Risk management in collateral SME lending

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Laurea University of Applied Sciences **Abstract**
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Aim of the thesis was to analyze and understand risk management methods and their use when it comes to collateral lending for small and mid-size enterprises. By achieving this the purpose of the thesis was to create more accessible information to different risk management method and how they might work in different scenarios.

Theory aspect is based on written sources in different risk management method utilized in different types of lending, finance in general, legislation and many other. Risk management methods include financial analysis methods, cashflow analysis, ratios, AML, KYC, due diligence methods, industry and company analysis, collateral, syndicated loans and covenants.

Research method used to research the topic is theme interview. Interviews was conducted with one company that is based in Finland and the aim was to get information related to common risk management methods and how they may apply to this company in question.

Main findings were that different risk management methods apply differently to different companies, some methods that lead to good results with one company's situation might not every company in need of finance. Adjusting risk management methods to the borrower in lending seems to give better risk coverage to the lender but also better operating freedom for the borrower, leading to increased change of success in their business.

Keywords: finance, risk management, corporate finance.

Laurea-ammattikorkeakoulu **Tiivistelmä**
Tradenomi (AMK)

Miro Pyykkö

Riskienhallinta menetelmät vakuudellisessa lainauksessa pienille ja keskisuurille yrityksille.

Vuosi 2023 Sivumäärä 29

Opinnäytetyön tarkoitus oli analysoida ja ymmärtää riskienhallinnan menetelmiä ja niiden hyödyntämistä vakuudellisessa lainanmyönnössä pienille ja keskisuurille yrityksille. Tämän saavuttamalla opinnäytetyön tavoite on parantaa tiedon saatavuutta riskienhallinnan menetelmiin liittyen ja siihen, miten ne toimivat erilaisissa tilanteissa.

Teoria osuus perustuu kirjallisiin lähteisiin erilaisista riskienhallintamenetelmistä, jotka ovat käytössä erilaisissa lainan myönnössä, rahoituksessa ja lakisääteisiä riskienhallintamenetelmiä sekä muihin lähteisiin. Riskienhallintamenetelmiin kuului yrityksen taloudellisen tilanteen analysointi, kassavirtalaskelmat, avainluvut, rahanpesun vastainen sääntely, tunne asiakkaasi sääntely, muu selvitystyö, yritykseen sekä toimialaan liittyvä analyysi, vakuudet, syndikoidut lainat ja sopimusehdot.

Tutkimusmenetelmänä käytettiin teemahaastattelua. Haastattelut tehtiin yhdelle Suomessa toimivalle yritykselle ja haastattelun tavoitteena oli saada asiaan liittyvää tietoa eri riskienhallintamenetelmistä, ja siitä miten ne soveltuvat haastattelun kohteena olevaan yritykseen.

Pääasiallinen tulos oli, että erilaiset riskienhallintamenetelmät soveltuvat eri tavoin erilaisiin yhtiöihin. Menetelmät, jotka johtavat hyviin tuloksiin yhden yhtiön tilanteessa eivät sovi jokaiselle muulle yhtiölle, joka tarvitsee rahoitusta. Riskienhallinta menetelmiä säätämällä lainanmyöntäjä voi saada paremman suojauksen riskeiltä ja velalliselle voi tulla enemmän operaationallista vapautta, joka taas johtaa parempaan mahdollisuuteen menestyä liiketoiminnassa.

Asiasanat: rahoitus, riskienhallinta, yritysrahoitus

Content

1 Synopsis 7
2 Lending as a process for SME lenders.. 8
3 Collateral lending 9
4 Lending risk management 10
4.1 Credit exposure 10
5 Tools to control credit exposure and avoid counterparty defaults 11
5.1 Financial analysis.. 11
5.1.1Cash flow analysis 12
5.1.2Ratios in financial analysis 12
5.2 Person specific credit analysis (AML, KYC, Due diligence) 13
5.3 Industry and company analysis 15
5.4 Collateral in risk management (Insurance and valuation) 16
5.5 Splitting the risk and syndicated loans.. 16
5.6 Post disbursement monitoring 17
5.7 Covenants 17
6 Risk management for SME lending in practice 18
7 Research methods... 19
8 Collateral.. 20
9 Financials and industry analysis 21
9.1 Cashflow.. 22
9.2 Financial ratios 22
9.3 Balance sheet... 22
10 KYC, AML and personal credit worthiness. 23
11 Covenants, collateral risk management and ongoing monitoring............... 23
12 Summary.. 24
Sources 26
Tables 30

1 Synopsis

Finance and accessibility of finance has been one of the key components on how companies, countries and people develop trough out of the history. Better access to finance leads to more and faster growth in all sectors if economic and other conditions are stable. (Popov 2017). The writer Alexander Popov also states that “The evidence suggests that countries with better-developed financial systems have higther export shares and trade balances in industries that use more external finance”. Due to this I became interested in how access to finance could be made more accessible and effective.

Finance is in simple terms the event or a task of raising money or other funds for any kind of use. Peoples and companies don’t always have the funds at hand to purchase and pay for everything they want. Financing can also be raised to pay debt in some cases, or complete other some kind of obligation. If the needed funds are not available, they must be borrowed, or something needs to be sold to obtain the money they need to conduct their operation. (Britannica 2022). One major field of finance is the finance of small and middle size enterprises (SMEs). Micro, small, and middle size enterprises are defined as following by the European union (EU).

Company category	Staff headcount	Turnover	or	Balance sheet total
Medium-sized	< 250	≤ € 50 m		≤ € 43 m
Small	< 50	≤ € 10 m		≤ € 10 m
Micro	< 10	≤ € 2 m		≤ € 2 m

Table 1: Definition of SME (European Commission, 2003)

SMEs make up approximately 99 % of all business within the EU. They also make up more than half of the Europe’s gross domestic product also known as (GDP) according to European Commissions website. (European commission 2022). Although demand problems do occur, supply-side constraints are much more prevalent in the field of finance. In many cases SMEs want a loan but choose not to apply for finance or credit. According to the World bank report of 2013 this is the situation for 20 % of SMEs in highly developed countries, 28 % of SMEs in somewhat developed countries, and 44 % of SMEs in undeveloped countries (World Bank 2013). Some SMEs dismiss themselves because they don’t have profitable investments choices, others think that their credit application will not be accepted because, for example, they lack collateral or cannot provide all the required information or documents to the lender (Abraham, Schmukler 2017A).

Problems of SME financing comes from their nature and type. SMEs tend to be newer, many times less formal, some lack of publicly available information, and operate often in not as established sectors, all of which results in higher information asymmetries and risk to the lender. Also, these companies do not always have enough or right type assets or other collateral that could be used. It’s often more expensive or even impossible for SMEs to list in capital markets. In many cases SMEs often fail to attract investor funding as investors often prefer larger companies which are seen as less risky and more liquid. (Abrahm, Schmukler 2017B)

So, in summary SMEs are a key participants of Finnish, European and global economy. SMEs also face a large issue when it comes to financing them and many choose not to invest in growth due to issues of getting finance. My goal in this thesis is to define risk management features so that lenders can use them limit their risk exposure when financing SMEs, focus will be on collateral lending and its risks management, but many of same principles and measures also work on non-collateral lending. There is no geographical limitation on where the things can be used in theory but most of the measures are developed towards finance in developed countries and might not transfer as such to other places.

2 Lending as a process for SME lenders

Recently some fintech lenders have been taking over the SME lending arena. Many SMEs don’t have the required assets and information available that almost all banks require for the company to be considered for credit. These include:

- Financial statements
- Collateral
- Sufficient “track record” and proven management
- And there are high transaction costs

(United nations 2022).

Lending companies that lend to SME companies often replace the enterprise credit risk with that of the owner’s own credit worthiness instead of the company, who is required to personally guarantee loan for the company. They do an individual credit checks to determine whether the owner is broadly creditworthy instead of the company. Another one of the issues is that fintech firms frequently offer only short time loans and usually not revolving credit or other long-term funding. Fintech lender often rely on credit-scoring models instead of traditional credit analysis done by banks. (United nations 2022).

Lending money always involves some kind of a risk or multiple risk factors. To talk about how these risks may be countered and avoided, they must be noticed, identified, and analyzed. There are many tools and resources that banks, and other lenders can employ to analyze an applicant’s risk profile. From the lenders perspective, the risk related to lending is called “credit risk” or “financial risk,” which is calculated by the financial figures of the SME that is applying over a previous period of time where the SME has been working. But financial risk of the lender is not the only risk they have, they also face operating risks, product/service risks, and market risks. (United nations 2022).

3 Collateral lending

First to understand collateral and non-collateral lending we must define “What is collateral?”. The word collateral refers to any type of an asset that has monetary value and is held by a person or a firm. Purpose of giving collateral in a loan is to give added security to the lender, meaning that if the company receiving the loan does not meet its obligations the lender has the right to sell the collateral get their money back and all other costs developed. (Simmons 2019, 3).

Reason for using collateral is many and varies based on transaction that is being done, in everyday life of people’s examples includes mortgages on property where the bank or similar business lends money to the buyer in a way that the lender has legal right to take hold of the property or asset if the buyer fails to follow the terms and conditions of the agreement or fails to pay the necessary repayments in agreed time. In this case, the bought property itself is the collateral which the lender can sell in order to recover the money it loaned out and, in many cases, also all the interest owed in the point of realization. (Simmons 2019, 3).

Collateral is one of the key factors in managing of what is called a counterparty risk. Definition of counterparty risk is the probability that the other party may not fulfill its part of the deal and fails to fulfill its contractual obligations. (Office of the comptroller of the currency, 2022). Using collateral to lower the counterparty risk can also be seen in two different lights. On the one hand, collateral may reduce existing counterparty risks and contribute to improving financial market stability in general. On the second hand, it may lead to a reduction in limitations such as capital requirements and credit limits, and with that it leads to growth in volumes and increased volume can increase financial market risks if not controlled correctly. (Gregory, 2015. 61)

Writer of collateral management: A guide to mitigating counterparty risk, Michael Simmons states that “It is in a firm’s own interest to monitor collateral values on an adequate frequency in order to determine whether a current exposure exists; in some cases, the lender now has an exposure where exposure should be fixed later on by the lender requesting additional collateral from the borrower. Also, the lender who holds the collateral should in a case where the value of collateral gets higher than the loan amount, the borrower has too much collateral held by the lender and the lender should return what if left of the collateral. (Simmons 2019, 5).

The original asset given as collateral should also be able to be substituted by other forms of assets if the enterprise lending money requests it, but in that case the lender needs to make sure that their loan balance are always secured whole time when changing the original collateral to different one. (Simmons 2019, 5).

4 Lending risk management

Credit risk can be defined as the potential that a lender agreed borrower or counterparty as it is often called, will fail to meet their duties and responsibilities as agreed in the loan terms. The point of credit risk management is first of all to make sure that the lenders risk-adjusted rate of return is high as possible. It does that by maintaining correct level of credit risk exposure that is within agreed on and defined by the management and fits the strategic plans of the lender. (BIS 2000)

By managing their risks related to the lending operations the lender can avoid losses in long-term and minimize the effect of economic decline and other similar events that might lead to increase in payment defaults from the borrowers.

4.1 Credit exposure

Credit exposure is a time limited measurement, whereas counterparty can default at any time in the future when a loan is given out by the lender or lenders, and the lender must think about the impact of such an event happening many years ahead to fully analyze and understand their credit exposure in that specific loan. Understanding credit exposure of the loan involves answering the following two questions:

1. What is the current exposure faced in terms of risk in time of lending the money, meaning the highest possible amount of loss if the counterparty shortly after taking the loan becomes unable to pay. (Gregory 2015, 66).
2. And what will be the loss exposure in different points within the future, meaning what could be the amount of money loss if the borrower defaults at some point in the future. (Gregory 2015, 66).

Lender can diversify their overall risk portfolio by putting different kinds of limits on the exposure to any given single counterparty or related counterparties or even a specific industry, the limit should be in line with the estimated probability of default. This is the principle of defining credit limits to how much can be loaned out to single entity, owner, or industry at any given time in the lenders operations. When lending to large number of SMEs, a risk related to one single loan is smaller, and lender is not as exposed to the failure of any one of them. (Gregory, 2015. 69)

5 Tools to control credit exposure and avoid counterparty defaults

In most cases lenders aim to maximize the amount of loans they put out without too high of a credit exposure and counterparty risk. There are multiple options and strategies to aim for that goal, most of the measures are aimed towards a single counterparty at hand, but by following the same criteria on all of its loans the company can also control its portfolio risk. There are also measures that affect the portfolio as whole, but these mostly market and economic risk management.

Usually, expectation is that using different tools in combination gives better results than focusing on single risk management methods. Different risk management methods give different kind of risk coverage, and they should tailored towards the specific customer to cover the risk related to this specific case and to give the customer enough room to operate their business without unnecessary restraints.

5.1 Financial analysis

Financial analysis in most cases requires two or three different financial documents from the borrower company. These documents usually are income statement, balance sheet and if available cash flow statement. (Vance 2002. 1)

Income statement is commonly a standardized document that shows the profit or loss over specific period in time. Most cases this period is one year, but might be shorter or longer in some cases. In simple terms the profit or loss is show when all expenses from operational and nonoperational sources are subtracted from company revenue. Other information available are gross profit, sale and administration expenses, other expenses, taxes. Key point of using income statement is that the information is displayed in clear and logical manner so that they can be understood by people not related to the company or its operations. (Corporate finance institute 2022A).

Other required document balance sheet is similar to income statement, but it shows company’s total assets and how they are financed in one specific date. Finance options are debt or equity. Some places call the balance sheet also a statement of net worth or financial position statement. Balance sheet needs to fulfill the equation of assets = liabilities + equity. (Corporate finance institute 2022B).

5.1.1 Cash flow analysis

Cash flow statement or statement of cash flows is the third financial document that is available in some cases. Cash flow is how much money is generated and how much is used during any given time period, usually year or less. There are three main parts of cash flow statement: cash flow in operating activities, cash flow in investing activities and cash flow in financing activities. These three parts make up the cash flow of the company and all transactions where cash is transferred go in one of the three categories. (Corporate finance institute 2022C). Change in cash is than added to opening cash position of the period being analyzed the number resulted from this is called closing cash balance and will be used as opening cash balance for the next cashflow statement. (Corporate finance institute 2022C)

Main points of why cash inflow and outflow is calculated is the need to compare the cash from operations to net income. The comparison gives a picture of how well the company operation are running, higher the rate is the better in general terms. It also shows the actual revenue that the company generates from its operations without any exceptions. (Corporate finance institute 2022C)

5.1.2 Ratios in financial analysis

To make it easier to understand and compare financial statement financial ratios are often used and analyzed. They are designed to analyze the operational performance and effectiveness in operations like how sales are generated, cost ratios, collection operations and losses and inventory value and turnover. (Vance 2002. 19)

One key ratio used is ROA, return on assets. It is measurement of how assets are used to generate returns for the company. Idea behind this is that if assets don’t generate returns, they tie up unnecessary capital that could be used instead of investments that would generate return or more returns in most cases. These investments can be something by the lines of product development, marketing, acquisition of other companies, pay interest generating debt or be paid as dividend to the owners. Assets of the company also go down in value overtime resulting in loss if they do not generate adequate return during its lifespan. Internal use of ROA in companies is usually to help on decisions if investment should be done or if some part of operations should be closed down. In investors and lenders perspective it is usually more a measurement of how effective the company management is. (Vance 2002. 20)

Another ratio used is profit margin. This ratio analyses the relation between revenue and expenses. If expenses have high relation to revenue of the company, there will be low or very thin profits for the company even if sales become higher. In case of the company making a loss there is very little to no use for this ratio. High profit margin is also a safety aspect for the company, meaning it can survive changes in business better than business with low profit margins. (Vance 2002. 22).

In the balance sheet side of financial ratios there is the ratio of asset turnover, meaning the amount of money in sales the company creates for every invested euro. This is often larger issue then what most people think. Assets turnover ratio shows the effectiveness of company operations in reaching its customers. It also shows the information needed to decide the number of stores, size and distribution of warehouses, equipment in places of sale and similar important factors. (Vance 2002. 23). Assets turnover ratio is calculated by dividing the total revenue by average amount of assets during the same period (Investopedia 2022C).

There a many more ratios in financial analysis and anyone doing financial analysis should choose the best ratios for their purpose. One financial ratio that can be used is Accounts receivable turnover. It is a measure of how quickly credit sales of the company are being collected. (Vance 2002. 25). This is one of the ways to evaluate the creditworthiness of a borrower by computing their accounts payable turnover and using number to calculate the average number of days it takes for them to pay their bills. (Vance 2002. 27).

5.2 Person specific credit analysis (AML, KYC, Due diligence)

When conducting lending operations there is always need to have staff that is trained and possess the knowledge of important financial crime regulation requirements in the places where the company operate. This together with money laundering and terrorist financing requirements make the critical requirement of analysis on the person or people behind the borrower. Maintaining staff awareness on relevant financial crime, terrorist financing and similar topics is important for all financial operation companies in order reach their overall objective of combating financial crime, money laundering and terrorist financing. (Cox 2014, 181).

Banks and many other financial service companies are also required to check many national and international list of people with political influence who have increased vulnerably to corruption related issues, under sanctions of a government and similar people who need to be denied services or monitored in their use of financial services. These lists include the US lists OFAC SDN list, bureau of industry and security (BIS) list of denied persons, other lists followed include UK, EU, Israeli and UNSC lists. There is also requirement to check against non-governmental lists of politically exposed persons (PEP). (Beaucillon 2021, 281)

Company does the lending must know a obvious legal purpose related to the business. If the applicant is unable to show a realistic purpose, the lender should be aware the increased risk of money laundering or terrorism financing. Not giving a satisfactory reason is not always a reason to decline a loan but due to the increased risk applicant should be under enhanced due diligence. In this type of cases, it is important to investigate the group structure and identify controlling relationships between companies and peoples. (Cox 2014, 201).

Another concern in business lending is the extent of control specific individuals have from their shareholdings. Shareholders have high amount of control over the company and its decisions. They have also the right to manage company funds and transactions with requiring additional authority. This means that shareholders can overrule internal procedures and controls. Low amount of internal control or no internal control and regulations is an optimal condition for money laundering and financial crimes. (Cox 2014, 201).

To conduct required due diligence in corporate lending, the lender must identify key individuals among the shareholders and ultimate owner or person with highest amount of control in the business. Significant amount of control is usually considered 25% of shares or similar voting power in company decisions from other sources. (Cox 2014, 169).

Requirements of following anti-money-laundering legislation and regulations must be followed in when starting a new lending relation and also during the whole lending relations lifetime. This makes it so that the lender can can understand the risk this customer possesses towards the lender and also society in general. Following legislation allows the company to combat money laundering and terrorism financing, but also keep its operations more profitable in the long run. (Cox 2014, 169).

Important factor in individual related risk management and also other parts of risk management is investigation to identify if documents and information provided is valid and that they can be used to understand and support customer identification and other info. Accepting fraudulent documents or information is a mistake that can have serious consequences as the real risk related to the relationship is not correctly documented. (Cox 2014, 169).

Here is where the KYC (Know your customer) procedures come in. KYC procedures are the check on the company and its key individuals to obtain and confirm required information regarding this customer. When done these checks will validate documents and information provided by the customer and source of the funds in the company. In many cases companies only record the stated source of funds instead of validating the information. (Cox 2014. 169).

Goals of KYC checks are to:
1. Understand the customers business and business environment, including source of funds and assets.
2. Understand the purpose of the loan.
3. Understand the nature of all transactions happening between the lender and applicant and to ensure information is maintained and kept up to date.
(Cox 2014, 170)

On how to verify or certify the document customer provides the requirements depend on the jurisdiction. There might be trusted public or privately owned data sources that can be used for this purpose. The combination of data from various sources can then be used to get the required level of assurance on authenticity of the information. (Cox 2014. 219).

After all the check have been made and authenticity of information has been verified to the needed extent, the lender will have to consider the nature of the applicant and transaction. Added assurance can be received if needed for example in a form of requiring a transfer or identification from a customer's primary bank to make sure that the account exists, and the applicant has access to the account. Non-face-to-face onboarding has increased risk compared to face-to-face relationship and its necessary to require face-to-face identification for some products, services and transactions. (Cox 2014. 219). Having a high-quality of control is a positive for the lenders reputation, leading to easier time to make partners and satisfied investors and shareholders.

5.3 Industry and company analysis

Industry analysis is a tool assess the market situation of specific field of business, including competition and future forecasts. Goal is to get a understanding on what is current situation in the market and how it is expected to develop in the future. Things to analyze demand-supply statistics, competition information in the industry, status of competitors in the market and financially, other emerging industries that might affect the industry, technological changes, credit systems within the industry and other external factors. (Corporate finance institute 2022D).

This analysis can be done for example by using porter's five forces model, Pest analysis or simple SWOT analysis. These model help to define the risks, strengths and industry direction. Part of this analysis is researching the subject from all available information sources. (Corporate finance institute 2022D).

By understanding the industry that the applicant operates gives an important information for the analysis of the company applying for finance —that is, company analysis. Equity analysis and credit analysis are usually conducted by analysts who focus on one or several industries, this gives a advance in synergies and efficiency when gathering and analyzing information. (Corporate finance institute 2022E). Field of business and company analysis is one of the requirements for effective financial and financial ratios analysis, as it helps to understand what the ratios mean and how they compare to industry averages.

5.4 Collateral in risk management (Insurance and valuation)

There are multiple options on what can be used as collateral, some common ones used are:

1. Commercial real estate ether in the company's use or as an investment held by the company
2. Residential properties held by the company or owner of the company
3. Land and other similar areas
4. Machinery and equipment
5. Furniture and fixtures
6. Accounts receivables
7. Inventory
8. Stocks and deposits
9. Life insurances

Key aspect of collateral management and choosing what to take as a collateral is the valuation of the collateral, usually referred as loan to value ratio or LTV for short. Value of the assets is always less than their retail value, but to as how much is often defined by how stable the price of the collateral is and how easy it is to liquidate if necessary. (Jewells 2012, 14). The collateral can also be owned by other party then the company applying for finance or its owner(s).

5.5 Splitting the risk and syndicated loans

Syndicated loans, also called syndicated bank facility in some cases, is a financing solution offered by two or more lenders, referred usually as a syndicate, who work together to provide fund for a single borrower. Syndicated loans come to play when a project requirement is too much for single lender to handle or when a project requires a specialized lender with very specific expertise in specific asset class. Syndicated loans are way for the lenders to spread the risk and to take part in opportunities that otherwise would be too much for them. (Investopedia 2020).

Syndicated loans are mainly targeted on large scale loans from large corporations, institutions and sometimes governmental entities. There is no specific limit on how small or large loan can be done as syndicated loan, but often the profit received limits how small of a loan is profitable to be done as syndicated loan. (Investopedia 2020).

5.6 Post disbursement monitoring

Moody's analytics, one of the leading companies offering loan monitoring solutions explains the post disbursement monitoring as follows. "After the loan is disbursed to the borrower there is need for regular monitoring to ensure the lenders investment is protected. A good monitoring program will quickly identify any red flags that would suggest the borrower's financial health is starting to deteriorate. Being able to detect these early warning signals is critical, as it allows the bank to remedy the increased risk to its investment. At a minimum, the lender might want to reprice the loan to charge for the additional risk. In more severe circumstances, the bank might want to recall the loan by, for instance, defaulting the borrower and demanding immediate repayment. Either way, if not captured early enough, the bank's options for remedying the situation become more limited." (Moody's analytics 2018).

In all lending the lender should obtain the borrowers financial and operational information regularly during the loan period, sources can be for example quarterly and annual financial reports, customer provided information and information from third-party data sources. Emphasis should be placed on the open credits of the borrower, risk factors and audit information. (Basy & Rolfes. 1995. 61).

There is also regulatory pressure in most cases for the lender to have strong risk management processes and to ensure standards are on a high level. This mean that effective monitoring procedures must be implemented in many cases. (Moody's analytics 2018).

5.7 Covenants

Loan are independent agreements between the lender and the borrower that outline things that a must do, must restrain from doing or transaction that they cannot take part in. (Corporate finance institute 2022F). When a loan agreement is done there usually are terms such as loan term, loan amount, interest, repayment schedule, but also more or less covenants. When borrower breaks one of the covenants it is often called a covenant breach and it is considered a technical default. (Corporate finance institute 2022F).

Typical loan covenant often affects things and actions that are considered normal and things that should apply automatically, but these things still have to be mentioned in the agreement so that they are legally enforceable. Usual covenants include:

1. Borrower must pay the principal and interest on when it is due to be paid.
2. Borrower cannot sell any assets that are part of the collateral in the loan, without paying the credit back in full.
   (Corporate finance institution 2022F).

The less standard loan covenants are made to match the specific circumstances and risks related to the loan in question. (Corporate finance institute 2022F). Specific loan covenants are usually seen in commercial lending due to business operations and financial statements being complex. Some examples include:

- The borrower has to send an accurate accounts receivable listing and a compliance certificate regularly to the lender.
- The borrower cannot pay any dividends to shareholders without the receiving consent from the lender.
  (Corporate finance institute 2022F).

Technical default usually means that the borrower is in financial trouble, usual effect from technical default are that it triggers an increase in a loan's interest rate, foreclosure, or other negative events towards the borrower. Technical default also lowers the quality rating of the loan in question making it harder to sell and similar effect, due to this many lender usually offer grace periods for their customer to avoid the loan going into technical default. (Investopedia 2021 & investopedia 2022D).

6 Risk management for SME lending in practice

There are as many ways of limiting and mitigating credit risk as there are lenders and there is no one right formula on how to get the optimal results. Main point of risk analysis and management is to make sure that the risk remains within the limits defined by company management while aiming to create as much profit as possible within the risk limit.

Studies on SME lending have shown that information asymmetry is the main issue, meaning that the borrowers cannot show their quality in a way that the lender is able to confirm it. This led to an issue for the SMEs looking to get a loan and even if they get the loan the lenders usually impose strict credit restrictions to compensate the lack of information. These restrictions can be requirement for more collateral, higher interest rates, shorter loan term and more covenants. (RAHMAN, BELAS, KLIESTIK, TYLL 2017).

Asymmetry in information is not something that can easily be fixed so as alternative to increase SMEs access to finance there are good risk management methods that can be used to limit the risk of the lender and making them more willing to finance SME companies that have less information to offer compared to larger and well established companies.

On the due diligence part to know your customer and anti-money-laundering for entity customer it has been established that the lender needs to know at least the following information, name of the legal person, registration number, date of registration. Also, they need the name, date of birth, citizenship information from the owners, board of directors or other similar decision-making person in the company. Lender should also know the type of business the borrower engages in and similar necessary information. Final and one of the most crucial parts of the information is the identification of the beneficial owner who is the person receiving the money from the company operations, lender needs to know the name, date of birth and ID number of the beneficial owner or owners. (Cox 2014, 421).

7 Research methods

Theme interview is a qualitative research method. Theme interview is a good research method to use when the topics is not that well known, and we want to get more indebt understanding. Compared to quantitative method the amount of research targets is smaller but more in-depth information is received. Goal of theme interview is to take this information and use it to analyze and create comprehensive information around the topic. Aim is to create new information or understanding in the topic. (Ojasalo, Moilanen & Ritalahti 2015, 104.) For theme interview method the information gathered before the interviews is crucial as the interview are very much shaped by the information and understanding that the interviewer has in that specific topic, good understanding of the topics helps to clarify the answers and to ask more questions when the interview requires it. (Tuomi & Sarajärvi 2009, 18-19.)

For this study qualitative research method was chosen as it the best way to meet the requirements for this type of study and gather information. Qualitative study in this case takes the study directly to the subject and the information can be considered more reliable compared to public source information that is often limited and does not offer full picture of the situation. Some other data sources might be used as supporting source together with the interview

To study the risk management in SME collateral lending I chose interview as research method, with the aim to compare to different kind of situations where SME has applied for financing and analyze the key difference in risk that these companies have to get better understanding how the risk can be identified and managed. The information used to analyze and benchmark the cases is based on theme interview with company representatives. Interviewed company will be preferred as company X, all other possibly identifying information will be left out.

Interview was done as theme interview to get as much usable information as possible without altering the answer. Theme interview is one of qualitative research methods where the interview is based on flexible and open conversation, but with before decided themes and main questions. Themes in the interview were: financial situation of the company, personal credit related topics, other risks, industry, and competitors in general, types of collateral available for use and free conversation.

Company X is cosmetics and beauty business, based in a large city in south Finland region. Company has been operational for 3 years and it employs the owner. Company X was looking to finance new equipment and maybe some renovations. (Interview with company X. 2023).

8 Collateral

Company X could use house owned by the owner as collateral. House is located in the Southern Finland. No other usable collateral was available.

Many lenders want a professional appraisal on the collateral real estate asset. In Finland there are two types of professionals for this kind of appraisal, professionals approved by the Finnish Chambers of Commerce are ether Authorized Real Estate Appraisers (AKA) or a Real Estate Appraiser directly approved by the Finnish Chamber of Commerce (KHK). (Waselius & Vänttinen. 2021).

Loan to value ratio for housing real estate in Finland is estimated to be 80% with the highest loan to value being in small apartment in large cities. Commercial real-estate has usually max 60 % with the value depending on overall demand, location, and size. Industrial and other business real-estate has max 60% loan to value ratio, but there is a lot of fluctuation based on size, purpose, and location of the real-estate. (Osaavayrittajä 2023).

Company X has good loan to value ratio due to using housing real-estate that is located in a large city in southern Finland, Loan to value is likely between 65 % to 80 %.

Company X, their apartments can be valued around 70-80 % loan to value ratio. Meaning that for example 50k loan would require between 62 to 63 thousand euros in free loan to value, depending on the value of the apartments and how much housing loan is left. Problem in company X case is likely that there is no effective way to take bit of collateral from all the guarantors, having small portion of collateral from multiple sources might lead to situation where the expenses from taking control and selling the collateral are higher than the actual amount that they guarantee, it would be safer for the lender to just take one collateral that cover the total amount of the loan.

From the lenders part they should base the need for collateral on their recovery rates, if the lender aims to have high recovery rate for their collateral loans they should value the loan to value rations of collaterals lower, If the lender is more willing to accept risk and want to attract customer with higher loan to value rations than their competitors that is one way of using collateral, but higher risk usually gives higher interest to the customer to make up the money lost in default cases.

9 Financials and industry analysis

For both companies the lender needs to do financial analysis to determine the continuity of their operations and to make sure that the financial situation matches the internal requirements of the lender. Before going into the financial analysis, the lender needs to understand the industry and overall situation that the companies operate in.

In terms of company x this means understanding how it makes money, who are their main customers, what kind of risks the industry has and what kind of assets the companies need to keep their operations running.

Company X income comes from the customer that visit the company and amount of customer and price of services that they use varies heavily. Company X has some regular customer but overall, the business relies on attracting new customer in steady space. Competition risk is very relevant in the business environment of company X, there is always new competition starting in the industry and new services offered. Economic risk in the industry is present in the factor that the services of company X are considered non-essential and if economics situation get worse people are less likely to be able to use money on services from company X.

9.1 Cashflow

Cashflow in general is very industry related and flow of cash is dictated by industry norms and customer in terms of payment schedule, terms and other similar factors. In terms of cashflow company X is in good position as they deal with consumers directly who pay right after the service is done or in some rare cases such as elderly individuals in assisted living homes in 30 days.

Understading the cashflow gives a better understanding on what kind of situation might arise if customer don't pay in time, in case of company X there is no large inflow from one customer and so the risk of default on a loan based on customer of company X paying late is fairly low, it would requiere that multiple customers don't pay their invoices in time to cause cashflow problems to company X.

9.2 Financial ratios

Return on assets or ROA was high in case of company X as the company assets were significantly lower than in many other companies the usefulness of the ratio can be questioned as small amount of assets leads to high return on those assets. Industry and required amount of assets affect he ROA ratio in most cases.

Another ratio highlighted earlier was profit margin, in case of company X, the profitability was steady and good, but this is more related to expenses control than the sales price of services, there is no employees in company X and the owner earn income based on the work they do. This structure where there is very close to zero regular expenses makes is possible for the company to adjust according to the fluctuating demand and prices of the industry.

9.3 Balance sheet

Main function of balance sheet analysis in both cases is the analysis of how the companies are financed, this tells a lot on how steady the company structure is and also indicates the possible issues that might come. In terms of rations debt to equity or debt to assets should be the main ration in terms of balance sheet ratios. These two tell how much of the company assets are purchased with external financing and how much is financed by the equity of the company. Higher the percent of assets that are financed with external financing higher the risk related to the company, debt always has a payment schedule and interest that must be paid even if the company is not going so well. Same thing is not present when assets are financed with equity or investment from the owners, investments earn income only if the company makes profit and management chooses to pay it out, so it does not form the same kind of burden on the business as debt does. Industry that the company is in also plays a large role in how much debt they have, industries that require large investment amount usually have companies with more debt and industries where no large investments are usually needed also have less debt, but this is not always the case.

For company X there is very little debt in their balance sheet, but this is related to the low amount of assets, they do not own the premises where they operate and main portion of long-term assets is the furniture that they own. Short term receivables are also very small portion of their assets as the main reason there is short term assets is payment processing. In case of compony X the low debt level is a good thing but for their case the debt level of the owner and financial situation would be more critical when assessing their risk of default as financing problems of the owner might affect the business, low amount of assets can also be viewed as negative factor but in most cases this should be taken into account with the personal assets and financial health of the individuals owning the company as they have a business where keeping money in the company is not necessary and there is no real benefit from it.

10 KYC, AML and personal credit worthiness.

In terms of KYC, AML and personal credit risk there is not much to do in case of company X. In general terms the lender should check all the owners of the companies towards national and international sanctions lists. As mentioned before loan purpose needs to be understood to make sure that the money is going towards legitimate purpose that does not break any laws or similar standards. All beneficial owners should be recognized in these cases it is most likely the owners unless something else comes up, also other key individuals should be identified if there are any.

Also the money laundering risk should be assessed, in these cases it is mainly making sure that the money comes from legit sources and there are no significant sums that the source of funds cannot be determined, Large part of the anti-money laundering and other risk management is the check for document validity, this means making sure that all the documents look right, no changes are done and that the company and owner information is correct in all documents and that the information in document matches information that is available from other sources. Final thing that always needs to be checked is that all the KYC information checks out and meets the legal requirement of the jurisdiction.

11 Covenants, collateral risk management and ongoing monitoring

Covenants usually used by the lender are based on the covenants of a Loan Market Association-based facility agreements and usually include restrictions to financial debt level, distributions, granting of securities, and guarantees and corporate restructurings, such as mergers and demergers. (Waselius & Vänttinen. 2021). Using covenants sounds very demanding when they are talked about on theoretical stage, but when implemented to use and included automatically into contracts they become very much invisible until issue rises where the covenant rule is useful. In many cases if covenant is broken the situation is usually very poor and the role of the covenant is more to help with the legal process.

In case of company X there is no info available about what kind of covenants or similar might be used to them, but some common ones might be that they are not allowed to take more debt without confirmation from the lender, guarantors cannot sell the company and they cannot split part of the company to separate enterprise

Other factor that is connected to covenants is the collateral risk management and insurance of the collateral, when lender takes a collateral for their loan there is usually expectation that they are able to sell it in case of a default on the loan. This might be problematic if the collateral is not insured correctly or not insured at all. For the lenders security it might be in their interest to have insurance on the collateral where they get their money from the insurance directly, as if the money goes to the borrower there is still many indirect consequences that will affect the operations for following months or even longer as their operations cannot get back to their original level.

In general, they should always be ongoing monitoring of the company on top of covenants, meaning financial monitoring, collateral monitoring and overall risk assessment on regular basis. By doing monitoring the risk level can be understood during the whole duration of the loan, also the lender has possibility take on measures if the risk level rises higher then it originally was.

12 Summary

Result received from the interview were much in line what was expected, risk management has many methods that give different kind of results to different type of borrowers. Same solutions that work for one company might be too limiting for another or might not give the lender the expected amount of cover in case of a payment default. Analyzing SME companies and determining their individual risk, success factors and need for finance is a great way to improve their operations and overall market development in the industries, but at the same time same issues regarding risk management for small and mid-size enterprises remain. One of the main factors that was not talked about here is the profitability of financing SME companies, in almost all cases the lenders aim to make a profit from the loan that they give out, meaning that it is very much in their interest that the borrower repays the debt as planned. With this information we can see that risk management should not only be factors that limit the borrower and secure the money in case of a default, but also a way where success factors of the borrower are considered, and their operations are not limited unnecessarily.

As we have talked about in this thesis there are mandatory requirements that are not flexible, such as AML, KYC and similar factors. Then there are also other risk management methods that are not mandatory but offer added security to lender. This includes collateral, covenants and similar. In these interviews we learned that many entrepreneurs are aware of their situation but might not know how to connect the dots between their information and the common risk management methods used by lenders. Also, lenders might not fully utilize these risk management methods and the topic is still very much left open in Finland and also international level, there is always ways to improve the risk management and optimize it so that the credit losses are minimal and costs from credit default don’t need to be transferred to other loans for the lender to make a profit.

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Tables

Company category	Staff headcount	Turnover	or Balance sheet total
Medium-sized	< 250	≤ € 50 m	≤ € 43 m
Small	< 50	≤ € 10 m	≤ € 10 m
Micro	< 10	≤ € 2 m	≤ € 2 m

Table 1: definition of SME (European Union 2003)