a company are now followed with the help of a larger perspective than before. Two of the interviewees also saw that the pandemic has created a kind of flexibility all over the place in our society, and hence banks are also meeting the unusual situation with their customers, as they want to help healthy companies over the acute situation. This is executed for example by providing certain flexibility concerning terms of payments.

The fact that the final consequences of the pandemic cannot be determined yet was faced among the given answers:

"*The realities and the regulations concerning finance have not disappeared during the COVID-19-pandemic, but several companies have now a decreased ability to invest while* *getting into debt has increased. We will see how companies will recover and grow when the pandemic starts to ease and the new normal will appear.*"

"*Financial institutions try to see the time after this COVID-19-pandemic, and to make such decisions that would be rational. Ability to pay back in the long run is something that is necessary to evaluate both before the pandemic and after it."*

*"It is important to be proactive and to ask for example "how are you?" although there would not be any special need to do that. New alternatives concerning financial instruments have appeared, and it is also important to deal that information."*

Thus, the answers are in line with the approach KPMG (2020) stated. The general view regarding securitization was the most common issue that appeared during the interviews. Companies with a strong balance sheet will cope with this abnormal situation better than those who do not have such a good one. Flexibility of operative business management also plays a key role in this framework, and it also depends on the business area of the company. In case a company works in catering business or travel industry, the pandemic naturally has a huge impact on that company's business.

There was one individual who wanted to clarify how the pandemic affects one's own work:

*"After the pandemic started, you have had more time to focus on such operations which are not related to customer relationships. Regulation is an example of those issues. Overall, more flexibility concerning working life has appeared due to this situation, and for example digitization in banking business has become faster."*

### 4.2.3. Credit decisions

Each one of the interviewees did not see the decision-making process to be challenging, for the most part. However, there were a few details some of them wanted to add. The first one is the situation where the ratios of a company seem not to be so strong. In those cases, a company needs to have clear visions concerning the future. One individual also argued that the tightened regulation in financial operations has caused more work which sometimes can be seen as one kind of brake in the decision-making process. A simple conclusion was also faced with the help of the question: the longer you have been working in the field, the easier the decision-making is. One of the individuals wanted to highlight the difference between old and new companies:

*"I would say it is challenging when it is about new companies. Business plans and profitability calculations are often defective. Especially small entrepreneurs can handle with the functional side but are not so keen on drawing plans and thinking about them. They are hasty to start with their business operations. Of course, professional ability helps to control decision-making."*

As normative decision theory is based on the aim to investigate how people will make decisions in certain circumstances if they are willing to be mentioned as rational, whereas descriptive decision theory aims to describe how those decisions are really made in various situations, it can be stated that both these are needed when making credit decisions. The data from the interviews indicates that you need to be rational and try to make such decisions which are reasonable, from the point of view of both the bank and the customer, and thus it is related to normative decision theory. It is also obvious that situations in this field are very varying, as there are companies from several business areas and with different financial or administrative situations, so descriptive decision theory is also included.

The interviewees were also quite unanimous concerning the question "How do you see financial statements affecting your decision-making?". The outcome of this question was that although financial analysis creates a certain basis for credit decision-making, it cannot be considered as a whole truth.

*"Those are the basis for decision-making, but you cannot get all the vital information only with the help of them."*

*"A starting point when you are heading to the process. A good situation gives an opportunity to think about other impacts and helps to believe in the future. A bad situation works naturally vice versa, but there may be a way to improve the structure of the balance sheet etc. in one way or another."*

*"Financial statements are a vital element especially when you are working with new customers, and you don't know about their business operations yet."*

*"Banks utilize certain ratings for customers which guide decision-making significantly. As those ratings are created mostly with the help of verified financial statements, their role is high."*

"*The final decision can be seen as a mix of both financial analysis and qualitative aspects related to the company. Qualitative risks are things such as for example know-how of the owners, owner's possibility to invest, risks within the business area, etc."*

*"The final decision is mostly based on numbers and facts, but you also have to consider the owner(s) of the target company; the impression they give is very important."*

According to KHT-yhdistys (2012, 18-20), the Finnish listed companies have been preparing their consolidated accounts according to IFRS since January 2005. Unlisted companies in Finland are allowed to prepare the accounts according to Finnish GAAP, which also creates the basis for taxation. Due to this fact, financial institutions have little influence on the construction of financial information of their customers. Nevertheless, there is always a possibility to request more information or clearance from the customer, and this was also argued by some of the interviewees.

As all the interviewees saw that financial analysis is required when making credit decisions, but not the only aspect, the answers concerning the question about the final decision were as follows:

*"You have to trust in the owners and the business operations of a company. When it comes to business operations, this means concrete proofs from profitable business activities."*

*"The final decision consists of "the big picture". Intuition and experiences from the manager's own point of view cannot be ignored in this context."*

*"The final decision is based on financial analysis, outlooks of the company, outlooks of the business area."*

*"The ability to pay back has to be based on the cash flow of a company, not on realization of the securities. Plans should be understandable and revenue logic clear. Speculative plans are "no go", for the most part."*

*"It is about the whole picture. Financial analysis, outlooks, rationality of the plans, and the payback time. There may be cases where you need to make sure that the owners of a*

*company are committed; this can be done for example by requiring enough own financing or securities."*

*"The whole picture will be evaluated before the final decision. There are usually more than one people behind a certain decision, so it is about mutual consideration."*

*"Financial analysis, securities, own experiences / professional ability. One's own professional ability is very remarkable when discussing about new companies, because there are no history or facts to rely on."*

The answers to the question "How do you control the operations or the process during the payback time?" were very similar to each other. It is essential to utilize data from the own systems of a bank, but also necessary to socialize with customers.

*"We are in contact via telephone during every quarter. Financial statements are required annually."*

*"Financial statements can be required each quarter, if it is necessary."*

*"Systems utilize bank's own data, but when it is about bigger companies it is essential to be in contact with the customer, so that mutual understanding concerning the whole picture can be created."*

*"It is possible to utilize financial statements from each year. Customer meetings are one part of this job. There are also some internal data systems that can be used for example controlling payments."*

At the end of the interview guide there was also a possibility to give some free comments, but only one of the individuals used that possibility. During the telephone discussions it started to seem that they prefer this method to the written form. As noticed earlier, the central detail they wanted to emphasize was the cohesion between financial analysis and other relevant information concerning a company in credit decision-making. Both these are required when making a final decision.

The one who added free comments argued:

"*The role of financial analysis has increased significantly during the decades in banking. In the beginning of my career, it was not usual to ask for financial statements. Instead, the history related to the ability to pay back, and some basic information concerning the company were enough.*"

# 5. Conclusions

According to Bryman & Bell (2011, 560), qualitative content analysis is considered one of the major approaches when it is about qualitative analysis of documents; despite the fact that quantitative content analysis is more common in business and management.

Content analysis is suitable for many qualitative research cases, and it is one of the most common methods in the context of analyzing qualitative material. Content analysis helps researchers to organize the information into a compact and clear form, without losing any vital information. (Puusa & Juuti 2020, 142-145)

The aim in analyzing qualitative data is to create an entirety that can be utilized in producing a versatile and well-motivated interpretation, and which makes creating conclusions possible (Puusa & Juuti 2020, 142). In this research, the material was collected with the help of the interview guide, and thus the material was quite easy for the researcher to work with.

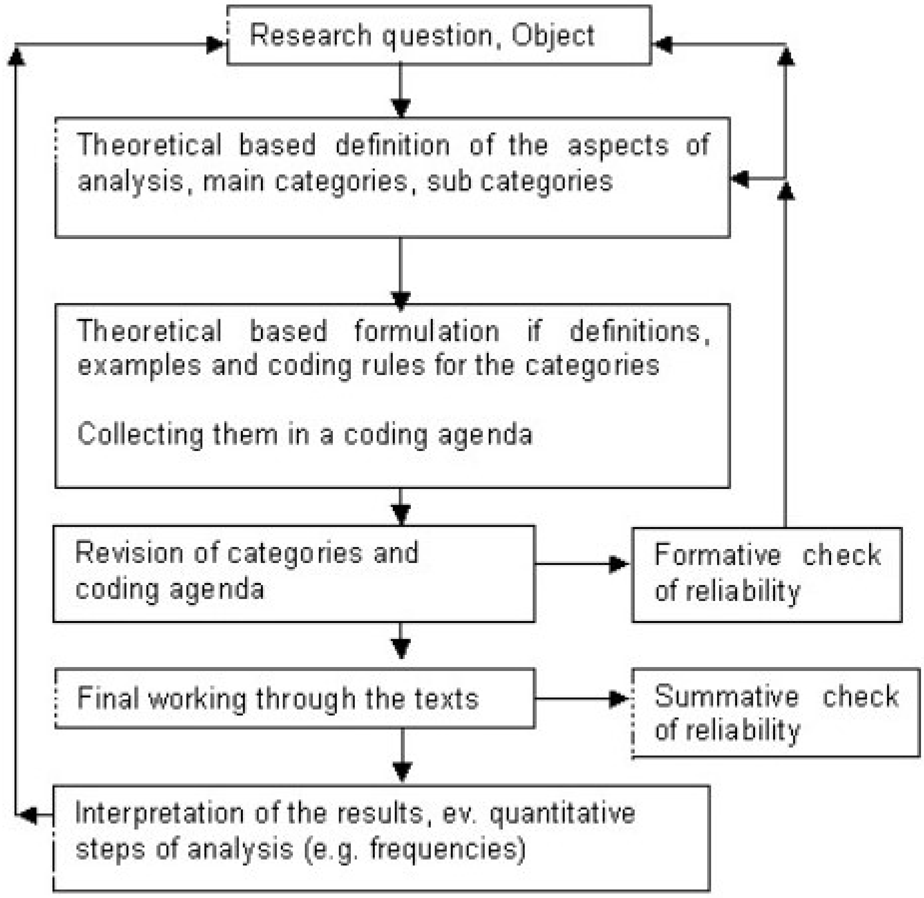


Figure 5: *Step model of inductive category development (Mayring 2000)*

## 5.1. Consequences

According to Gibbs (2018), analyzing qualitative data is in some cases generally considered as the focus of qualitative research. Instead, the data collection is seen as a preparatory step towards this. Several approaches can be found in the context of analyzing qualitative data; some of them are more common, whereas others are suitable only for data of certain type. However, the mutual aspect concerning all of these is the fact that they are grounded in textual analysis which causes all the materials in qualitative research to be prepared for analysis as text. There are such cases where the internal structure of the text is more important than in other cases; for example, when comparing a narrative to a semi-structured interview.

The interviews were conducted with such professionals who work in banking, in close co-operation with corporate customers, and were conducted during the spring and the autumn of 2021. Those interviewed were first contacted and asked whether they had the time and willingness to be a part of this kind of study. After that, the interview questions were sent in an electronic form. When the written answers arrived, the researcher contacted the interviewees via phone, with the purpose of processing the given answers and giving the possibility to amend something concerning their answers. Also, four online-interviews with the help of the Zoom-service were included in this research case. The interview guide was sent to the interviewees before the Zoom-interview due to better accuracy.

| Date | Person | Duration |
|---|---|---|
| 29.8.2021 | Individual H | 40:14 m. |
| 2.9.2021 | Individual I | 31:03 m. |
| 3.9.2021 | Individual J | 51:13 m. |
| 16.9.2021 | Individual K | 58:03 m. |

Figure 6: *The online interviews*

Seven out of the people who answered were men, three out of eleven women. The ages vary between 39-63 years. One of the individuals did not want the age and the gender to be public. Four of the individuals hold a university degree, five of them a university of applied sciences degree, and two of the individuals hold a vocational degree. Apart from one these educations are related to business administration.

| Information | Parameter | Amount | Percent (%) out of all the individuals |
|---|---|---|---|
| | | | |
| **Age:** | <40 | 1 | 9,09 % |
| | 40-49 | 3 | 27,27 % |
| | 50-59 | 2 | 18,18 % |
| | >60 | 4 | 36 % |
| | (secret) | 1 | 9,09 % |
| | | | |
| **Gender:** | male | 7 | 64 % |
| | female | 3 | 27,27 % |
| | (secret) | 1 | 9,09 % |
| | | | |
| **Educational degree:** | vocational | 2 | 18,18 % |
| | university of applied sciences (bachelor) | 4 | 36,36 % |
| | university of applied sciences (master) | 1 | 9,09 % |
| | university (master of science) | 4 | 36,36 % |

Figure 7: *Personal information of the interviewed people*

Some significant differences between the given answers were not found. Four out of eleven individuals work in a smaller local bank, and thus it can be stated that their approaches to the questions concerning for example ethical aspects were not so comprehensive, compared to the answers which were given by the individuals who work in a bigger, international bank.

According to Metsämuuronen (2011, 264), similar observations can be seen as a good sign in terms of a good qualitative report. Many of the interviewed managers had quite concordant answers in many questions. Due to the chosen method and anonymity of the interviewees, it is difficult to estimate how much time they have spent in answering the questions. This could have told something about their contribution concerning this study case. However, they had the possibility to orientate themselves with the questions beforehand, so the used time would not have given some answers concerning their motivation. The interviewees also had the opportunity to choose a suitable time to participate in this research case, so it can be assumed that they have had enough time to answer the questions.

When using a questionnaire, the researcher is not able to confirm whether all the interviewees have understood the questions similarly (Hirsjärvi et al. 2016, 195). Thus, the risk of misunderstanding increases. However, any clear misunderstandings were not mentioned among the given answers.

The researcher aspired to be as neutral as possible during the research process. This is an aspect that Eskola & Suoranta (2001, 19) want to highlight; researcher's own experiences should not create a layout which would mold the research process too much towards a certain direction.

## 5.2. Analyzing the results

Analyzing data which is collected from interviews requires a method. In this thesis, the results were analyzed with the help of the qualitative content analysis; more specifically the chosen method was problem-driven analysis. According to Krippendorff (2013, 357), this method is utilized in cases where one wants to know something about a certain issue and where there is no former information beforehand. In other words, the information is collected by using the data collected from the target group.

In this research, the analyzing process was executed as follows:

1) Reading through the whole material several times.
2) Starting to look for suitable expressions concerning the research question of this thesis.
3) Repeating the previous point from the points of view of the headlines in the fourth chapter. During this process, the material started to repeat itself, and thus it started to seem to be comprehensive enough for this research case.
4) The research question was divided into upper and lower categories. This was executed by utilizing both the theoretical review and the collected data. An example of the analysis can be found in Figure 8.

| Original expression | Lower scale | Upper scale | Category |
|---|---|---|---|
| 1. Individual: Equity ratio, accounts receivable, accounts payable, treasury.<br>2. Individual: Same as from the point of view of the bank. | From one's own point of view | The most important figures / ratios | Does financial analysis provide enough information in the context of minimizing credit risks |
| 1. Individual: EBITDA, equity ratio, financial results.<br>2. Individual: Liquidity, equity ratio, viability. | From the point of view of the bank | | |
| 1. Individual: Significant (approximately 80-90%).<br>2. Individual: 75%. | The role of financial analysis (%) in decision-making | How does financial analysis affect decision-making | |
| 1. Individual: The construction of balance statement has a huge impact (what one has there).<br>2. Individual: Negative EBITDA, negative equity. | Possible hazards or warning signs | | |

Figure 8: *An example of the analyzing process*

After drawing such tables as Figure 8, the fourth chapter concerning the results was written. Categories, as well as upper and lower classes, were created with the help of the material. The interpretation of the analysis was made with the help of the background information of the interviewees.

As all the online interviews were recorded, the data analysis was processed in this case by listening to the recorded interviews. With the aim of finding the most significant and relevant insight, the researcher needs to process the recordings several times, so that any useful information will not be ignored. Marshall (1996) sees theoretical sampling to build ambiguous theories from the incipient data, with the aim of selecting a new sample for investigating and defining that theory. That method is considered a main strategy when discussing the grounded theoretical approach and is also utilized in some form in qualitative research that requires an interpretation.

The theoretical findings presented in the second chapter, and the research findings presented in the previous chapter, are discussed below. The results are presented by using a comparison which consists of both the theoretical review and the gathered data.

As Asif Raz et al. (2019) stated, after the year 2008 financial experts worldwide have researched and analyzed primary factors underpinning the credit crisis to identify problematic act and effective solutions with the aim of helping financial institutions to avoid disasters in the future. This causes banks to pay attention to better risk management strategies which may protect them in the long run. Similar evidence was found with the help of the empirical findings, since most of the interviewed managers saw that credit decisions are mostly based on both qualitative aspects and financial statements, instead of managers' own professional abilities.

Klomp & de Haan (2012) argued banking regulation and supervision to affect the risks of high-risk banks, whereas most measures for bank regulation and supervision do not have a significant impact on low-risk banks, and thus the research question is based on a such hypothesis that regulation and supervision will not have such a significant effect on this case. Nevertheless, the empirical findings did not highlight that viewpoint so much. Instead, many of the managers saw that regulation both causes more and more work and sometimes affects the decision-making process. Those who work in a small, national bank also argued that guidelines concerning regulation do not depend on the size of a bank, and thus they can be similar for both international and national banks.

Atkinson & Kaplan (1989, 1) stated managers to be able to acquire information with the help of management accounting systems for planning or controlling operations. The systems consist of gathering, identifying, processing, analyzing, and reporting information to managers, and are meant to help decision-making within a company, instead of informing external stakeholders like financial accounting information. The research data confirms that it is necessary to utilize data from the own systems of a bank, but also important to be in touch with customers.

According to Belas et al. (2018), the global financial crisis has caused getting bank finance to be more difficult for SMEs (small and medium enterprises). The empirical findings reinforce this approach, as many of the interviewed managers argued that ethical aspects and other qualitative aspects become more and more important continuously. One of the individuals wanted to highlight that these issues have to be in order in the future if a company wants to acquire finance at all. Regulations and guidelines concerning financial numbers have also tightened due to the global financial crisis, so the financial situation of a company must be in shape when discussing corporate finance.

Rapoport (1998, 3) argued decision theory to occur in a situation where one or several operators need to make a choice considering alternatives they have got. The alternatives may deal with operations to be set in motion, objects to take over, or an amount of money to pay. These alternatives can also be considered as beliefs which can occur for example in a situation where a jury must make a choice whether an actor is guilty or innocent. The empirical findings indicate similar results, as there exist only two alternatives when discussing credit decisions: either positive or negative. One standpoint that arose from the findings was the fact that it is not a straightforward issue to say if a decision will be positive or negative, as there are some aspects which can turn the whole situation over quickly.

As Hammond, Keeney & Raiffa (1998) explain, decision-making is perceived as a process of making certain trade-offs. Having only one objective can be described as luxury, but usually our target is to go for several different objectives. In decision-making, the most challenging circumstance is to make such trade-offs which would be the optimal ones. This is an element that also occurred in the research data. Especially under this COVID-19-pandemic it is important that healthy companies cope with the situation.

Subramanyam & Wild (2009, 9) saw that creditors lend funds to a company in return for a promise of repayment with interest. While discussing about credit decisions during the interviews, one common phrase arose many times: the situation must be under control. For example, it is important for a manager to have a trained eye regarding the amount of debt, as there may be cases where it is not clever to fix the economic aspects of a company by using more liabilities. In complex cases, asking for a viewpoint from a colleague is usually rational.

Andekina & Rakhmetova (2013) argued that all kind of business entities should monitor their financial and economic activities for distress to be avoided, due to the recent financial crisis. To evaluate the business and to forecast the bankruptcy applying the financial ratios are such multivariate discriminant analysis approaches that are used in common circumstances. Most of the respondents also highlighted evaluating and forecasting to be key factors in this framework. Hence, a small paradox can be faced when discussing the role of financial statements in credit decisions; although they are necessary, no guarantee about upcoming activities can be created.

The literature review did not interpret the financial information from previous years as one tool for avoiding credit losses. Nevertheless, the empirical findings highlight this tool strongly. The comparison between current and previous numbers was considered particularly important. By understanding the development of the most relevant numbers, an improved ability to see the general view can be achieved.

# 6. Final discussion

The purpose of this thesis was to investigate how banks utilize financial analysis with the aim of minimizing credit risks among corporate customers. Alongside this approach, non-numeric aspects were taken into consideration as well. The theoretical background was created with the help of the theoretical review which includes aspects concerning the core details of this research area. Based on the theoretical review, the case study concept was created and implemented among the professionals in this business area. The interview guide consisted of questions related to the role of financial analysis in credit decision-making, supplemented also with questions that concern other essential approaches in this area.

From the researcher's point of view, the thesis yielded such results the researcher expected. Nevertheless, the discussions were on a basic level which does not support the aspiration concerning an in-depth analysis.

One problem in a case study is the target group. This thesis had quite a specific target group, supplemented with a specific field of subject. Therefore, the researcher sees that a replication cannot be executed, due to the fact the discussions are related to the personal preference among a small group of individuals. Had the study been made with the help of financial institutions other than banks, the results might have been significantly different.

No certain guide concerning the sampling of a qualitative study exists. Instead, a smaller sampling can be comprehensive enough if the interviewees have much specific information related to the research area. (Patton 2015, 470)

Eskola & Suoranta (2001, 66) see that generalization of a study requires rational research data. The interviewees should have quite similar circumstances, have relevant information concerning the research problem, and be interested in the research case. In this case study, those criteria were faced. All the interviewees work in banking, so they have quite identical circumstances, despite the fact that the length of their work experience in this business area varies.

As the research question in this thesis is formulated as “How does financial analysis affect the credit rating of corporate customers in banking?”, it can be stated that the thesis has contributed to the understanding of credit risk minimizing in banking regarding corporate customers. The thesis gives a holistic overview concerning this area of study. Worth mentioning is also the fact that the validation of this thesis is highly dependable on the scope of the thesis. Validation is also dependable on the current situation in our society. In case the thesis would have executed before the COVID-19-pandemic, there would have been a possibility for face-to-face-interviews, and the given answers would have indicated different outcomes.

In conclusion, the researcher could say that the ability to understand financial numbers, so that those can be utilized in the decision-making process, is considered as a key finding of this research process. Financial analysis is an essential tool when assessing credit decisions of corporate customers, but not the only aspect; a manager cannot make decisions only with the help of numbers. The data from this research also points out that the situation can turn around easily, as seven out of eleven individuals argued that they have made a negative decision which was based on ethical aspects only. In those cases, the numbers in financial analysis are meaningless. Another interesting point that arose during this research process is the fact that the role of both financial analysis and aspects such as authorities' requirements, ethical aspects, and other qualitative factors increases all the time. The older individuals who hold long experiences in banking stated that for example thirty years ago credit decisions were quite much based on managers' own intuitions, instead of proven facts or data. Some of the younger individuals also argued that the situation has changed after the beginning of the 21st century and keeps on changing continuously. Nowadays there exist not so much space to trust on own intuition, as instead it is both financial analysis and qualitative aspects which will lead to a certain decision.

From a broader perspective, it can be stated that the findings of the thesis are relevant compared to the previous research by Altman & Saunders (1996). The tightened regulation, the development of information technology, and overall changes in our society have had their impact on how credit decisions are made. One of the core findings is the fact that this area of study develops continuously. Thus, had this kind of study been made twenty years from now, there might be some significant differences among the given answers.

## 6.1. Topics of future research

One approach for future research could be an expanded, simulated situation where a group of professionals is gathered in a real-life situation. This could be implemented with the help of a group discussion, so that a researcher provides a model example of financial analysis. Hence, the professionals would have a possibility to both give their opinions and to discuss within a group. Another aspect that arose during this thesis project is the relevance of the history of a certain company. If a researcher provides several financial statements concerning the same company, but which are from different financial years, professionals would be able to demonstrate how the situation has changed, and thus what kind of effect it will have on the decision-making process.

Future studies that are relevant to the field also deal with the COVID-19-pandemic. As noticed, the final effects and consequences concerning financial institutions cannot be clarified yet. Therefore, a case study which is based on the effects of this pandemic in banking, or in other financial institution, would be useful. However, these approaches will not be possible if the global COVID-19-pandemic is running.

Finally, as this research process was conducted as one part of the master's thesis, it also causes certain limitations concerning both the depth and the timetable of the research. In case the study would have done in a different context, more significant or deeper conclusions could have faced.

# 7. Svensk sammanfattning (Summary in Swedish)

## Signifikansen av finansiell analys i kontexten av att minska kreditförluster med företagskunder inom bankbranschen

Inledning

Den här pro gradu-avhandlingen undersökte på vilket sätt kreditrisker kan minskas med hjälp av finansiell analys med företagskunder inom bankbranschen. Det här fältet har utforskats tidigare, men undersökningar till exempel från 1990-talet anses inte längre vara relevanta. Således var syftet att samla ihop sådan information som skulle vara väsentlig på 2020-talet och avhandlingen besvarar följande forskningsfråga: På vilket sätt påverkar finansiell analys kreditvärdering av företagskunder inom bankbranschen?

Altman och Saunders (1996) utforskade utvecklingen av kreditriskers mätning på 1970- och 1980-talen. Enligt dem antalet instrument som ligger utanför balansräkningen hade utökats under de föregående tjugo åren. Enligt Altman och Saunders ska nya aspekter formas under de följande tjugo åren. Detta kommer att vara möjligt med hjälp av betydande utvecklingar gällande databaser.

Avhandlingen består av sex kapitel. Den börjar med en inledning som beskriver idén, problemområdet, forskningsfrågan och strukturen av avhandlingen. Det andra kapitlet är ett teoretiskt ramverk, vilket ger en helhetsbild av de relevanta begreppen och källorna samt den teoretiska bakgrunden.

Därefter behandlas forskningsmetoden, som är en fallstudie och således är forskningen kvalitativ. Alla de intervjuade var finländska direktörer från olika banker och de krävde att få vara anonyma. Svaren som samlats från intervjuerna har analyserats med hjälp av problemdriven analys.

Det fjärde kapitlet som presenterar resultaten har delats upp i tre underrubriker vilka fokuserar på vissa intervjufrågor.

Därefter analyserades resultaten. De centrala kopplingarna och skillnaderna mellan både de olika svaren och den teoretiska delen presenteras.

Det sista kapitlet gäller slutdiskussionen vars syfte är att erbjuda ett sammandrag över hela avhandlingen. På vilket sätt har forskningsprojektet lyckats och vad kunde förbättras? Till slut föreslås hurdana undersökningar som kunde göras i framtiden.

Metod

I litteraturöversikten diskuteras teorin genom identifierade huvudteman. Den teoretiska referensramen börjar med aspekter gällande hantering av kreditrisker. Efter det presenteras teman som olika typer av kapitalstruktur, beslutsteori, strukturen av bokslut och etiska eller moraliska problem inom kreditsbeslutsfattande.

Klomp och de Haan (2012) påpekar i sin forskning att banker av höga risker påverkas av regleringen inom bankbranschen, men regleringen inte har ett så väsentligt intryck på banker med låga risker. Eftersom den här avhandlingen fokuserar på affärsbanker i stället för investeringsbanker, baserar forskningsfrågan sig på en sådan hypotes att reglering inte har ett starkt intryck.

Elva individuella semi-strukturerade intervjuer har använts som kvalitativ forskningsmetod i denna studie. Enligt Bryman och Bell (2011) brukar kvalitativa forskningsmetoder utnyttjas då det gäller att ta reda på vissa helheter och kan därmed anses vara metoder vars syfte huvudsakligen är att belysa förhållandet mellan teori och praktik.

Sju av alla elva intervjuer utfördes både skriftligen och per telefon. Två intervjuer gjordes både skriftligen och online i Zoom-programmet och två intervjuer ordnades endast online med hjälp av Zoom. Orsaken till att intervjuerna ordnades både skriftligen och online var inte endast det långa avståndet mellan de intervjuade och intervjuaren, utan också myndigheternas rekommendationer gällande tryggheten i covid-19-situationen. Längden av en online-intervju varierade mellan en halv timme och en timme. Varje intervju följde samma intervjuguide. Alla semistrukturerade intervjuer började med frågor om informanternas bakgrunder. Varje informant hade kontakt med företagskunder och hade varit med i en kreditbeslutsprocess från början till slut.

Eftersom datamaterialet som samlats in med hjälp av intervjuerna kommer från sådana personer som jobbar i en bank i Finland, är den här avhandlingen mest relevant för den finländska marknaden.

På grund av att syftet med den här avhandlingen var att erhålla en djupare förståelse av handlingar och åsikter inom ett visst område, var en kvalitativ undersökning den forskningsmetod som kunde anses passa bäst för den här avhandlingen. De viktigaste datamaterialen som samlades in i intervjuerna analyserades efter det tillsammans med annat datamaterial, bland annat vetenskapliga artiklar, teorier, och annan allmän information som finns på internet.

Eftersom syftet i den här studien är att få en bättre förståelse av hur kreditrisker kan minskas för företagskunder i en viss bank, var det relevant att ha fördjupade diskussioner med personer inom det här området. Att genomföra intervjuer med personer gällande deras åsikter och erfarenheter hör till den kvalitativa forskningsmetoden.

Resultat och avslutning

Syftet med den här avhandlingen var att förstå hur bokslutsinformation påverkar när det gäller att minska risker för kreditförluster i kreditbeslutsfattande.

Respondenterna ansåg att även om bokslutsinformation spelar en stor roll inom kreditbeslutsfattande kan den inte anses vara hela sanningen. Det är ytterligare viktigt att förstå vad som är orsaken bakom en viss siffra, samt veta någonting om framtiden; bland annat teman som kassaflöde och investeringar som äger rum i framtiden är väsentliga i det här sammanhanget.

Enligt intervjuguiden behandlades sådana frågor som till exempel hur krävande beslutsfattande är, vilka de viktigaste siffrorna både från bankens och direktörens synvinklar är, hur processen under betalningstid kontrolleras, vad som kan anses vara en möjlig varning i bokslutsinformation, hur etiska frågor i processen beaktas, och vilken roll covid-19-pandemin spelar inom den här branschen.

De intervjuade direktörerna ansåg att beslutsfattandet huvudsakligen inte är krävande. En av dem argumenterade att det kan vara problematiskt med nya företag, eftersom då man inte har bokslutsinformation eller annat datamaterial från tidigare finansår.

Det fanns tre specifika nyckeltal som kom fram i nästan alla svaren: likviditet, lönsamhet och soliditet. Några av de intervjuade direktörerna betonade att dessa tal formar en viss helhet där alla av de där delarna borde vara i ordning – annars uppstår olika utmaningar.

Till exempel om företagets lönsamhet börjar försämras kommer företaget snart att ha problem med likviditeten.

Då frågan var om möjliga varningar i bokslutsinformation nämndes det olika siffror, men det som ofta kom fram var negativt eget kapital. Förminskad lönsamhet är också något som anses vara problematiskt.

Resultaten från den här undersökningen visar att processen kontrolleras under betalningstiden med hjälp av datasystem, men vid sidan är det också viktigt att vara i kontakt med kunder. Därtill är det också nödvändigt att en direktör och sin kund lyckas att skapa en gemensam förståelse gällande kundföretagets situation.

Alla intervjuade tyckte att etiska detaljer har allt större vikt inom kreditbeslutsfattande. Det beror också på banken – de som arbetar i en nationell bank hade inte så mycket erfarenhet av sådana här saker jämfört med de som jobbar i en internationell bank. Sju av de elva direktörerna berättade att de hade gjort ett negativt kreditbeslut som baserade sig bara på etiska detaljer.

Eskola och Suoranta (2001) betonar att logiska forskningsdata är en grundförutsättning då man håller på att generalisera en forskning. Intervjuade människor borde ha ganska likadana omständigheter, aktuell information gällande forskningsproblemet, och de borde också vara intresserade av studien. De här förutsättningarna uppfylldes i den här studien.

Resultaten från den här undersökningen pekar på att tiderna har förändrats från forskningen av Altman och Saunders (1996). Arbetet inom finansieringsbranschen baserar sig huvudsakligen på informationsteknologi. Värt att lägga till i diskussion är också covid-19-pandemin som har satt sin prägel såväl på den här branschen som på hela världen under de senaste två åren. För tillfället är det inte så lätt att förutsäga hur företagsekonomiska situationer kommer att vara efter pandemin.

Ett betydande samband mellan litteraturöversikten och resultaten kan hittas i den här studien. Därmed kan man säga att de tillsammans bidrar till en förbättrad förståelse om hur kreditrisker kan undvikas med företagskunder i banker.

# 8. References


<u>*Articles:*</u>

Adamko, P. Spuchlakova, E. Valaskova, K. (2015). The Credit Risk and its Measurement, Hedging and Monitoring. *Volume 24, 2015, pp. 675-681.*

Alpi, K. M. Evans, J. J. (2019). Distinguishing case study as a research method from case reports as a publication type. *Journal of the Medical Library Association. Vol. 107, No. 1 (2019).*

Altman, E. I. Saunders, A. (1996). Credit Risk Measurement: Development over the Last 20 Years. *Journal of Banking & Finance, 20th Anniversary Issue, 1997.*

Andekina, R., Rakhmetova, R. (2013). Financial Analysis and Diagnostics of the Company. *Procedia Economics and Finance, 5 (2013), pp. 50 – 57.*

Asif, R. Bilal, S. Noor, M. Ur Rehman, Z. (2019). Impact of risk management strategies on the credit risk faced by commercial banks of Balochistan. *Financ Innov 5, 44 (2019).*

Basit & Hassan. (2017). Impact of Capital Structure on Firms Performance: A Study on Karachi Stock Exchange (KSE) Listed Firms in Pakistan.

Belas, J. Dvorský, J. Gavurová, B. SMRCKA, L. (2018). The impact of social and economic factors in the credit risk management of SME. *Technological and Economic Development of Economy. 24. 1215-1230.*

Boghean, F. Hlaciuc, E. Boghean, C. Morosan-Danila, L. (2010). The role of accounting in decision making by managers – empirical research regarding the use of financial accounting information. *Volume: AMIS 2010 - Proceedings of the 5th International Conference, Accounting and Management Information Systems.*

Cancino, S. Escalante, G. (2019). Credit decision-making and information requirements. *Dimensión, Empresarial, 18(1).*

Chen HH., Shia BC., Lee HY. (2011). A Comparative Analysis of Credit Risk Management Models for Banking Industry Using Simulation. In: Zhou Q. (eds) Applied Economics, Business and Development. ISAEBD 2011. *Communications in Computer and Information Science, vol 208. Springer, Berlin, Heidelberg.*

Chen, L. Li, H. Liu, F. H. Zhou, Y. (2020). Bank regulation and systemic risk: cross country evidence. *Review of Quantitative Finance and Accounting*.

Dafermos, Y. Galanis, G. Nikolaidi, M. (2018). Climate Change, Financial Stability and Monetary Policy. *Ecological Economics, Volume 152, October 2018, pp. 219-234.*

Daniele, L. Gangi, F. Mustilli, M. Varrone, N. (2018). Corporate Social Responsibility and Banks' Financial Performance. *International Business Research. Vol. 11. No. 10. 2018.*

Demerjian, P. (2007). Financial Ratios and Credit Risk: The Selection of Financial Ratio Covenants in Debt Contracts. *SSRN Electronic Journal. 10.2139/ssrn.929907.*

Djalilov, K. Piesse, J. (2019). Bank regulation and efficiency: Evidence from transition countries. *International Review of Economics & Finance, Vol. 64, November 2019, pp. 308-322.*

Eilon, S. (1992). Key ratios for corporate performance. *Volume 20, Issue 3, May 1992, pp. 337-343.*

Fatemi, A. Fooladi, I. (2006). Credit risk management: a survey of practices. *Managerial finance, Vol. 32 No. 3, 2006, pp. 227-233.*

Ferdous, L.T. (2019). Capital Structure Theories in Finance Research: A Historical Review. *Australian Finance & Banking Review; Vol. 3, No. 1; 2019.*

Frohlich, M. Tsikriktsis, N. Voss, C. (2002). Case research in operations management. *International Journal of Operations & Production Management, Vol. 22, No. 2, pp. 195-219.*

Gorton, G. Winton, A. (2003). Handbook of the Economics of Finance: Bank regulation. *Volume 1, Part A, 2003, pp. 431-552.*

Hammarberg, K. Kirkman, M. de Lacey, S. (2016). Qualitative research methods: when to use them and how to judge them. *Human Reproduction, Vol. 31, No. 3, pp. 498–501, 2016.*

Hammond, J. S. Keeney, R. L. Raiffa, H. (1998). Even Swap: A rational method for making trade-offs. *Harvard Business Review, 76(2): pp. 137-149.*

Howarth, D. & Quaglia, L. (2015). The Comparative Political Economy of Basel III in Europe. *Edinburgh School of Law Research Paper No. 2015/19, Europa Working Paper No 2015/03*.

Imai, K. Mesler, M. van Deventer, D. R. (2012). Advanced Financial Risk Management: Tools and Techniques for Integrated Credit Risk, Market Risk, Liquidity Risk and Interest Rate Risk Management.

Kahneman, D., Lovallo, D., Sibony, O. (2011). Before You Make That Big Decision. *Harvard Business Review, 89(6): pp. 50-60.*

Klomp, J. de Haan, J. (2012). Banking risk and regulation: Does one size fit all? *Journal of Banking & Finance, Vol. 36, Issue 12, December 2012, pp. 3197-3212.*

Kvale, S. (1983). The qualitative research interview: A phenomenological and a hermeneutical mode of understanding. *Journal of Phenomenological Psychology, 14 (2), pp. 171–196.*

Marshall, M. N. (1996). Sampling for qualitative research. *Family Practice 1996; Vol. 13, No. 6: 522-525.*

Pahuja, A. Sahi, A. (2012). Factors Affecting Capital Structure Decisions: Empirical Evidence from Selected Indian Firms. *International Journal of Marketing, Financial Services and Management Research, Vol. 3, No.3, pp. 76-86.*

Serghiescu, L. Vaidean, V-L. (2014). Determinant factors of the capital structure of a firm – an empirical analysis. *Procedia Economics and Finance 15 (2014), pp. 1447 – 1457.*

Szydeko, A. Biadacz, R. (2016). The role of Financial Statement in Performance Management. *Modern Management Review, vol. XXI, 23 (4/2016), pp. 205-214.*

Van der Stede, W. Young, M. Chen, C. (2005). Assessing the quality of evidence in empirical management accounting research: The case of survey studies. *Accounting, Organizations and Society, 30 (7-8), pp. 655–684.*

Weissova, I. Kollar, B. Siekelova, A. (2015). Rating as a Useful Tool for Credit Risk Measurement. *Procedia Economics and Finance, Vol. 26, 2015, pp. 278-285.*

<u>*Books:*</u>

Allen, L. Saunders, A. (2002). Credit Risk measurement: New approaches to Value at Risk and Other Paradigms. *Second edition*. New York: John Wiley & Sons, Inc.

Atkinson, A. A. Kaplan, R. S. (1989). Advanced Management Accounting. *Second edition.* New Jersey*:* Prentice-Hall International, Inc.

Bell, J. Waters, S. (2016). Introduktion till forskningsmetodik. Lund: Studentlitteratur AB.

Bryman, A. Bell, E. (2011). Business Research Methods. *Third edition.* New York: Oxford University Press Inc.

Catasús, B. Högberg, O. Johrén, A. (2017). Boken om nyckeltal. *Upplaga 3.* Stockholm: Liber AB.

Eskola, J. Suoranta, J. (2001). Johdatus laadulliseen tutkimukseen. Tampere: Vastapaino.

Frostenson, M. (2011). Att förstå företagsetik. Malmö: Liber AB.

Gibbs, G. R. (2018). Analyzing qualitative data. *2nd edition*. London: SAGE Publications Ltd.

Hansson, S. O. (2005). Decision Theory: A Brief Introduction. Stockholm: Royal Institute of Technology (KTH).

Haynes, W. W. Gibson, J. L. (1963). Accounting in Small Business Decisions. Lexington: University of Kentucky Press.

Hirsjärvi, S. Remes, P. Sajavaara, P. (2016). Tutki ja kirjoita. *21. painos*. Helsinki: Tammi.

Järvinen, P. Järvinen, A. (2012). Tutkimustyön metodeista. Tampere: Opinpajan kirja.

KHT-yhdistys. (2012). Introduction to Financial Statements in Finland. *Revised 5th edition*. Helsinki: KHT-Media Oy.

Kontkanen, E. (2009). Pankkitoiminnan käsikirja. *2. uud. p*. Vammala: FINVA.

Krippendorff, K. (2013). Content Analysis. An Introduction to Its Methodology. *3rd edition.* California: Sage Publications.

Mayring, Ph. (2000). Qualitative Inhaltsanalyse. Grundlagen und Techniken. *7th edition*. Weinheim: Deutscher Studien Verlag.

Metsämuuronen, J. (2011). Tutkimuksen tekemisen perusteet ihmistieteissä. *4. painos*. Helsinki: International Methelp Oy.

Patton, M. Q. (2015). Qualitative Research & Evaluation Methods: Integrating Theory and Practice. *4th edition*. California: SAGE Publications.

Puusa, A. Juuti, P. (2020). Laadullisen tutkimuksen näkökulmat ja menetelmät. Helsinki: Gaudeamus.

Rapoport, A. (1998). Decision Theory and Decision Behaviour. *Second revised edition.* London: MACMILLAN PRESS LTD.

Subramanyam, K. R. Wild, J. J. (2009). Financial statement analysis. *Tenth edition*. New York: McGraw-Hill.

Wethey, D. (2013). Decide: Better ways of making better decisions. London: KoganPage.

*Electronic sources:*

KPMG. (2020). COVID-19: Impact on the banking sector. *Global banking M&A outlook H2 2020.* [Accessed 25.1.2021]. https://home.kpmg/xx/en/home/insights/2020/07/covid-19-impact-on-banking-m-and-a-2020.html

Nordea. Capital and Risk Management Report 2018. [Accessed 11.1.2021]. https://www.nordea.com/Images/34-305679/nordea-group-capital-and-risk-management-report-2018-updated-version.pdf

The EBA Methodological Guide. Risk indicators and detailed risk analysis tools. [Accessed 2.2.2021]. https://www.eba.europa.eu/sites/default/documents/files/documents/10180/1380571/02c01596-5122-4d45-ac3e-23eb2f79f032/EBA%20Methodological%20Guide%20-%20Risk%20Indicators%20and%20DRAT.pdf?retry=1

# Appendix 1: The interview guide in Finnish

Taustatiedot:

1) Henkilötiedot (ikä & sukupuoli), koulutus sekä työn kuva.

2) Kuinka kauan olet työskennellyt nykyisessä tehtävässä?

Tilinpäätöstiedot:

3) Kuinka suuri painoarvo (prosentteina) tilinpäätöstiedoilla on päätöksenteossa?

4) Ovatko tilinpäätöstiedot mielestäsi riittävän kattavia?

5) Miten koet, että tilinpäätöstiedot vaikuttavat päätöksentekoosi?

6) Mitkä luvut ovat keskeisimpiä pankin näkökulmasta?

7) Mitkä luvut ovat sinun työssäsi merkittävimpiä?

8) Voiko lukujen perusteella havaita ”varoitusmerkkejä” tai yksityiskohtia, jotka johtavat kielteiseen päätökseen? Jos voi, mikä voisi olla esimerkki kyseisestä tilanteesta?

9) Koetko päätöksentekoprosessin haastavaksi?

10) Miltä pohjalta lopullinen päätös useimmiten tehdään?

11) Miten seuraatte toimintaa / prosessia luoton takaisinmaksun aikana?

12) Miten päätöksenteossa huomioidaan kohdeyrityksen ympäristöasiat, sekä eettiset näkökulmat (lapsityövoima yms.)?

13) Oletko tehnyt kielteisiä luottopäätöksiä puhtaasti eettisin perustein?

14) Miten paljon finanssialan lisääntynyt sääntely on vaikuttanut työmäärään?

15) Koetko, että meneillään olevalla COVID-19-pandemialla on vaikutusta siihen, mitä tietoa painotetaan?

16) Vapaa kommentointi:

# Appendix 2: The interview guide in English

Background:

1) Personal information (age & gender), education, and job description.

2) How long have you been working in your current position?

Financial analysis:

3) What is the role of financial analysis (percent) in credit decision-making?

4) Do you find financial statements comprehensive enough?

5) How do you see financial analysis affecting your decision-making?

6) What are the key figures from the point of view of your bank?

7) What figures / ratios are the most important in your job?

8) Concerning those figures / ratios, are there some “warning signs” or aspects which may lead to a negative decision? If those do exist, what could be an example of that kind of a situation?

9) Do you find the decision-making process challenging?

10) What kind of aspects is the final decision usually based on?

11) How do you control the operations or the process during the payback time?

12) How do you take into consideration the environmental issues and the ethical aspects (child labor etc.) of the target company in decision-making?

13) Have you made any negative credit decisions that are based on ethical aspects only?

14) How much does the tightened regulation concerning financial institutions affect your amount of work?

15) Do you find the ongoing COVID-19-pandemic having any impact on the information that is highlighted?

16) Free comments: