



Fatema Tuz Zohra Aney

SMEs alternative financing using P2P lending platform

Faculty of Management and Business

Master's Thesis

April 2021

ABSTRACT

Fatema Tuz Zohra Aney: SMEs alternative financing using P2P lending platform
Masters' Thesis
Tampere University
Leadership for Change
April 2021

This paper aims to focus on how peer-to-peer(P2P) lending can help Small and Medium-sized Enterprises (SMEs) to get the required finance. P2P lending as an alternative financing solution has gained tremendous popularity throughout the world. This paper will investigate factors that could expedite SMEs to use p2p lending for their fund. Further, this paper will investigate the information asymmetry problem in SMEs along with some other issues, for example, collateral, management expertise, transaction cost, and interest rate. Next, the paper will explore the scope of P2P lending in mitigating these roadblocks including the information asymmetry problem in SMEs financing.

Qualitative research method was applied in this paper to collect data from semi-structured interview. To analyze the data, thematic approach was used. The analysis concedes about the financial problem of SMEs. Mostly, along with other obstacles, information asymmetry issue caused majority of the constraints in SMEs financing. However, P2P lending has great potential to mitigate the ongoing financial problems of SMEs. Though, P2P are facing troubles due to collateral free loan, high interest rate and poor credit assessment tool. Furthermore, analysis proposed, to ensure the healthy growth and development of SMEs, P2P lending is essential. P2P lending, with the technological adoption may mitigate the ongoing roadblocks in SMEs financing.

Keywords: Financial technology, SMEs, information asymmetry, alternative financing, peer-to-peer lending, soft information

The originality of this thesis has been checked using the Turnitin Originality Check service.

TABLE OF CONTENTS

1. Introduction	1
1.1 Background	1
1.2 Research purpose and questions	2
1.3 Key concepts and limitations	4
1.4 Structure of the report	4
2 Literature	
Review	4
2.1 Overview of SME Financing	4
2.1.1 SME Definition	7
2.1.2 SME Importance	8
2.1.3 Sources of SME Financing	10
2.2 SME Financing Constraints	13
2.2.1 Information Asymmetry in SME Financing	15
2.2.2 Collateral Problem in SME Financing	17
2.2.3 Transaction Cost and Interest Rate Issue	19
2.2.4 Managerial Expertise Problem and Other Challenges Faced by SME	21
2.3 P2P Lending	22
2.3.1 Definition of P2P Lending	23
2.3.2 P2P Lending in Financing SMEs	23
3 Methodology	29
3.1 Qualitative Research	29
3.2 Data Collection	29
3.3 Data Analysis	31
3.3.1 Thematic Analysis Method	32
4 Findings	36
5 Conclusions	43
5.1 Summary of the study and key findings	46

5.2 Conclusion.....	51
5.3 Recommendation.....	53
5.4 Managerial Implications.....	46
5.5 Theoretical Contribution.....	54
5.6 Assessing the quality of the study.....	55
5.7. Future research directions.....	57
References.....	58
Appendices.....	66
Appendix A: Interview Questions.....	66

List of Tables

Table 1: SMEs definition by European Commission, Source: European Commission

Table 2: SMEs definition by Bolton committee

Table 3: SMEs financial constraints in different parts of the globe

Table 4: Transaction cost of borrower and lender

Table 5: Peer-to-Peer Lending to Business

Table 6: Interviewees' profile

Table 7: Example of coding and thematization

Table 8: Key findings

List of Figures

Figure 1: Employment contribution by SMEs

Figure 2: Sources of funds Percentage of finance, Data: Adapted from Bosri (2016)

Figure 3: The optimal interest rate after what the expected return decrease

Figure 4: Availability of financial information of SMEs

Figure 5: Interest rate is increasing over time in SMEs lending

Figure 6: Categories of crowdfunding

Figure 7: Crowdfunding in EU

Figure 8: SMEs Financing Constraints and How P2P could ease the problems

Figure 9: Themes

Figure 10: Benefits Of using Big data& machine learning in P2P lending

Figure 11: Recommendation to reduce information asymmetry

Abbreviations

P2P=Peer to peer

SME=Small, Medium Enterprises

EU=European Union

IFC=International Finance Corporation

OECD=Organisation for Economic Co-operation and Development

WB=World Bank

GDP=Gross Domestic Product

1.INTRODUCTION

1.1Background

Small and Medium Enterprises (SME) work as a pillar for any nation by contributing largely to its financial progress. SMEs role in achieving financial solvency for any country is significant. The growth of SMEs is mandatory to ensure the healthy development of any country's economy. Government bodies and private organizations are giving more emphasis on the flourishing of the SME sector as it promotes certain positive results to its economies such as employment generation, poverty eradication, women empowerment, and financial stability. Thus, SMEs become a vital element for sound economic growth. Moreover, OECD reported SMEs remarkable contribution to export and productivity (OECD,2004). In adapting to foreign markets, governments around the globe should facilitate SMEs financing to ensure sustainable growth and development. Besides, SMEs help countries to become adaptable towards innovation, competitiveness, and internationalization. Therefore, SMEs play a significant role in forming a strong world economy by downsizing the negative impact caused by recession, poverty, and pandemic. Across the globe, SMEs help to promote well being of the nations and create a powerful economic base. SMEs bring more value to any nation than the big companies, as small firms are more flexible towards dynamic circumstances; providing social benefits and productivity to the nation (as cited in Cravo, 2010, p.3).

Globally, SMEs suffer from credit access by traditional finance companies which affects their normal growth and regular business activities. It has become a universal challenge for SMEs to manage sufficient credit to grow and develop. According to IFC's SME Finance Forum report, in developing countries, 65 million companies or 40% of MSMEs are suffering from finance need of \$5.2 trillion yearly. (IFC,2017) The insufficient access to required funds is the persisting problem in the growth and internationalization of SMEs. Therefore, SMEs are not capable to become larger or go international due to a lack of sufficient finance. Consequently, shortage of finance has become the key constraint of the expansion of SMEs worldwide. To ensure the healthy growth of SMEs, it is a precondition to have an uninterrupted credit flow.

There are multiple reasons, that hinder finance companies lending with SMEs; mainly high risk, information asymmetry, transaction cost, high interest rate, and management-

related issues exist. However, in recent years, circumstances are changing in the financing industry. Due to the enhanced digital presence, financial technology has become ubiquitous and thus brings a revolutionary change in the financial industry. Financial technology can lessen the ongoing imperfections in SMEs financing. Especially, the rising Fintech has achieved significant response from all over the world in financing SMEs. Fintech brings a unique and flexible business model that may eradicate the roadblocks of SMEs financing, such as, collateral and information asymmetry problems (OECD,2017). Also, it is believed that fintech has enough potential to replace and strengthen traditional financing patterns; thus, will provide an ultimate and innovative financing solution to a neglected fragment of SMEs. Similarly, the credit market is replaced significantly by the progress of digital platforms (Han & Greene, 2007).

Today, online platform lenders, such as peer-to-peer (P2P) lending provide funds to the borrowers in a shorter time and every step can be completed online. (ADB,2019). To continue the regular flow of funds and to remove the recurrent credit gap; the P2P platform can enhance credit access facilities and thus, ensure the sustainable growth of SMEs. P2P appears as a powerful solution to the financing problem of SMEs by providing ingenious and resourceful financing privilege. Moreover, to address the existing finance gap, P2P platforms promote better access to credit for SMEs everyday business, at the same time offering credit for long-run businesses. Altogether, P2P is facilitating SMEs long-run growth by providing prompt financing options, and supporting their business by taking them to maturity level from scratch. Besides. the P2P lending platform may create alternative financing solutions for the SMEs rejected by traditional financial institutions.

1.2 Research purpose and questions

The primary aim of this study is to examine the financing disputes of SMEs. To attain the aim of the study, the below-mentioned objectives have been established:

- ✓ To explore the financing obstacle faced by SMEs
- ✓ To discover Information Asymmetry as a financing roadblock of SMEs
- ✓ To examine other barriers; management, collateral, transaction cost, and interest rate problem
- ✓ To find out how P2P can mitigate information asymmetry in financing SMEs

- ✓ To provide a proposition on the current situation of P2P lending in financing SMEs

Determining the research question is a very crucial stage in a study as it specifies the research aim and objective to the limited area the research will focus on. A research question is remarkable since it will guide the researcher throughout the study to find out the answers and thus, help to choose methodology, data collection, and data analysis process. It is considered one of the toughest tasks in research to select and finalize research questions as it may change in every step of the study (Doody,2016, p.1).

Identifying good research question undoubtedly assist the researcher to plan the study and construct accordingly the methodology, data collection, and data analysis. Also, it is recommended to form the research questions in advance to plan the study design accordingly. To establish good research questions, exploring the previous study is a prerequisite to understand what is already been studied and what important aspects still be unclear to scholars.

This research aims to fill the research gap and tries to shed some light on SMEs' financing options. In this respect, the research questions are:

RQ 1: What are the challenges in SMEs financing including the information asymmetry problem?

RQ 2: How could P2P lending facilitate SME financing by minimizing the information asymmetry problem?

1.3 Key concepts and limitations

Quite a few limitations certainly impact the extent to which the research can be employed and utilized. First, this study is based on a different part of the world which may produce different results and thus lacking similarity. Also, the literature used in this research is from a variety of countries, also this may not depict the same problem to analyze. Most importantly, the sample size of the study is small and limited, thus this may not deliver

adequate and satisfactory results. Also, qualitative data have not successfully depicted the actual problem strongly.

- Research layout and research composition might be affected by the researcher's limitations and capacity.
- Researchers' queries might also influence respondent's reactions on a specific topic.
- Expository potential of this research was limited with the researcher's explicative and analytical competency.
- The study is hampered by ongoing Covid restriction in various aspects.
- It was difficult to construct unified answers from different respondents.
- Researcher finds it strenuous to interpret the result from respondents' detailed answers.
- Researcher spent a vital amount of time in collecting data from different sources. The ongoing Covid situation made it worse.
- Language is an important factor in the data collection and analysis process. Since the researcher is not a native English speaker, it confuses at times. Also, data collection was troublesome due to the language barrier.

1.4 Structure of the report

The structure of my paper will be as follows. First, I discuss the literature on the SME and SME financing constraints. I have highlighted the information asymmetry problem along with other challenges. Then, I focus on P2P lending and its potential to enhance SME financing by minimizing the ongoing roadblocks. And then, I highlight the relevant theories on SME financing and provide a theoretical framework for my research.

In the section that follows I explain the data generation to illustrate the overall process of entire data collection. Next, I focus on the data analysis process and talk about the thematic analysis method of data analysis. In this section, I discuss how I select the sample, company names, and data generation. Also, the description of the selected themes. Thereafter, I specify my findings and outline the most relevant and important issues raised by SMEs and lenders. After that, I provide a suggestion based on the findings. In the final chapter, I detail the conclusion and provide a recommendation.

2 LITERATURE REVIEW

This chapter will present existing literature on SMEs definition, the importance of SME financing, SME financing constraints, information asymmetry concept, Peer to peer (P2P) lending, and P2P lending role in SME financing.

2.1 Overview of SME Financing

SMEs need sustainable financing in order to guarantee the development and sound growth. Without proper and sufficient funding, SMEs will not be able to deliver the expected outcome. SMEs is the reason behind new job creation, economic development and most importantly woman empowerment. In real scenario, the funding options is surprisingly narrow and unachievable for SMEs. Particularly, government bodies, policy makers and private organizations should give priority to increase the scope of SME financing. However, in recent years, various alternate financing platforms have emerged to serve the need of SMEs. For instances, Peer to Peer (P2P) lending has become an important channel in SME financing. Though, P2P platform is in a very early stage compared to the traditional sectors. Therefore, to ensure the continuous financing, P2P lending requires to adopt innovative business model that successfully fill the gap in SME financing and fulfill the diverse funding need of SMEs.

2.1.1 SME Definition

International organizations and countries have provided definitions of SME. OECD describes SME as "Small and medium-sized enterprises (SMEs) are non-subsiary, independent firms which employ fewer than a given number of employees. This number varies across countries. The most frequent upper limit designating an SME is 250 employees, as in the European Union" (OECD SME and Entrepreneurship Outlook: 2005, OECD Paris, page 17) OECD mentioned there might not be any fixed criteria to define SME, some countries can set the limit at 200 employees and some may fix that firms less than 500 employees.

Moreover, European Union analyzed that SMEs represents 99% of all businesses in their region. EU believes SMEs are their fuel of job creation, prosperity, and economic progress. Therefore, It is mandatory to define SMEs appropriately so that they get the full

support for growth. However, the EU presented two factors that can determine SME; staff headcount and turnover or balance sheet total.

Table 1: SMEs definition by European Commission, Source: European Commission

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

Defining SME could be a challenging task as it varies globally. Multiple criteria do not match each other in all countries. As a result, different definitions existed. However, the number of employee criteria is considered one of the common in all countries, according to the world bank survey. It is mandatory to have the quantitative criteria of some employees and at least one financial criterion to be categorized as a micro, small, or medium business. SMEs defined by numbers of employees can face difficulties because of work time variations, such as different companies may have different arrangements like part-time, full time, etc. Financial criteria also face problems that can arise from annual turnovers, inconsistencies in measurement policies, and inflation. However, Gibson and Vaart (2008) described the criterion of turnover as the most consistent of the three quantitative criteria (p.4).

It is now accepted that there is no fixed definition for SME; rather, scholars, international organizations, and economists are trying to provide an appropriate reference. Hence it is important to know the correct definition of SME (Gibson and Vaart (2008)).

El Madani (2018), in his paper, compared the qualitative versus the quantitative definition of SME. He presented that it is easier to produce quantitative definitions than qualitative ones due to the accounting and financial reporting standards. Also, his study describes that worldwide there is an ongoing attempt to target SMEs to develop the economy. If

SMEs cannot be defined clearly, then it may create a hindrance to the growth and development of the economy. "The creation of a clear and distinct SME category would help politicians and policymakers to provide appropriate support to SMEs (as cited in El Madani,2018, p.3). Thus, an ambiguous and confusing definition can create a great disturbance among policymakers to track and nurture SMEs growth. There are multiple support programs designed by policymakers, the government sector, and the private sector to benefit SMEs, but all this effort will be ineffective if SMEs are interpreted differently.

Moreover, the Bolton Committee (1971) provided the most popular definition of SME, where they clearly distinguished two different points. First, they named it an economic definition where firms will be considered as small firms if they could meet certain criteria. The criteria are given below.

- A very small percentage of market share
- Managed by only owners without having any formal or structured management and
- It should be independent and must not be a part of any big organization.

Then, the second point is named as statistical definition, where they present three main criteria. First, the size of the small firm should be quantified according to its contribution to economic aggregates, for example, GDP, employment and exports, etc. Next, to compare mainly the extent to which small firms have changed their economic contribution over time and lastly to apply the statistical definition to determine its economic contribution in one country to compare with other countries.

Table 2: SMEs definition by Bolton committee (source: Bolton committee 1971)

Sector	Definition
MANUFACTURING	200 employees or less
CONSTRUCTION	25 employees or less
MINING & QUARRYING	25 employees or less
RETAILING	Turnover of 50,000 pounds or less
MISCELLANEOUS	Turnover of 50,000 pounds or less

SERVICES	Turnover of 50,000 pounds or less
MOTOR TRADES	Turnover of 100,000 pounds or less
WHOLESALE TRADES	Turnover of 20,000 pounds or less
ROAD TRANSPORT	5 vehicles or less
CATERING	All excluding multiples and Brewery-managed house.

Now it is obvious that there are lots of efforts of defining SME by researchers and organizations, and there are ongoing efforts to make concise definitions globally. Now, the most challenging task will be to put all necessary criteria in one single SME definition.

2.1.2 SME Importance

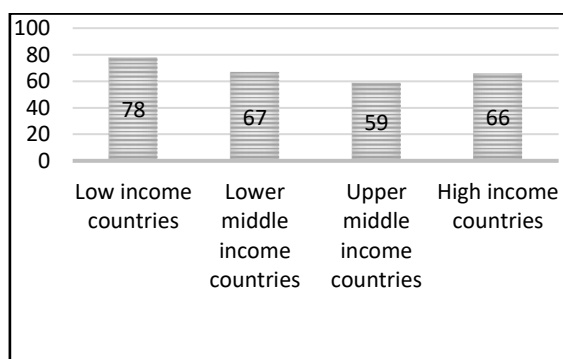
Badulescusmes (2010) has discussed in his paper that how crucial is SMEs role in the economic development of any country. He termed SMEs as the engine of any nation's economy and also mentioned, nurturing SMEs growth can be beneficial for employment creation and innovations. To ensure all this advancement and growth, it is a prerequisite to ensure better financing options for SMEs.

SMEs role is notable at both the enterprise level and individual level. For a large corporation, SMEs bring progress and competition, whereas for an individual SMEs can be one's first job or the first step toward his entrepreneurship. Furthermore, SMEs contribution is not limited only to its sector, but it may play a chief role to support other sectors too. The statistical reports of all countries claim that SMEs are the backbone of the economy by contributing significantly to job creation and GDP growth. SMEs creates harmony in both micro and macroeconomic level by weakening the controlling power of the big companies. (Savlovschi & Robu)

Karadag (2016) presented in his paper that SMEs help every nation to achieve its goal by contributing three main factors; GDP growth, new job creation, and entrepreneurship.

Veiga & McCahery stated "SMEs' important role in the economy has been long recognized; their contributions include job creation, poverty reduction and the achievement of higher levels of economic development "(2019, p.2).

Figure 1: **Employment contribution by SMEs (in percent), source: Dalberg,2011**



SMEs can create large employment than any other form of business. Therefore, to eradicate poverty from many parts of the world, SMEs role is crucial. SMEs ensure sustainable growth of the economy and remove the socio-economic deficit. Mostly, SME owners are women, which means SMEs are the main driver of women empowerment. Moreover, SMEs require less start-up amount than any other business. (Bosri,2016)

2.1.3 Sources of SMEs financing

To start a new business, everyone needs money. Notwithstanding, it has been always a strenuous task for SMEs to manage available sources of funds. Historically, equity and debt are considered the two main funding sources for business (Scarborough, 2011).

An equity fund is defined as the owner's money in a business. Also, equity fund is considered as risk capital since the owners are at risk of losing the invested money if a business goes bankrupt (Scarborough, 2011). Then, Companies issued shares to investors in equity funding since it helps them accumulating money from investors to run business. Investors make profits in two ways, when sharing price increases and dividends issuance (Ho & Yau, 2013). There are multiple forms of equity finances; owners find, money from friends and family, and venture capital is mostly known.

Debt is widely accepted as an important source of finance by businesses in all corners of the world. Expressly, debt financing is defined as lending money from financing companies to run businesses (Ho & Yau, 2013). Debt funding can be from a bank and non-bank financial institutions.

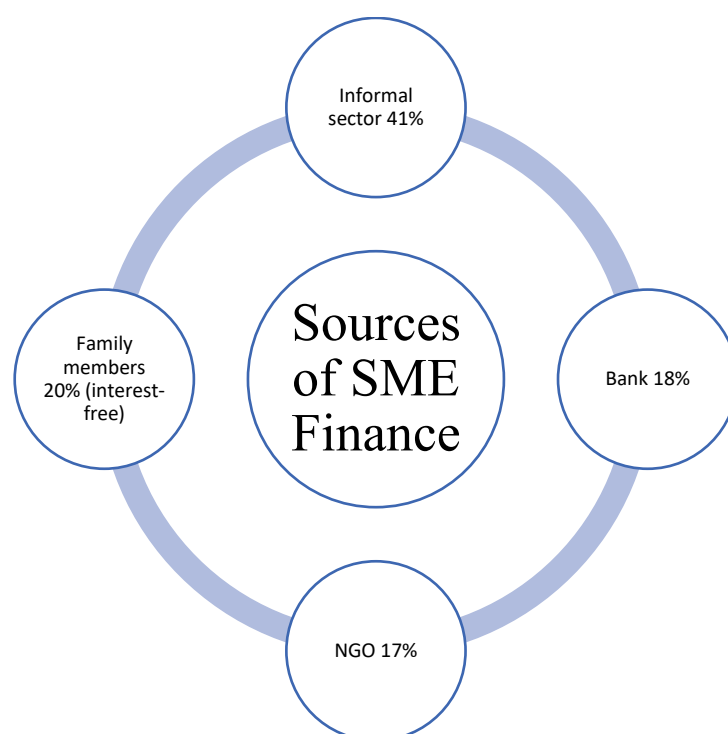
One of the crucial sources of funds for SMEs is **family and friends**. Mostly, entrepreneurs borrow money from their close relatives and friends to start the business. Though this borrowed money has been lend for a short period. Entrepreneurs have to pay back the amount when they make any profit. Also, the amount is not satisfactory since family and friends might not possess large capital as large financial institutions. Moreover, this money becomes a hassle for the SMEs owner since the lender may interfere with business. (Kuriloff, Hemphill, & Cloud: 1993).

Venture Capital is another important source of funding for SMEs. Particularly, a group of investors who invest in emerging businesses. This investor also receives an equity position. They expect to have a satisfactory return on their investment. Therefore, they evaluate the future potential of the SMEs before investing. Investors' demand for profit gets higher with the perceived risk (Stenvenson et al. 1999).

Alternative financing options have emerged to offer SMEs unique financial products. Especially, P2P has received significant attention in financing SMEs. In every part of the world, P2P has grown substantially and contributed to minimizing the finance gap pf SMEs. Moreover, P2P finance small or risky SMEs that cannot be feasible for banks (World Economic Forum, 2015). P2P possesses the skills and infrastructure to enhance SME financing by lowering the effect of information asymmetry and also handle the collateral deficiency. (OECD, 2017).

Bosri (2016) have presented in her paper that according to Micro Industries Development Assistance and Services (MIDAS) main sources of SMEs are mostly friends and family member. Historically, informal financing is extensively used by SMEs to fulfill their demand. SMEs prefer informal financing sector as the formal financing institutions are difficult to approach. Informal channels, such as, local money lenders are the important source of financing and usually charge high interest rate.

Figure 2: Sources of funds Percentage of finance, Data: Adapted from Bosri (2016)



Next, SMEs fulfill most of the financing needs from family and friends. Since arranging fund from family and friends are easier than from a financial institution. Family and friends do not require any documents or assets to give the capital. However, Guerin et al. (2012) have argued that entrepreneurs sometimes do not prefer to borrow from family members. Notably, banks provide a significant amount of capital to SMEs. Though the approved loan amount is not that significant compared to the demand. Banks can not provide funds to SMEs because of their strict rules and regulations. Besides, non-government organizations also support SMEs by allocating capital. In addition, different government organizations nurture SMEs growth through creating financing privilege. For instances, Finn vera, a state-owned organization in Finland support SMEs growth and grant substantial SME loans (OECD,2019).

2.2 SME financing constraints

Undoubtedly, SMEs financing is one of the global issues. The financing problem is one of the global phenomena and it exists both in developed and developing countries. (World Bank,2020). As a result, these entrepreneurs borrow funds from family, friends, or local

unauthorized risky sources, such as a moneylender who provide the fund with high interest. Therefore, It has now become crucial to create multiple financing sources for their growth and internationalization.

Table 3: SMEs financial constraints in different parts of the globe, Source: IFC data and analysis (2020)

Region	Fully Constrained	Partially Constrained	Constrained
EAP	33%	11%	56%
ECA	17%	14%	69%
LAC	9%	22%	68%
MENA	14%	20%	66%
SA	24%	26%	50%
SSA	28%	25%	46%
TOTAL	30%	14%	56%

(Note: EAP = East Asia and Pacific; ECA = Europe and Central Asia; LAC = Latin America and the Caribbean; MENA = Middle East and North Africa; SA = South Asia; and SSA = Sub-Saharan Africa)

"IFC analyzes that 30% of total SMEs are fully constrained. Besides, The International Finance Corporation (IFC) estimates that 65 million firms, or 40% of formal micro, small and medium enterprises (MSMEs), have an unmet financing need of \$5.2 trillion every year, which is equivalent to 1.4 times the current level of the global MSME lending. East Asia And The Pacific account for the largest share (46%) of the total global finance gap and are followed by Latin America and the Caribbean (23%) and Europe and Central Asia (15%)" (IFC, 2020, p. 34.) Also, globally 38% of SMEs are facing credit shortages to run business smoothly (Parker et al., 1995). In this scenario, to meet this finance gap, key problems should be identified, and take measures to meet the demand. Government organizations, private entities, and scholars are conducting researches to trace the key issues simultaneously.

Due to lack of required financing, small and new SMEs underperform and go bankrupt eventually. Berger & Udell (2004) have argued in their paper about lending trends made by existing financial institutions. They presented that large SMEs are more likely to get funds compared to the new entrants. The idea is related to the size, maturity, and profitability of SMEs. Larger, the organization has a more secure lending platform and credit scoring system. This type of organization can lend more SMEs than small and new financial entities. Moreover, there several factors that are currently affecting SME financing. For example, collateral, well-structured financial statements, cash flow, and lending history. Most of the new entrants and small SMEs do not meet the mentioned factors. Archer, Sharma, and Su mentioned, "approximately 50% of SMEs in developing economies report formal credit access constraints" (p.2, 2020).

"However, like most business enterprises, SMEs also requires sustainable access to external credit, without which survival and long-term growth prospects may be seriously jeopardized" (Karlan and Zinman, 2009; Rahaman, 2011; Saridakis et al., 2008, p. 13). If SMEs are not supported by the required money supply, then It may hinder the rapid flow of economic development, job creation, and global economic growth.

Government and policymakers are trying hard to help SMEs grow in various ways. Though some SMEs are still facing problems to develop and get sufficient funds for survival. The role of SMEs is greatly acknowledged in the development of a nation's economy, but their growth is limited by the inadequate financial resources to meet the various operational and investment needs of the country (Cook and Nixon,2000, p.2)

2.2.1 Information Asymmetry Problem in SME Financing

Information asymmetry arises when one group in a transaction retains diverse or unique knowledge than another one. And this information disparity affects the negotiation negatively. Besides, information asymmetry is considered detrimental to one party in an exchange that holds less information. There are practical examples of information asymmetry, such as a patient's knowledge about the cost of treatment is not significant as the doctor, a retailer having more insight about prices than a small business owner, or management of a company knowing more about companies' future and prospects than a normal outsider (saxton & anker,2013, p.3).

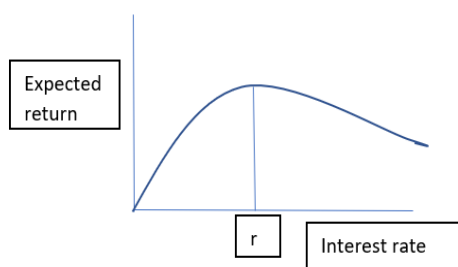
Thus, most financial negotiations generate information asymmetry as managers or owners can avail more knowledge, or can trace the ongoing scenario; whereas an outsider has a limit to the access of required information. Further, to make the right decision, full and authentic knowledge is a must. Otherwise, this may lead to a serious issue and will impair the negotiation in the end. Then, lack of information will produce more severe trouble, such as adverse selection and moral hazard. Adverse selection occurs when financing companies face a dilemma of selecting the appropriate risk profile, while moral hazard refers to the situation when lenders fail to oversee the borrower by the reason of insufficient contract or find it costly to supervise. Particularly, moral hazard occurs after the transaction takes place, while adverse selection appears before the contract. Due to inadequate business information, lenders cannot observe the high-risk activities of the borrower and it causes default of the loan. (Abdelhafid & Mohammed,2019, p.2). Loan default is a major issue that financing gets hampered. Also, default make the lender stricter towards loan decision.

Information asymmetry produces the credit rationing situation; therefore, the availability of funds becomes extremely difficult and challenging for small firms. Mostly, traditional lenders emphasize two factors; interest rate on the loan and how risky the loan is. And, these two factors are regulated by the imperfect information prevailing in the credit market. Stiglitz and Weiss have presented in their research that traditional lenders often prefer to provide funding to less risky borrowers. Lenders, generally, identify the riskier borrower through a screening tactic. To elaborate, a borrower who wants to get the loan even if the interest rate is higher is unsafe. Those who are ready to pay the loan at a high lending rate because know that the chances of payback are low. Consequently, it affects the bank's profitability and returns due to high-risk borrowers (1981, p.2). Furthermore, because of poor or unequal information, lenders are unable to verify the quality of the venture; resulting in lenders increasing the lending rate. Consequently, moderate or low-risk borrowers do not prefer to take a loan at a higher rate and prefer other options (Storey. 1994). Therefore, potentially good borrowers do not invest in projects and also, the lender loses a better option.

symmetric information results in lenders offering high-interest rates to crunch the excessive loan demand whereas, asymmetric information disinclines lenders to balance the credit market by increasing lending rates. The authors also claim in their paper that

increased lending rates due to information asymmetry may affect the expected return of the lenders. (Ma, Zhou & Chen ,2019,p.10).

Figure 3: The optimal interest rate after the expected return decrease, derived from Stiglitz and Weiss(1981, p.3).



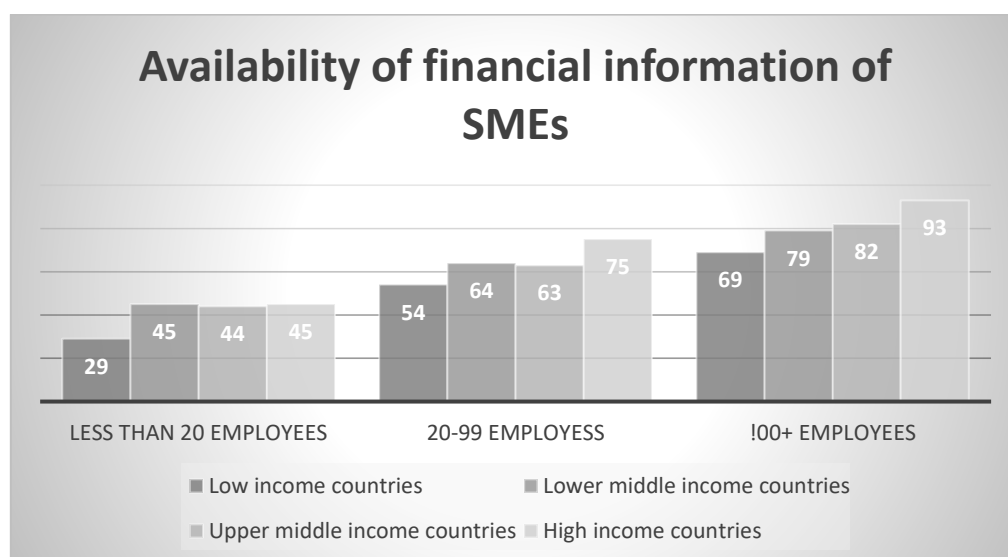
According to Stiglitz and Weiss(1981), there must be an equilibrium interest rate, r ; that restrain lenders to provide loans after that equilibrium lending rate. Since, in the lender's point of view, such loans may not be repaid by the borrowers; assuming them high-risk profile borrowers. Also, after the equilibrium interest rate, the expected return begins to decrease. And this interest rate is also called a bank optimal rate as at this specific lending rate, the expected return of the bank is highest (p.3)

Many factors create hindrances for financing SMEs, such as collateral, information asymmetry, and weak credit history (Gupta and Gregoriou,2018). Although there are studies on how information asymmetry can affect financing, only a few of them are taken into consideration to know the impact on SMEs financing. Due to unequal or lack of information, traditional lenders, particularly, banks are not willing to provide loans to SMEs. One of the major reasons that prevent SMEs from obtaining funds from banks or other financial institutions is information asymmetry. Especially, information asymmetry makes the situation unclear between SMEs and their lenders. There is a mismatch between information provided by SMEs and information required by the lenders; therefore, creates a deviation of authentic information (Bakker, Udell, & Klapper, 2004).

Usually, lenders, such as banks, evaluate the creditworthiness of a business to look at the cash flows and another profitability measurement. However, in reality, most of the SMEs

do not have such an establishment of disclosure (Otero et al.,1994, p.13). Consequently, insufficient information is considered as the main roadblock of SMEs funding. Lenders usually suffer from information transparency issues when granting funds to SMEs. "However, this information is not always readily available from SMEs, and owners of small businesses possess more and better information about the performance of their businesses than banks, (Abdesamed & Wahab, 2014, p.3)".To be specific, sometimes SMEs with their small capacity can not provide structured financial information which is required by banks to evaluate creditworthiness.

Figure 4: Availability of financial information of SMEs, source: Dalberg,2011



According to Baas and Schrooten (2006), lenders usually require financial or accounting reports to evaluate the financial status. Similarly, accessing the credit market efficiently is disrupted by SMEs inadequate information infrastructure that cannot represent possible risk and return (OECD,2018). As a result, such opaqueness discourages banks and other lenders from establishing business relationships with SMEs. Furthermore, Maiti discussed in her study that information asymmetry can cause banks not to provide funds to SMEs. Lack of proper information and transparency creates problems in SMEs financing. (2018). To be specific, many SMEs come from an informal sector that doesn't have the structured financial documents required by lenders. Also, large and formal SMEs lack in preparing that minimum required document due to not having accounting firms or related assistance to submit the proper documents (Kauffmann, 2005; IMF, 2006). Besides that, it is reported that to reduce tax or to get loans at a low-interest rate, some

SMEs hide actual information about their credit history. In this case, credit bureaus may resolve the issues, but many countries do not have such establishments. As a result, lenders are forced to minimize their risk by taking guarantees or collateral, thus making SMEs financing more difficult to obtain (IMF, 2005). Storey argued that lenders perceive it costly to seek information or relevant knowledge for a small transaction and decide not to offer fund.(1994). Banks emphasize information transparency before establishing credit transactions. Hence, proper information maintenance increases the likelihood of SMEs getting required funds by lenders. Berger and Udell emphasize in their study that banks establish an alternative relational lending model that navigates them to disburse loans to SMEs in response to information asymmetries (1998,2006). Furthermore, sometimes banks use their personnel to maintain a good relationship with the SMEs management to get authentic information about the business activities as there is inadequate information exist for proper valuation (Bessy and Chauvin, 2013).

Furthermore, Berger and Udell (1995) suggested in their paper that a long-run lender-borrower relationship may help SMEs to get funds easily in easy terms. On the other hand, P2P lending is an online platform, therefore, may face an obstacle to adopting such a mechanism. This could be a challenge for P2P lenders to imply relationship lending in their business model to alleviate the information asymmetry in SMEs financing.

2.2.2 Collateral Problem

SMEs do not get finances from financiers due to their rigid conditions, such as collateral requirements. Particularly, SMEs suffer from the collateral demand to get the capital. Berger and Udell have discussed that most SMEs are not getting funds from formal institutions due to the lack of collateral or asset (1998). Collateral is a form of securing the loan that is given to SMEs. Thus, banks can minimize the default risk when a borrower may fail to repay the loan amount. Banks ensure the collateral requirement before loan approval. Besides, Meagher has claimed that the collateral demand by banks hinders the sound growth of SMEs since it is impractical for them to arrange such costly resources (1998).

2.2.3 Transaction cost and Interest rate issue

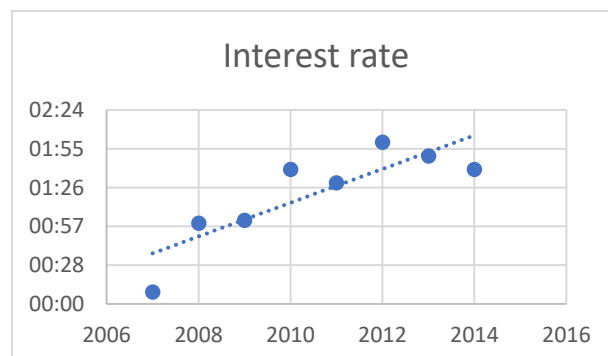
Researchers have identified that SMEs financing gets troubled by transaction costs substantially (Ellram and Dooley, 2014). Particularly transaction cost is the charges associate with the lending service provided by financiers (Grover and Malhotra, 2003).

Table 4: Transaction cost of borrower and lender

Transaction Cost	
Borrower cost	Lender Cost
Time, service fees, print cost, travel cost	Information search cost,evaluation cost

There is transaction cost from both lenders and borrower side. Borrower’s transaction cost can be the fees, document print cost, transportation cost, and others. And, lenders' transaction costs can be information search cost, credit evaluation cost. Often, lenders refuse to take SME loan applications due to the high transaction cost compared to the return.

Figure 5: The interest rate is increasing over time in SMEs lending, source: OECD,2016



Next, a high interest rate is another primary roadblock of SMEs financing. Due to the increased lending rate, most SMEs prefer funds from personal sources or family and friends.

Also, SMEs give up their potential projects because of the excessive high rate. According to the WBES survey, analyzed by Beck et al., there is 12 dominant roadblock of SMEs financing; interest rate is one of them (2006). Following this topic, a higher interest rate results in more defaults, therefore discourage SMEs to apply for a loan at increased interest rate. Consequently, financiers consider SMEs riskier than other large companies. However, interest rate changes with the loan amount, collateral, relationship, credit rating, and so on (Berger and Udell, 2002).

2.2.4 Management Expertise problem and Other Challenges faced by SMEs

Management inefficiency is one of the challenges for SMEs financing. Lack of appropriate skill and strategy in management, SMEs fail to enhance their performance. Since SMEs is usually a small company, therefore management wrong decision affects the business operation significantly. Moreover, highly capable managers are costly to hire for SMEs, and this situation is common in most of the case. Consequently, it has become a serious problem for SMEs (Huang, 2014).

Aryeetey et al. (1994) and Parker et al. (1995) have studied that other factors hampered SMEs business; therefore, resulting in unprofitable business. Consequently, the unprofitable business creates threats for loan approval. Factors such as lack of efficient manpower or skilled personnel, inappropriate technological advancement, and unstable business environment, such as weather-dependent seasonal business, may create obstacles in SMEs business.

Furthermore, banks verify the loan application of SMEs strictly. Sometimes it takes a long time to provide the result that the borrower may already get the loan from other sources or the scope or interest are no longer available. (Avevor, 2016,p.44). Moreover, the loan repayment period is also a big problem for SMEs as the period is very short compared to the loan amount. Ricupero argued that "financial institutions' loans granted to SMEs are often expected to be repaid within a very short period to cover for any long-term investment strategy" (2002, p.34). Furthermore, bank documentation requirements

also create problems for SMEs; most new and small SMEs do not have such skills or ability to obtain those documents.

2.3 Peer to peer Lending(P2P)

Recently, the fast growth of internet and technology have formed new and innovative ways of financing. One of the modern types of lending is Peer-to-peer lending. Basically, P2P is a online platform of lending that connect borrower to lender. Gradually, P2P lending is getting popularity in all parts of the globe. As such, P2P is considered more simple and flexible financing option compared to the traditional financial institutions (Ye et. al., 2018). However, P2P may increase default rate to various reasons inherent in its business model, such as, collateral-free unsecured loans and high interest rate. Therefore, to address the shortfalls of P2P lending is mandatory in order to ensure its growth and development.

Description of P2P lending and its possible financing opportunities for SMEs were given below.

2.3.1 Definition of P2P Lending

Peer to peer lending is one kind of crowdfunding. Crowdfunding is generally defined as “an open call, essentially through the Internet, for the provision of financial resources to support initiatives for specific purposes” (Bellefamme et al., 2014, p. 588). Crowdfunding can be narrowed to an entrepreneurial aspect, entrepreneurs collect their funds through the internet from a large broad group of investors (Mollick,2014). Morduch said the microfinance concept has influenced crowdfunding significantly (1999).

The crowdfunding platform is evolving unexceptionally since its commencement. Crowdfunding can be two types; investment and non-investment. P2P is categorized under investment model crowdfunding (Lynn &Mooney). Different types of crowdfunding are identified and can be categorized based on their attributes.

"Person-to-person or peer-to-peer lending – also known as P2P lending, P2P investing, and social lending; abbreviated frequently as P2P lending – refers to lending and

borrowing between individuals through a for-profit o/nline platform, without the intermediation of a traditional financial institution" (Loureiro & Laura, 2014, p.2).

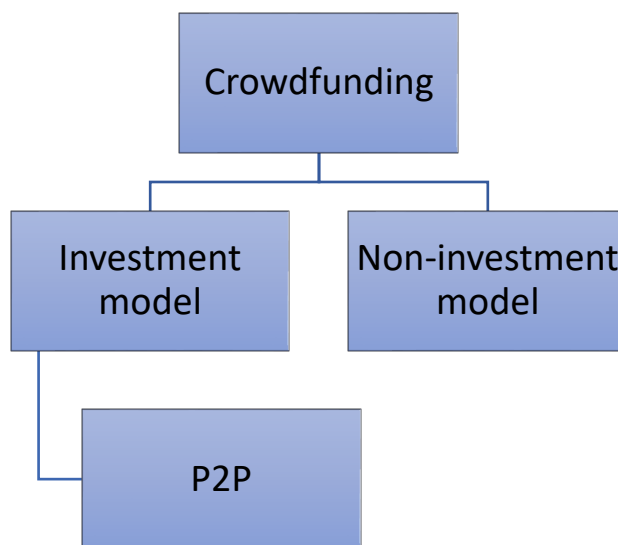


Figure 6: Categories of crowdfunding

P2P provides financial services using an innovative online setup. Notably, P2P does not use an intermediary to process the loan application. Thus, enable lenders to complete the procedure within a short time and also serve borrowers with a poor credit history that usually are rejected by traditional financial lenders, such as, bank (Reddy & Gopalaramanj,2016, p.3). According to EU definition of P2P, an alternative to the existing credit facility offered by the bank and unlike the bank loan; fund can be sourced from multiple lenders. Similarly, Bachmann et al. have claimed that the whole transaction is completed online through pairing supply and demand for money. (2012).

P2P lending became one of the prominent types of lending platforms in the recent period. Particularly, P2P is considered a distinct type of crowdfunding where business is financed through accumulating funds from different investors. But, P2P works differently than traditional lenders, such as banks; following an innovative business model. Also, P2P replaces traditional financing by modifying the prevailing lending pattern and thus, create challenges for lenders and regulators as well. P2P is becoming popular day by day and accepted by the borrower increasingly. (Rainer,2016). Furthermore, P2P can benefit both the lender and borrower without the involvement of traditional lenders.

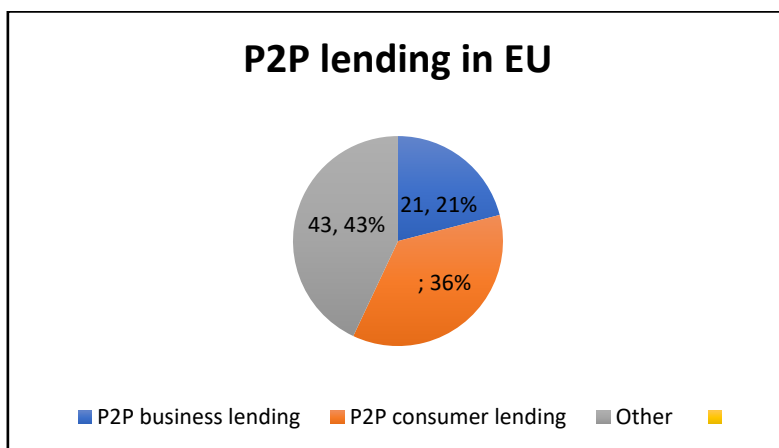


Figure 7: Crowdfunding in EU, Data based on B. Zhang et al, supra note 2, derived from (Rainer,2016, p.2).

P2P lending to SMEs is expanding rapidly. In the EU, P2P business lending is about 21% of total crowdfunding. This amount is significant and is increasing.

P2P has adopted a new and exceptional business model that possesses some rare aspects. Elaborately, P2P platforms transfer rights of using intangible products and services, such as money and interest (Chen, Lai & Lin,2014). Mainly, P2P lenders have no physical existence rather an online presence. And typically, grants loans quickly with less documentation than the bank. Moreover, they adopt different credit screening devices with the help of financial technology that alters the traditional system; consequently bring faster process and reduced cost (Cortina &Scmukler,2018)

To evaluate the credit history of the borrower, a P2P lender demands few financial attributes that can be used as determinants; such as, earnings, expenses, total debt or total asset, etc. Often, this information is processed by a third party. However, some P2P platforms also require other types of information such as age, gender, family background, or social information as this information is taken considerably for funding approval (Alexander et al.,2011). Thus, this could be difficult for P2P to obtain such rarely available information from the borrower. Because, P2P lenders have no direct connection with their borrowers, accessing sufficient information could be troublesome. Researchers suggest modifying the business model and adopt a different mechanism to handle the situation of information asymmetry. Besides, P2P lending is facing other stumbling

blocks, such as credit default and money laundering. Hence, this is a quest for P2P lending to go ahead and find an optimal solution to ongoing problems and boost SMEs financing.

2.3.2 P2P lending in Financing SMEs

Due to unfavorable lending conditions and complex procedures, SMEs are preferring alternative funding options. Recently, P2P lending is rising notably in all corners of the globe. Small market nations, as well as, big market countries, such as China, the United States, and the United Kingdom also use P2P for business financing. With the advent of P2P, SMEs are evolving faster. To ensure the productivity and sound growth of SMEs, this financing trend should be monitored. Also, to continue and maintain uninterrupted financing for SMEs, legislators have to contribute responsibly. Though, SMEs financing increase in some parts of the world; in some other corner, are still facing difficulties. Especially, new ventures and young enterprises are struggling to get the required funding to grow. (OECD, 2019).

Besides, digital platform, for example, crowdfunding and P2P has increased rapidly in recent times. Online lending, such as P2P is considered the topmost financing instrument for SMEs. SMEs financing gap is diminishing through this online lending notably. (World bank, 2017).

Table 5: Peer-to-Peer Lending to Business, 2016,source: ADB(2019)

P2P lending	Volume of New Credit (\$billion)
China	61.5
United States	1.5
United Kingdom	1.8
Europe excluding UK	0.4
Japan	1.2

US and China have the biggest market of P2P. In other parts of the globe, P2P lending to businesses is small but growing very fast. P2P business lending is also becoming a popular source for financing SMEs. Hence, this expansion will boost SMEs financing largely

More specifically, emerging P2P lending institutions is trying to fulfill the excessive credit gap of SMEs. There is a notable chasm between the financing need of SMEs and the availability of funds. Traditional lenders become stricter day by day due to the ongoing issues related to SME financings, such as information asymmetry, high transaction cost, and management inefficiencies. However, with the advent of P2P lending, financing SMEs become much easier than before. P2P is a new and innovative way of arranging credit for SMEs in their early stage. Some scholars believe SMEs can get their required funds even if they do not have structured financial documents or credit history. Also, P2P transforms the SMEs lending model into an advanced and progressive version that largely increases the financial inclusion for them (Cortina& Schmukler, 2018).

Many researchers are trying to find the impact of the information asymmetry issue in P2P lending. In this particular market, lenders are at a weak point compared to the borrower. Since, the borrower has the whole picture of the exchange, while lenders may know to the extent borrower let them. It is suggested to apply an innovative business model that can mitigate this information asymmetry issue in P2P lending. To address the problem successfully, safeguards should be introduced in P2P lending. Globally, P2P lending is adopting different mechanisms to tackle the information asymmetry problem.

Generally, P2P uses borrower's online available data to know credit information to label a credit rating that entails the likelihood of the borrower to pay back the debt. This credit rating can be derived successfully after assessing borrowers' essential personal information, such as financial status, social information, and peer recommendations (Yan et al., 2015).

Borrowers' hard information, such as financial information assessment, credit rating, etc are considered significant to determine the loan success and determining an ultimate lending rate (Greiner and Wang 2010; Serrano-Cinca et al. 2015). But recent studies claim that only credit rating may not enough to convey the right estimate of a borrower's creditworthiness. Thus, P2P lending needs additional information exposure to produce a better picture of the creditworthiness of borrowers along with hard information (Serrano-Cinca et al. 2015; Tao et al. 2017; Zhu 2018).In P2P lending, information about the borrower and their situation may describe as soft information. (Dorfeitner et al. 2016). Moreover, soft information assessment, for example, some peer recommendation and purpose of the loan, help lenders to screen lower grade borrower more efficiently. (Iyer

et al. 2009). Gao et al. (2016) examined in their research that the loan purpose statement can be faulty which is considered an important factor of granting loans by lenders. Also, soft information, such as borrowers' study background, job, and other qualifications affect remarkably (Pötzsch and Böhme,2010). Providing more narratives about the identity of borrowers may enhance the chance of loan approval and decrease the ultimate interest rate (Herzenstein et al. 2011). Furthermore, Michels claimed that delivering information by borrowers is inversely related to the interest rate, thus better information sharing results in lower lending rate (2012).

Information asymmetry causes default in P2P lending predominantly. As such, assessing borrowers' hard information is not enough to decrease the defaults in P2P, since this hard informations generate from old data. Sometimes borrowers' attributes also predict the default possibility than the stated accounting statements (Iyer et al. 2016).

Borrowers establish a close relationship with the lender to collect more authentic information that can not be evaluated through financial data or credit scoring. "Soft information reflects aspects of a borrower's creditworthiness and prospects that hard information cannot fully capture and thus plays a crucial role in lending decisions (as cited in Campbell et al. 2018,p.11)." Also, Campbell et al. Proposed a soft-information-based lending model that perfectly fits in an imperfect information credit market, such as SMEs (2018). Moreover, soft information of the borrowers in SMEs loan applications plays a vital role than available hard information (Demiroglu et al. 2017).

2.4. Summary: theoretical framework

The focus of my study is on the SME financing constraints and P2P lending's contribution to mitigate the difficulties, particularly the information asymmetry issue. I will provide justifications of my paper about the theoretical approach and discuss the research framework. To understand the ongoing barriers of SMEs financing, The asymmetric information theory is used in this paper. Basically, this theory has been widely used in the field of business and financing.

Asymmetric information theory construes the major problem that SMEs are dealing with while perusing funds. Information asymmetry problem generally exists between lender

and borrower, and the lender has improper knowledge about the borrower (Riggins & Weber 2017). Leland and Pyle have highlighted that borrower particularly concern about their current status than others. For instance, borrowers' earnings, assets, debts, etc. are considered confidential issues and better acknowledged by borrowers themselves. The availability of information may help the lenders in financing decisions (Leland & Pyle 1972). Consequently, inadequate information results in adverse selection and moral hazard issues. Therefore, it will be a challenge for P2P lending to handle the information asymmetry problem efficiently while financing SME.

To summarize, the literature review demonstrated the financing problem of SMEs. Multiple factors hinder the financing possibilities of SMEs. For example, the severity of information asymmetry problem in SME financing. Besides, collateral, transaction cost, interest rate, and management problem create obstacles in funding SME.

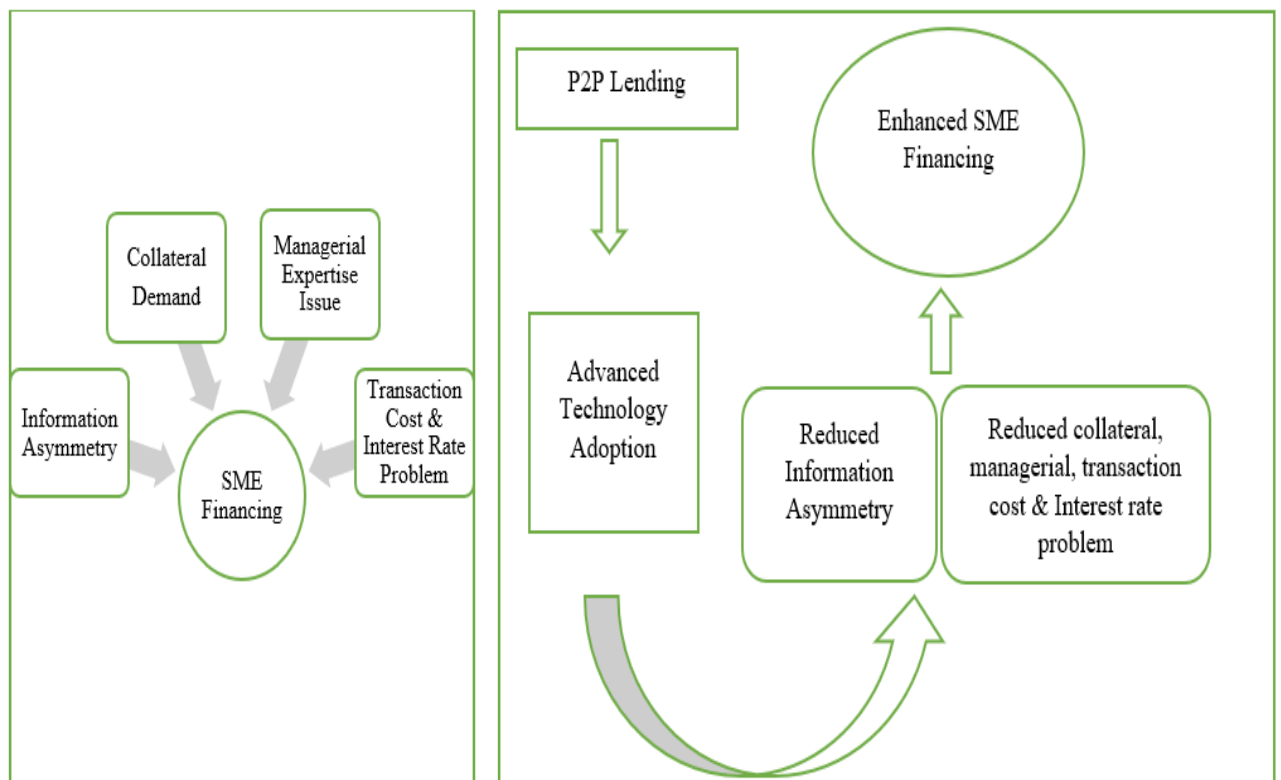


Figure 8: SMEs Financing Constraints and How P2P could ease the problems

Furthermore, P2P lending with its technological adoption may ease the current situation of SME financing. As such, the below-constructed diagram defines the research framework based on the goal of this paper.

The literature part, asymmetric information theory and the above illustrated diagram have displayed that the information asymmetry and other challenges of SMEs are shrinking the financing spheres largely. Particularly, the information asymmetry problem is considered one of the major roadblocks in SME financing. Thereafter, the main purpose of the study is to find the scope of P2P lending in minimizing the obstacles of SME financing including the information asymmetry problem.

3.METHODOLOGY

3.1 *Qualitative Research*

To examine people's thoughts on a specific phenomenon, qualitative research is one of the pioneers. Qualitative research guide researchers to observe what is essential and people's preference. The aim of conducting qualitative research is to explore human action and practice. "Qualitative research is claimed to be concerned with subjective meaning and hence very different from quantitative research's pursuit of objective facts" (Silverman, 1943, p.4).

Qualitative research is conducted to know the facts and essence of common people in a society. Data in qualitative research is non-quantifiable and are variety in forms; such as interview, document, video recording to text. The purpose of the qualitative study is dynamic and largely varies with the research agenda. The result of the qualitative research is based on the data analysis tactics. The results are also known as findings which may describe different features, such as, cause and effect, suggestion, recommendation, policy alternation, adopting, and so on. Qualitative study is conducted in many fields, such as sociology, economics, health care, business, and so on (Saldana,2011).

The author chose a qualitative approach for the study as it seems realistic and feasible to complete the study. Moreover, the qualitative method was helpful to get detailed answers from respondents. For this study, to address the research questions properly, a qualitative approach was best fitted as this method guide author to know the phenomena from a broader perspective. However, both qualitative and quantitative approaches may provide more in-depth answers to the research questions. Besides, using only the quantitative approach may assist the research to obtain a better result as It may cover a large population and therefore, will deliver a more focused justification of the paper. Notwithstanding, the researcher could not able to use the quantitative method due to certain barriers. For instance, language problems, covid situation, and less personal contact with the target population.

3.2 Data Collection

In this section, a description of the process of data collection was discussed. Qualitative data were collected through the interview from 8 individual. Particularly, they are from Europe and Asia.

In this particular study, a qualitative interview method was used. Specifically, a semi-structured interview was designed. Collecting data through interviewing samples is a conventional and well-known method both in quantitative and qualitative research. (Salkind,2010). Qualitative interviews are useful to understand people's thoughts on a specific phenomenon besides researchers' preset topic. Thus, interviews facilitate the study by providing satisfactory answers. Moreover, a semi-structured interview helps to get authentic information about a certain topic while not creating a dilemma in the researcher and interviewee's mind. Conducting semi-structured interviews assist me to get the closest answers that comply with my research question. Also, it helped me to focus on the theme that was important for analyzing and interpret the ending.

Table 6: Interviewees' profile

Interviewee Code	Date	Duration, min	Country	Designation	Company Name	Company type
A	04.02.2021	55.40	Finland	Vice Chairman	Piceasoft	SME
B	09.02.2021	40.21	Finland	Business Director, Loans	Vaurus	P2P
C	18.02.2021	Email	Finland	CEO	Springvest	Crowdfunding
D	25.02.2021	Email	Finland	Director	Fixuro	P2P
E	08.03.2021	50.32	Germany	CEO	Mainanalyticalg	SME
F	10.03.2021	57.25	Russia	Chairman	SimpleFinance	P2P
G	15.03.2021	43.65	Bangladesh	Director, business loan	Standerd Chartered	Bank

H	17.03.2021	39.20	Banglade sh	Manager, SME loan	SoutheEas t Bank	Bank
I	19.03.2021	56.77	Banglade sh	CEO	Pathabo	SME

To conduct the data collection successfully, it was needed to find the right people. First, I have used my academic network to search for relevant people. Then my supervisor helped me by recommending his friend. Then, I have also contacted lots of SMEs and financial organizations. To be specific, I have emailed them and contacted them via telephone. But it was difficult to reach them without any reference. However, few of them responded luckily. Then, I have used my family and friends' network. And by doing this, I have managed confirmation from a couple of companies. In my opinion, the data collection process was significantly hampered by the Covid restrictions. Also, due to language problems, it was disrupted.

However, there are confirmed 10 people from different organizations who were ready for the interview. Then, I have contacted through mobile and email about the procedure; such as, how to conduct, time and conditions, etc. Moreover, I have sent my questionnaire to them in advance so that they could get an idea about the topic. Interviews were conducted through WhatsApp phone calls. Also, three of them could not attend the call, therefore, they filled up the questionnaire and also communicated through email about any queries. Interviews were recorded through a voice recorder and then saved on the phone and laptop and also in the cloud. The length of the interview was 5.5 hours and the transcription was 45 pages.

3.3 Data Analysis

The thematic analysis method was used to describe the qualitative data. First, I have transcribed the data collected from interviews and email. Then, I need to read the texts to get acquainted with the response and reactions of the interviewees. Since I have used deductive thematic analysis, so there were five pre-set themes already. So, I carefully looked into the text to categorize them into relevant codes. After that, codes were arranged to match with the selected themes.

In this paper, I have adopted both inductive and deductive thematic approaches. The description of the analysis will be discussed below section.

3.3.1 *Thematic Analysis Method*

In this study, a thematic analysis model was used to interpret the collected data from the interview. The main objective of conducting thematic analysis was to derive themes from obtained texts from the interviews. It is considered that building such themes express essential knowledge about the research question and depict facts within the data set (Braun & Clarke, 2006).

There are two sorts of thematic analysis; inductive and deductive. The inductive type is based on collected data. There is no assumption from the literature in the inductive method. Whereas, the thematic deductive process is following the research question (Braun & Clarke, 2006). In this study, the deductive approach was followed to analyze the data. This study follows both deductive and inductive methods as it provides an elaborative explanation of the data while pays attention to a certain form of the data that is more justified to the research problem. Therefore, this mixed approach enables the researcher to identify more appropriate knowledge to the research question.

To establish the themes, this study utilizes the Braun and Clarke (2006)'s six steps. This is very helpful in thematic analysis to generate themes. The steps are flexible to follow for the researches and easy to imply.

Step 1: Familiarizing yourself with your data

In this part, the researcher needs to read and observe the data to search for relevant patterns and meaning. Interviews were summarized and develop ideas to identify codes. In this stage, first I transcribe the collected phone records and read data again and again. Then, I looked for similar patterns and meanings and gathered the idea.

Step 2: Generating initial codes

Then, based on the data and impressions from preliminary explored literature, preliminary codes were established. Researchers need to identify the relevancy among data. In this

step, I began to form my initial codes manually. To do this, I have highlighted the text after analyzing it. Then, I put together the codes according to their similarity.

Step 3: Searching for themes

Here, the researcher conducts an interpretative analysis of the codes and therefore, helps to construct themes (Braun & Clarke, 2006). In this stage, I have identified a long list of codes. and then transferred codes into themes. In addition, I have used different flashcards to generate potential themes.

Step 4: Reviewing themes

The researcher verifies the themes to make clear results. The data under each theme should be distinct and coherent (Braun and Clarke 2006). Moreover, in this stage, they should reflect the collected data preciously. Here, I made some revisions and re-check themes to find the relationship between themes.

Table 7: Example of coding and thematization

Data	Code	Theme
<p><i>Often it is tough to get the real picture, also they sometimes deliver terrible quality data, sometimes they hide, or take long time to response</i></p>	<p><i>Lack of transparency, opacity, no scope to get real data, deliver improper information</i></p>	<p><i>Information Asymmetry</i></p>
<p><i>"If there is all documents available then we can complete the loan request quickly but improper documentation</i></p>	<p><i>Inadequate document, poor information infrastructure</i></p>	

<i>create the process tight and lengthy"</i>		
<p><i>There is lack of information transparency in SMEs, It becomes very hard to obtain proper information with all necessary legal, financial papers. The incapability of providing sufficient document and information leads to loan rejection</i></p>	<p><i>Insufficiency in providing information, data, improper financial statements, absence of required paper</i></p>	

Step 5: Defining and naming themes

This step defines the refinement and the naming of each theme. Here each theme should represent the appropriate feature of data they labeled. In this step, I provide the names of each theme based on their narrative and meaning.

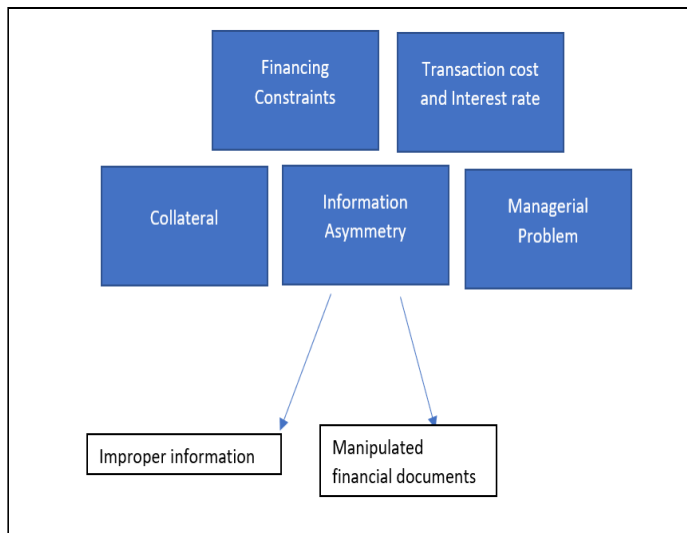
Step 6: Producing the report

In this stage, the researcher does the end analysis and produces the paper. It should define the meaning of themes about the data clearly. I selected five themes in total; Information asymmetry, collateral, managerial problem, financing constraints, and transaction cost and interest rate. Also, I provided an example of how I derived the themes from interview data and develop themes.

For this study, thematic analysis as useful as it was flexible and systemic. But from the researcher’s perspective, it was time-consuming and difficult to finalize the end report.

The researcher thought about different analysis method but finalize thematic analysis due to its flexibility in nature. "thematic analysis provides a highly flexible approach that can be modified for the needs of many studies, providing a rich and detailed, yet complex account of data" (as cited in Lorelli et. al, 2017, p.2).

Figure 9: Themes



Thematic analysis is helpful for beginners in the research field, such as students. Moreover, this process is easy to learn and naïve researchers can adopt it quickly. However, there are also few drawbacks of thematic analysis. For example, sometimes new researchers may find it confusing to do the thematic analysis properly. "While thematic analysis is flexible, this flexibility can lead to inconsistency and a lack of coherence when developing themes derived from the research data" (ibid).

4. FINDINGS

This section describes the findings of this research that address the research question, which was to realize the financial constraints of SMEs and P2P's role in minimizing the information asymmetry issue along with other major challenges. To provide a better understanding, comments were presented from qualitative interviews and illustrated.

Financing constraints

Questions were asked to SMEs, banks, and P2P lenders to perceive the real scenario in SME financing. There are several issues identified that indicate the financing difficulties. Though, the present financing condition has slightly improved with the advent of modern financing channels. Also, the regulations and policies have evolved to support SMEs. The analysis will be discussed below.

Firstly, most of the lending companies prefer large and established SMEs over the new and small companies. Some are offering the minimum loan amount is pretty high that small company cannot afford such high loan amount or they don't have sufficient collateral or asset for loan approval. Most of the loans are evaluated strictly by the credit department. Therefore, it is tough for most of the small or new SMEs to get funding. For example, interviewee B has confirmed about their most of the target customers are mainly large or established SMEs. Providing loans to small and new SMEs is rare.

" Not really startups. Our minimum loan amount is 100,000€. They can't be new company. We prefer established company Who have established credit history and real cash flow already"-Interviewee B

Lenders hardly provide loans to new entrepreneurs. Since, to approve the loan, they need their banking history, therefore, it should be established SMEs. Also, there is high demand for credit from SMEs that financing companies cannot fulfill. Interviewees from the lender side have told various reasons, for example, tight credit rating, incapacity of information, risk assessment, and so on. These findings have demonstrated the problem that has been discussed by scholars in their research papers. Also, the interview agreed with the stated problems. An interviewee from a P2P company has expressed his feeling on this topic. He agreed that the company can not provide most of the customers due to inadequate funding sources. Therefore, It shows that to fulfill the credit demand of SMEs,

more financing options should be created. In this case, it can be said from the literature and the data, P2P can fill the gap in SMEs financing.

"In the market, there are far more demand than our capacity, let's say there is 10-billion-dollar demand, and we have issue only 1.2 billion dollars, Honestly for lenders/banks perspective its high. Most of SME's loan got rejected because of credit quality, while some got rejected as we don't have sufficient capital, thus it shows the demand is really high" -Interviewee F

Following this topic, all interviewees think that banks have enough capital and resources to finance SMEs but they can not finance all SMEs due to the tough guidelines. Therefore, banks have to set the requirements high.

"Bank follows conservative rules and regulation imposed by central bank; they cannot finance due to such tight criteria. Let's say, 6 months old SMEs want fund, int his case, May be P2P can lend but bank can't lend to that business, Moreover there are number of risk other than credit risk; such as, money laundering and regulatory risk, that bank need to consider. So P2P is more capable to lend"- Interviewee F

"Many SME customer do not meet the loan condition. The conditions are set according to the guidelines of central bank"- Interviewee H

SMEs responded to the questions related to the financing difficulties. They have expressed their perception of financing constraints. Most of them have blamed the tough conditions required by lenders for financing their business activities. This signifies the ongoing challenges of SMEs cause of insufficient financiers.

"if you establish a company yesterday, it is difficult that credit company to analyze, because there is no asset, So almost impossible to get fund. But when you are new in the market then there is 3F strategy about what sources you may get money easily; friends, family & fools"- Interviewee F

"There must be hard numbers then we finance those SMEs, it's pretty difficult for SMEs to get money. Because we analyze before approve, also we help SMEs sound growth, as a socially responsible lender, we evaluate the risk factor of the project, then we approve the loan "-Interviewee F

"Few years back, I need money for future projects, so I approached bank and it was lengthy procedure, at the end „I got the money but not full amount. Then, I had to borrow from another source. I did not understand why I did not get the amount I wanted.they said its their assessment on my company"-Interviewee E

However, few SMEs maintain good rapport with their lending bank and they get their required fund at a lower rate or sometimes without collateral. Banks also complied that they prefer to give loans to their existing SMEs client. Besides, the local branches have a close connection with their SMEs borrower which allows them to monitor easily. Similarly, SMEs concede to get credit at simple terms and conditions if the credit relationship is long.

"It is quite easy to give loan to your existing customers. As we know their business well, what they are doing now and what are their thoughts about future.... granting loan to your old clients is different from what we do in case of new borrower. Also, it is possible to waive the collateral demand sometimes. There is a trust issue comes and most importantly, we evaluate the pattern of previous loan installments. The loan installments must be in order"- interviewee G

In addition, the financing situation gets better recently with the new policy adopted by the government and financing companies. SMEs with high potential usually get money without any hassle. Nevertheless, the business idea should be unique and outstanding. Particularly, new entrepreneurs are also nurtured by the central bank's SME support program in many regions.

"If they have an excellent idea, potential, good projects then sometimes we do finance entrepreneurs"-Interviewee H

It has been observed that alternative financing channels become effective in funding SMEs. As their loan product is customized and can be avail on easy terms, SMEs are turning towards them from banks. Although there are different statements noticed. Some large and established follow the same strict evaluation criteria. Also, P2P lenders impose hard lending criteria because of fund scarcity. To continue, most of the interviewees from P2P lenders have enough capacity to fulfill the need of SMEs but they need to follow strict guidelines before approving loan application focus group, ion to minimize the default rate. As a result, 10%-20 % of total loans request get disbursed. However, P2P

companies have fewer regulations than banks. There is a large number of P2P firms but among them, very few are financing SMEs.

However, P2P lenders are willing to finance SMEs and they have customized products to support SMEs growth.

P2P companies are trying to boost SMEs growth by tailoring their loan products. But it has been observed that the number of such P2P lending is limited. In addition, borrowers have little knowledge about them. Especially, an interviewee from SMEs stated that they don't know such a company exists or not. P2P has flourished basically in developed countries, in developing nations, there is less P2P lending compared to the number of SMEs. Furthermore, most P2P only provide loans to individuals. An interviewee from consumer-based P2P lending has confirmed that they have not thought about lending to SMEs yet. It shows that to boost financing, more P2P business lender is a prerequisite.

"We did not know about this type of funding, different kind of financing and sometimes more complex than bank"- Interviewee H

"Our company provides loans to only consumers; we don't have any product for SMEs. We will think about it in future, but we don't have any plans yet" - Interviewee D

To summarize, it can be drawn from analysis that there is notifiable progress in SMEs financing through P2P lending. The major problem now is to make P2P lending more affordable and available. Especially, to enhance the startup phase funding for SMEs, there is a need for more P2P lending platforms all around the world. Furthermore, P2P lending companies should enhance their efficiency and capacity to boost SMEs development and internationalization. Most importantly, P2P should provide finance to all; small to large SMEs to ensure economic growth. Also, SMEs still prefer banks over this newly emerged P2P lending. There are few drawbacks of P2P lending, for example, trust issues, high-interest rates, and relatively small loan amounts.

Information asymmetry

Questions were asked to the interviewees from banks, SMEs, and P2P lenders to know how information asymmetry affects financing.

However, few P2P lenders reported that large and well-established SMEs can provide the necessary information timely and properly. Small SMEs may face problems in arranging the required information. Moreover, P2P reported that large SMEs provide audited financial statements mostly but those are new and small, struggle to arrange. Also, It takes a long time to provide the necessary documents.

For example, Interviewee B, a P2P lender, claimed to get the proper information from SMEs clients, though it may take some time. However, the scenario might be different for smaller SMEs, sometimes it takes a long duration to get all required information. This leads to process the loan application without those documents and thus, affects the loan decision. Many P2P lenders suffer from huge defaults due to poor loan processes or inadequate credit ratings.

"No problem getting information, it just takes some time" -Interviewee B

"Yes, if they are small, it depends, sometimes it takes too long that we can't wait then we start to process the loan application " Interviewee B

"If there are all documents available then we can complete the loan request quickly but improper documentation create the process tight and lengthy"- Interviewee G

From the interview, the poor information system has clearly shown. SMEs can not provide required information timely. Also, SMEs lacked sufficient skill and knowledge to handle financial documents appropriately. Most of the time, the lender got unaudited financial documents which is unacceptable. Then, according to interviewed P2P firms, SMEs tend to hide the actual image of the company by presenting false and exaggerated information. Most of the time, it is tough for a lender to verify.

"There is lack of information transparency in SMEs, It becomes very hard to obtain proper information with all necessary legal, financial papers. The incapability of providing sufficient documents and information leads to loan rejection. Since handling SMEs loan file is time-consuming; we prefer to take loan application from large companies"- Interviewee H

"Often it is tough to get the real picture, also they sometimes deliver terrible quality data, sometimes they hide, or take time to respond" -Interviewee D

On the contrary, in some developed countries, to enhance the quality of the credit evaluation process and to enhance information transparency, lenders use a consolidated database. P2P lender from Russia, *Interviewee D* claim of using such mechanism. In addition, he suggested using technological tools to assess the creditworthiness of borrowers. Such a tool unable lenders to mitigate information inadequacy by ensuring better credit assessment.

"We have a centralized credit database, It helps to evaluate credit data and we use it frequently. Then, we use different technological tools to lower information problems. I think it is very important to adopt different tech support, thus it can be easy to do the business" - Interviewee D

Interviewees from banks have stated that they prefer existing customers over a new one. Because, in case of an old customer, they have sufficient knowledge about their business and future projects. Also, the information is enough to provide the loan. Whereas, processing new customers would be troublesome due to information incapacity. Similarly, an interviewee from SMEs claimed to get a loan from one of his previous lenders. It has been observed that if a borrower has a long rapport with a lender, then the likelihood of disbursing the loan increases. Information adequacy may improve the overall lending process.

"I took a personal loan a while ago. After few years, I started a business with my own money and borrowed from my father too. And, for my new project, I applied to the same lender, and initially, I thought I will not get the money. But surprisingly, my loan got approved. Also, the process was smooth since the lender knew about my business"- Interviewee I

To conclude, P2P through technology adoption may mitigate the information asymmetry problem. Specifically, P2P should enhance the availability of soft information of borrowers using advanced technology.

Management expertise

Management competencies-related questions were asked to both lending companies and SMEs. Interviewees from SMEs were asked about how confident they are in their management and whether they have the aptness to deal with financing. Then, questions were asked to know about the training and learning opportunities for their management so that they can cope up with the dynamic economic and financial situation. Next,

Interviewees from lending companies were questioned about how easily they can contact the SMEs management and what they assume about the right skills and abilities of the SMEs management. Furthermore, in what aspect the SMEs can improve their productivity and aptness.

After analyzing respondents' feedback about management's role in SME loan decisions, it is clear that management has a significant contribution to SMEs financing. Few skills of management help SMEs to grow; communication skill, financial management skill, leadership skill is the most prominent ones.

Interviewee B has expressed his thought about SME managers' skills and proficiency. He thinks it is important for managers to possess the necessary financial knowledge to communicate efficiently with lenders. Otherwise, the lending activities can be affected. Also, inefficient managers cannot communicate properly with the lenders. Interviewee B thinks this problem is more familiar in small firms.

"Not really.... Sometimes there is lacking in skill and efficiencies, lack of financial knowledge, especially the smaller the company the higher the problem is, And, commonly, they lack accounting knowledge" Interviewee B

However, most of SMEs have skilled management bodies. They have the right skill to negotiate with lenders. SMEs create different learning spheres for their management. For example, the interviewee claimed to have the proper management to handle financing tasks appropriately.

"In my point, our company has good management to handle borrowing tasks. And we have different learning scope" Interviewee A

"Sometimes we are in rush, as the company has a small number of employees who looks after the different department and also manage business operations, so sometimes it becomes tough to communicate with lenders timely and with good preparation. It is true that at times, we suffer to understand the accounting terms and conditions. But later, the one who suffers from that, it is us because then our loan gets rejected or we need to pay" Interviewee E

Particularly, P2P lenders sometimes overlook the management as their flexible terms, on the contrary, banks always prefer good management. An interviewee from SMEs said that bank evaluates their management before providing the loan. Also, banks favor long

relationship clients. Since banks have established a good rapport with the management so they tend to retain their old customers.

To create such a good connection with banks or other lenders, SMEs must build their management competence. Also, P2P lenders give priority to their existing clients or whom they have internal contact. Sometimes lenders assess SMEs managements credit history before approving fund. If managers are well-reputed then it becomes easy to borrow from financing institutions. Therefore, relationships or networking play a vital role in obtaining credit from lenders. The interviewee confirmed that one of his friends is the key person in a lending company, which helped him to get the fund. Also, he thought it was pretty tough if his friends did not recommend him.

"P2P is a different game, they never look the management but bank have to believe in high-level management" -Interviewee A

Management problem was not a big issue in SME financing. Since most of the management level employees are efficient enough to manage the company efficiently and also to deal with lending activities. Although, the picture is different in small firms. Small SMEs should give importance to develop skills and efficiency of their management including other employees. Especially, training should be focused on financial learning development. Therefore, Management bodies must use a good part of their personal and professional side to make it an advantage to get financing.

Transaction cost and Interest rate

From SMEs perspective, they recognize transaction cost as a burden and affect their business largely. Transaction cost makes challenging for SMEs to obtain fund. Especially, new SMEs struggle to bear high transaction costs. Also, Banks consider SMEs loan size is small compared to the transaction cost. Consequently, it is not profitable to finance small amount loans for SMEs. Next, P2P companies often charge high transaction cost to SMEs because of the perceived uncertainty and risk.

"Fees are significant. Like, if you borrow 1 million dollars then you will give 1 thousand dollars as fees"- Interviewee A

Questions related to the interest rate were asked to know the real scenarios and how they can affect SMEs financing. After analysis, it is clear that the interest rate is pretty high

and not favorable to SMEs. Notably, P2P offer loan at a higher rate than bank. Many SMEs consider high-interest rate is detrimental to their business profit. Also, a high interest rate impacts the development as it affects SMEs daily business operations.

"Our money is expensive, so SMEs come to us when the bank does not approve their loan. It is good for us but in my point, bad for SMEs"- Interviewee B

"Yes, a lot higher, it depends on the collateral, tenor, market situation, risk. If there is high demand then to fulfill the demand, we must increase the interest rate. Suppose, previously it was 7 percent but later, because of high demand; then we have to raise it to 9 percent" -Interviewee B

Few SMEs think the interest rate is high in all available lending options. One SME has described that because of the high interest rate they prefer not to take the new project. Bank reported high cost of monitoring SMEs than other industries. Banks claim that they need government support to reduce the interest rate. However, P2P often charges a high-interest rate compared to banks. This is one of the primary reasons SMEs not applying for a loan from P2P. Access to loans at a minimal interest rate is the barrier to SME financing and most SMEs cannot pay such high interest rates in P2P lending. However, P2P lenders stated that their loan interest rate decreases with the perceived credit risk. The high opaqueness in SMEs make financing difficult and as a result, lender implies high-interest rate to subsidy the associated credit risk.

"We take a loan to support our business, this new online P2P lending charge high rate that it is not possible to pay back and it increases with time. It is not helpful for us at all, also it is not good for the country's development"

Interviewee.

Collateral

Collateral requirement by the bank is mandatory, especially for SMEs. Bank officials claimed that without the collateral it becomes tough to approve the loan. Banks consider SMEs risky and thus, apply the collateral condition to back up the uncertainty. Mostly, SMEs can not avail of the fund due to not having collateral or lower grade collateral. This lower-grade collateral does not fit into the bank's required benchmark. Bank official has authority to

"Bank has money, they can easily fulfill the need of SMEs but due to the strict regulation by the central bank and regulations they often demand collateral and such" - Interviewee B

However, P2P companies may provide funds to SMEs without collateral but with a high interest rate. Thus, P2P creates an opportunity for SMEs to grow with their innovative business framework. Though, P2P lenders think that granting loans without collateral is risky.

"Yes, it's a problem, but we accept different collateral than banks. Banks usually have their type of collateral. Some customers got refused to get funds from banks due to inappropriate collateral, then they come to us and then we evaluate the type and make the decision. Moreover, we don't have to follow certain rules as banks" Interviewee B

In this case, P2P lenders have an advantage over traditional lenders in that they can finance SMEs who have little or no collateral. Also, it is reported by P2P lenders that they modify and design their loan products according to the need of SMEs.

"It depends on the loan type, since arranging collateral is difficult for SMEs, so we have customized product that has no collateral"- Interviewee D

In addition, collateral demand can be waived if the owner or management is known or have a previous lending history with the same lender. Sometimes P2P lender provides loan if they think the SMEs has a high potential project. But, most of the time, no collateral results in a high-interest rate. Likewise, banks or other lenders design SME loans without collateral under some special category; such as SMEs loan for women.

"We are one of the top financiers of the collateral-free loan in our country. There is SME loan product without collateral for women entrepreneurs and entrepreneurs with extraordinary ideas. Mainly, there are lots of loan application we get each month, then our credit department evaluate those and select the best proposal"-Interviewee H

Therefore, collateral-free loan opportunity is increasing day by day. It will certainly boost SME growth. SMEs also prefer loans without collateral. Moreover, a large number of SMEs are taking collateral-free credit from P2P lenders. On the other hand, it increases the credit risk of lenders. Therefore, providing a collateral-free loan with better credit scoring may minimize the credit risk.

5. CONCLUSION

5.1 *Summary of the study and key findings*

The main goal of this study was to contribute to the research gap by exploring previous literature in SME financing. This study aims to realize the financing constraints of SMEs and assess the P2P lending in minimizing these constraints. To navigate the research, two main research questions were formed; First, "What are the challenges in SMEs financing including the information asymmetry problem?" And, second, "How could P2P lending facilitate SME financing by minimizing the information asymmetry problem?" To answers these questions, the asymmetric information problem was explored to assess the ongoing obstacles in financing SMEs.

Then, the methodology was qualitative research which consists of qualitative data collection and data analysis. To understand the financial constraints and P2P's role in financing, interviewees were selected carefully from relevant organizations. After that, the data analysis followed the thematic analysis method. Total four themes were discussed; financial constraints, information asymmetry, collateral, managerial expertise, and transaction cost and interest rate.

Next, the findings of this paper were used to address the problem of information asymmetry and how P2P lending should tackle the issue. The key findings were discussed briefly in the below table. Later, a brief discussion was provided on the possible solutions to the problems. Primarily, the ultimate explications of the information asymmetry problem are to ensure soft information using technological support.

Table 8: Key findings

Key Findings

Finance Gap: There is a significant gap in SMEs financing. Particularly, SMEs require funding for different purposes; For example, business expansion or internationalization, daily operation, and acquisition. Historically, the demands are high compared to the available fund.

Information Asymmetry: Information asymmetry impedes SMEs financing notably. Poor information may lead to high interest rates and the collateral required to adjust the

perceived risk. SMEs need to have sufficient skills and competencies to increase information transparency. Besides, P2P should adopt necessary technological support to lessen information disparity. For a suggestion, Relationship lending can enhance information transparency through close monitoring. However, in P2P online platforms, technology, such as big data, machine learning can improve the current information asymmetry situation in SME Financing. Thus, more soft information will be available to tackle the problem of information inadequacy.

Bank's role in SME financing: According to Banks, they have tight regulations imposed by the central bank in lending activities. Hence, it becomes difficult for SMEs to meet those requirements. Still, it shows that bank is one of the major players in SME financing. Especially, a bank can lend a big amount of loan to large SMEs which cannot be possible for other financial institutions or P2P lending platforms.

P2P in Financing SME: P2P lenders are increasingly financing SMEs and contribute to mitigating the financial constraints. P2P has a competitive advantage over traditional lenders because P2P don't have to follow strict rules and regulation as a bank. However, due to excess credit demand, sometimes they also have to impose tight evaluation criteria. To boost SMEs financing, P2P needs to offer loans at more flexible terms and conditions according to the diverse demand of SMEs.

P2P is currently facing few obstacles in SME financing. For instance, credit default, trustworthiness, and poor infrastructure issue. In some cases, P2P offer no-security loan, thus, enhance the risk of credit risk. Then, P2P still can not obtain the trust from many clients. Furthermore, a large number of P2P lack established infrastructure to operate efficiently. For example, they do not have a proper credit assessment mechanism to identify risky borrowers.

Other Challenges in SME Financing: Notably, other challenges interrupt SME financing. For instance, inefficient managers impact the overall productivity of SME; particularly financing-related activities. Therefore, efficient management may help SMEs to lessen the information imbalance. Consequently, a manager with good financial skills will support SMEs lending activities. Then, transaction costs may hamper the regular business operation. Therefore, transaction cost needs to be as low as possible. Similarly, high-interest rate discourages SMEs to borrow.

Soft Information: To improve information asymmetry condition, it is required to ensure borrower's soft information. Banks or other traditional lenders as financial intermediaries can secure sufficient soft information through relation lending tactics. Whereas, P2P, in this case, without any financial intermediary can develop an innovative business model to ensure the required soft information. As such, soft information certainly will mitigate the information asymmetry problem in SME financing by an improved credit assessment process.

The potential solution to mentioned problems discussed below.

"Information matters in lending, to cope with uncertain credit repayments and to predict the probability of default (PD) of borrowers". (Flögel & Beckamp, 2020,p.5). Information asymmetry is an unavoidable part of lending activities. Bank and non-bank financial institutions, both face some sort of information inadequacy. To reduce information asymmetry, the lender has only the option to verify and analyze borrowers' credible information (Handke, 2011; Hartmann-Wendels et al., 2010). Though, banks are in a better position in reducing information asymmetry by formulating tough regulations and close supervision. Whereas P2P cannot follow such a strategy as not having a physical presence and frequent interaction with the borrower. Nevertheless, P2P lending may adopt a combination of formal finance and informal finance to tackle ongoing problems, such as adverse selection, moral hazard, and credit rationing (Allen et al., 2019). To be specific, practicing informal finance will help to generate necessary insight about the potential and future of the business and also reduce supervision costs. Eventually, it will mitigate adverse selection and moral hazards (Stiglitz, 1990; Ghatak, 1999). To increase information transparency between lenders and borrowers, relationship lending can be an optimal solution. Relationship building may help lenders avail important information (Berger and Udell, 1995, Berger and Udell, 2002).

Relationship lending adoption can be a solution to reduce information disparity (Berger and Udell, 2002). Such a relationship provides valuable soft information which is tough to get from hard data. Boot identified information asymmetry reduces with the number of soft information lenders have and thus lower credit rationing (2000). In relationship lending, lenders usually gather important information about the lending firm to make an accurate decision. This information is soft information about the company, company

owner, or management. "By establishing a solid relationship with the borrower, the lender learns about the hidden attributes and actions of the borrower, thus reducing information asymmetries" (Ono & Uesugi,2009,p.6). Also, this is completely different from transaction-based lending that relies on financial data. "Relationship lending, in contrast, allows informationally opaque small businesses without strong financial ratios, collateral, or credit scores to obtain bank financing by augmenting relatively weak hard information with soft information gained through contact over time"(Burger & Udell,2002,p.17).

In addition, relationship lending may increase the acquaintances of the borrower and its potentiality of various projects. As a result, lenders can detect the less risky company to invest in. The long-run rapport between lender and borrower allow a lender to receive valuable hard and soft information through frequent communication that significantly reduces information asymmetry (Flogel & Bechamp,2019).

Borrowers, who regularly do credit transactions with one specific financial institution, that financial institution become borrowers main lending source. Then, this relationship may help the borrowers in many ways, such as providing funds at an exceptionally cheaper rate, offer a tailored loan, also ready to provide funds whenever needed (Boot, 2000; Handke, 2011; Udell, 2008).

In SMEs, company performance largely depends on their management or director's characteristics. Also, soft information, such as private information about the company director or owner can be helpful to predict the risk profile of the entire company. And this soft information of SMEs may help lenders substantially to assess the firm appropriately. Hard information can not depict the whole scenario of the company's potentiality since it is difficult to understand completely from the borrower's perspective. "Lenders need private and local information on these firms to estimate PD (probability of default). Such information—termed soft information in the literature on small firm finance cannot be directly verified by anyone other than the agent who produces it"(as cited in Flogel & Bechamp,2019, p.3). Particularly, banks utilize their physical presence to communicate with borrowers at short intervals and thus obtain soft information. This is considered a competitive advantage for banks; especially the local branch office since the borrower can visit whenever they want. Also, this soft information-based borrowing expedites SMEs financing (as cited in Flogel & Bechamp,2019).

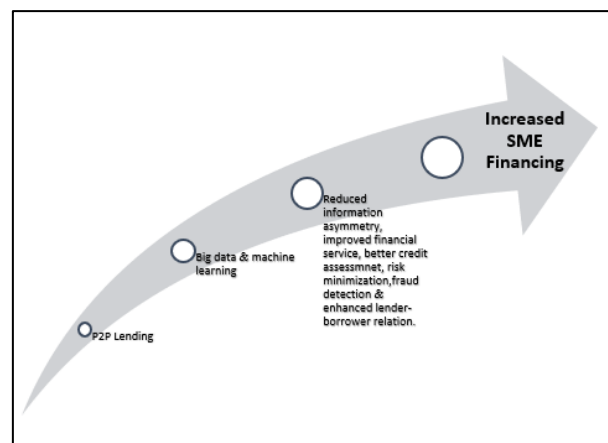
Researchers predict that using both hard and soft information will enhance financing as examining both data will deliver more reliable information about default (Iyer et al., 2016 & Berg et al., 2018). P2P lenders may compete with large banks in financing SMEs using soft information with the help of big data and machine learning. Applying big data and machine learning may enhance the availability of SMEs soft information. In near future, SMEs financing would be more enriched with soft information-based lending.

Soft information has become an important tool to assess SME borrower's creditworthiness. Besides hard information, such as, financial data; soft information of SME and their owners penetrate in lenders' loan assessment. Soft data significantly improve information transparency in lending. Studies showed that soft information affects important factors in the lending decision, such as interest rate and loan default. To be specific, soft information affects the loan decision positively (Iyer et al., 2014). Also, Chen et al. Stated, soft information is considered valuable in determining different factors in the lending decision, such as borrowers' financial quality, interest rate, and profitability of the lending firm. (2015). Similarly, non-financial attributes as soft information, such as management characteristics can forecast loan default possibility. (Grunert et al., 2005). Thus, soft available data can be an important and valuable aspect for SMEs to get finance.

P2P can use their advanced technology to get the required information of the SME borrower. Stulz (2019) has analyzed that fintech firms are in a better position in terms of accessing improved data and they utilize it in financing SMEs. Also, this way fintech firms can fulfill the requirement of SME borrowers. Following this topic, newly emerged fintech companies, such as, large and advanced P2P firms can adopt innovative approaches to access credit data and thus, can mitigate the information disparity that is the main culprit of financing constraints of SMEs. Especially, a large fintech firm's credit rating mechanism, which adopts machine learning technology, is more advanced and trustworthy than the traditional credit rating system (Frost et al., 2019). Besides, P2P lenders should build the website in a simplistic way that can be used by SME borrowers easily. So that, everyone can complete the lending procedure smoothly. Thus, P2P lending can get acceptance extensively among borrowers, especially SMEs (Suryono, Purwandari & Budi, 2019).

Similarly, **Technological support**, for example, big data, machine learning, and artificial intelligence will enable P2P lenders to minimize information asymmetry in SMEs financing. Using this tech support will benefit both the P2P lender and SMEs. The advanced technology will guide lenders to fulfill the diverse finance need of SMEs through offering customized loan products according to their demand. Also, 360° supervision could be attainable for the lender. Moreover, a lender may avail borrower's rare and exceptional information. This previously unavailable information can be utilized to predict the default rate more accurately (IFC, 2020). P2P lenders can avail some advantage over traditional financing institutions with their advanced tech support. Since traditional financing institutions rely on paper data and make a lending decision based on that former information. while P2P can use technological support to make an improved decision. Consequently, facilitate P2P lenders to take more appropriate credit decisions. Moreover, advanced technology adoption will save lenders from fraud and money laundering scandals.

Figure: Benefits Of using Big data& machine learning in P2P lending, source: (Zhang et al., 2015).



Following the topic, big data enable lenders to evaluate borrowers more efficiently, particularly the borrowers without any credit history or adequate information. In addition, more authentic information of borrowers can be obtained through big data that can not be imagined by the conventional business model. Hence, fast and accurate evaluation using big data will enable lenders to select more genuine borrowers. Furthermore, with the advent of big data in the credit market, lenders can offer loans to more clients than before.

Thus, Big data uncover essential information of borrowers that makes the lending activities quick and error-free (Zhang et al, 2015).

5.2 Conclusion

SMEs play a crucial role in the economy and contribute significantly to GDP and workforce. To ensure the sound development of SMEs, sustainable and continuing financing are a must. New advanced alternative financing should facilitate SMEs growth. Particularly, P2P could save SMEs by providing required finance.

To continue, this study explores how P2P lending could facilitate SMEs financing and improve information infrastructure. Undoubtedly, P2P creates alternative access for funding to SMEs and therefore, diminish financing problem. With the new business model, P2P has the advantages to serve SMEs significantly. P2P uses a unique mechanism to mitigate the adverse effect of information asymmetry. However, P2P faces multiple obstacles in financing SMEs too. The default rate is significantly high and the market is uncertain to undertake business appropriately. It has been challenging to continue financing for P2P from its commencement. Particularly, the credit market is volatile and therefore makes it uttermost difficult to survive. Besides, there are already large and matured competitors, such as banks. Banks have leveraged over these modern alternative financing platforms. It will not very smooth path for P2P lending to create room in the dynamic credit market.

Nevertheless, P2P is trying its best to fit into the credit market by providing customized loans to SMEs. Gradually, the user of P2P lending is enhancing. Since its birth, P2P has achieved tremendous success and accepted by all parts of the world.

This paper has focused on the different obstacles including information asymmetry that SMEs face while obtaining finance for their business and a narrowed down aim on P2P lending addressing the SMEs financing. There are numerous points developed from the research. Firstly, the literature has demonstrated that several challenges exist in financing SMEs. To begin with the information asymmetry problem, there is another roadblock too; collateral, management, transaction cost, and interest rate problem. Also, a major focus was on the P2P lending adoption in financing SMEs.

From the findings, there is a notable improvement in SMEs financing was shown. Nevertheless, SMEs are still facing considerable challenges in managing the required fund. Besides traditional lenders, newly emerged P2P lending has enormous scope to fill the gap. There is a significant amount of financing is disbursing through the P2P channel. This amount is not enough compared to the need. P2P has multiple drawbacks including information insufficiency, risk assessment, trustworthiness, money laundering, default, and fraud. These impediments hamper financing operation remarkably. Many P2P lenders are cracking down due to huge defaults. Mostly, poor credit assessment and collateral-free credit play a vital role in this demolition. This is high time to act with the proper guidelines to ensure the healthy development of P2P lenders, therefore securing a stable credit source to SMEs. Moreover, lowering the information asymmetry problem could facilitate the situation. Improved information infrastructure will eradicate these problems and ensure a better credit rating. In this case, the study comes up with a solution of using relationship lending and soft information. P2P lenders can utilize its technical support to get soft information. Particularly, big data, machine learning, and the artificial interface can help lenders to ensure sufficient soft information of borrowers.

To conclude, due to enhancing technology adoption, P2P can disrupt the financial industry. Also, SMEs needs and financing decisions may take a radical shift. Covid-19 will leave a deep impact on the SMEs industry, therefore, a more customized and flexible credit scheme will be the priority of SMEs borrowers. In this case, advanced technology-based P2P lending could be an optimal solution for SMEs.

5.3 Recommendation

P2P lenders play an important role to ensure the growth of SMEs. Particularly, P2P should adopt a more innovative mechanism to remove ongoing roadblocks in SMEs financing. For example, P2P lending has to get more soft information of SMEs borrower to ensure perfect credit scoring. Thus, potentially good borrowers will be chosen and therefore, P2P's efficiency will be enhanced tremendously with less default. Further, P2P should use progressive technology; such as big data, machine learning, and artificial intelligence. Specifically, using this technology, more soft information will be available to P2P lenders. Eventually, this will boost both SMEs financing and P2P lender's safety.

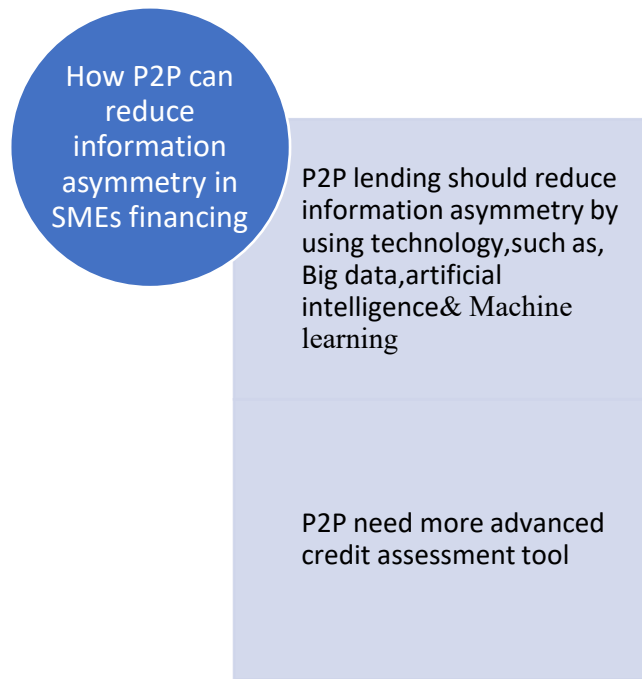


Figure 11: Recommendation to reduce information asymmetry

Next, SMEs also have a crucial role in performing. According to the data, P2P lenders often face difficulty to complete financial negotiations. To solve this issue, SMEs should ensure proper training and learning scope for their management. Moreover, P2P lender also evaluates the SMEs owner credit status, so SMEs managers or owner can maintain good credit history to face this challenge. Furthermore, SMEs have to ensure effective use of the resources and to adopt innovative technology in their operation.

5.4 Managerial Implications

In this chapter, the practical contribution of this research will be discussed. Thus, this discussion will show how the findings of this paper can subsidize the difficulties in financing SMEs. The disclosure of this study has multiple significance for both SMEs and P2P lenders. However, the findings can be difficult to overcome for a few P2P lenders and SMEs due to the aspect of a company. Besides, it will be a challenge for both SMEs and P2P lenders to adopt the suggestion in a short period.

Furthermore, the findings of this study show the funding difficulties of SMEs due to several factors. Along with other problems, poor information infrastructure makes financing more challenging. Therefore, priority should be given to reduce the information gap. First, P2P platforms need to develop an organized and innovative business model that can minimize the impact of information divergence. In this case, P2P can take help

from modern technology to tackle the crisis. While SMEs also need to develop certain efficiency to enhance their potential to get funding from financiers. The managerial implications can thus be summed up as follows; P2P should adopt technology to improve credit evaluation, such as, big data and machine learning, P2P must ensure adequate soft information of borrower to lessen information imbalance, P2P need to promote customized loan product that can fulfill the diverse need of SMEs, SMEs also must utilize their resources carefully and efficiently, SMEs should provide required training to their management and other personnel to ensure the highest productivity, SMEs must develop essential financial knowledge to deal lending activities successfully and lastly, policymakers should help both SMEs and lenders by establishing flexible conditions in financing activities.

5.5 Theoretical Contribution

This study aims to add to the existing researches. The main purpose was to know the financing constraints of SMEs due to information asymmetry and other challenges. Then, to observe P2P's role in minimizing the information disparity. Thus, the study helps to achieve a better realization of the financing problem of SMEs. Also, the study contributed a lot to gain insight on SME financing using P2P lending. A key theoretical contribution of this paper is that there are diverse existing publications on SME financing, but, there is a minimal number of researches that focus on the P2P perspective in SME financing. Therefore, this study will try to provide new insight on SME financing through the P2P channel. Moreover, the qualitative approach in methodology supported the researcher to detail a better understanding of the phenomena. Also, the sample collection from the different regions will contribute a lot to present an overall picture of the phenomena.

5.6 Assessing the quality of the study

I emphasize remaining authentic to the information used in this paper by being translucent through my research. I chose the most appropriate methodological approach according to my limit and skills. I provide details of the data collection method and interviewees' profiles. In addition, the interview questions were given in the appendix. Moreover, in

the data analysis, the deductive thematic approach was discussed properly and an example was given to show the adopted method.

Since this study comprised various key people of the financial institutions and SMEs, I perceive the importance of adopting the ethical significance of the study. I tried my level best to ensure the ethical standard of my study. Furthermore, I took guidance from the academic writing standards set by Tampere University to ensure ethics and quality (Bethwaite, 2017).

I also emphasize protecting the privacy of the participants. I asked consent from each of the participants before conducting interviews about any confidentiality or concern.

5.7. Future research directions

There could be numerous predicament that affects the quality of this study. Thus, the application of this paper can be limited. Firstly, the study focused on different regions and thus, may contain different observations. Therefore, the results are difficult to organize and produce. Next, the sample size is small and concentrated and may not express the actual face of the problem. Further study should be conducted in a wider scope and with a large sample size. However, there are a limited number of a study conducted on this particular subject. Hence, it is recommended to research this subject. Also, future researchers could narrow it down to more specific topics to get accurate results. This study will help future researchers to know the current scenario and what should be taken further. Also, this study will facilitate P2P lenders and SMEs to improve the present financing constraints. Moreover, this qualitative approach will create a benchmark that can be used as a base for further research.

REFERENCES

- Abdesamed, K., H. & Wahab, K., A. (2014). Financing of small & medium enterprises (SMEs): Determinants of bank loan application, *African Journal of Business Management* 8(17):717-727, DOI: 10.5897/AJBM2013.7222.
- Adriana, D. & Dhewantoa, W. (2018). Regulating P2P lending in Indonesia: Lessons learned the case of China & India, *Journal of Internet Banking & Commerce*, vol. 23.
- Allen, F., Qian, M. & Xie, J. (2018). Undersetting informal financing. *Journal of Financial Intermediation*. 39, 19–33.
- Alt, R. & Puschmann, T. (2018). The rise of customer-oriented banking - electronic markets are paving the way for change in the financial industry, *Electronic Markets*, Vol. 22, No. 4, pp. 203-215.
- Andersen, T., B. & Malchow-Møller, N. (2006). Strategic interaction in undeveloped credit markets. *Journal of Development Economics*. 80 (2), 275–298, DOI 10.1007/s11187-008-9129-7.
- Aristovnik, A. & Obadić, A., (2015). The impact & efficiency of public administration excellence on fostering SMEs in EU countries. *Amfiteatru Economic*, 17(39), pp. 761-77.
- Asdrubali, S. & Signore, S. (2005). The Economic Impact of EU Guarantees on Credit to SMEs. Retrieved from: https://ec.europa.eu/info/sites/info/files/economy-finance/dp002_en.pdf
- Avery, R., B., Bostic, R., W. & Samolyk, K., A. (1998). The role of personal wealth in small business finance. *Journal of Banking Finance*, 22 (6–8), 1019–1061.
- Ayyagari, M., Demirgüç-Kunt, A. & Maksimovic, V. (2010). Formal versus informal finance: evidence from China. *Review of Financial Studies*, 23 (8), 3048–3097.
- Bachmann A., Becker A., Buerckner D., Hilker M., Kock F. & Lehmann M. (2011). Online Peer-to-Peer Lending—A Literature. *Journal of Internet Bank Commerce*, 16(2): 1–18.
- Badulescusmes, D. (2010). SMEs Financing: the Extent of Need & the Responses of Different Credit Structures. *Theoretical & Applied Economics*, Volume XVII, pp. 25-36.

- Banerjee, A., V. & Duflo, E. (2014). Do firms want to borrow more? Testing credit constraints using a directed lending program. *Review of Economics Studies*, 81 (2), 572–607.
- Beck, T. & Demirguc K., A. (2006) Small & medium size enterprises: Access to finance as a growth constraint. *Journal of Banking & finance*, 30, pp. 931 - 943.
- Berger, A., N. & Udell, G., F. (1992). Some evidence on the empirical significance of credit rationing. *Journal of Political Economics* 100 (5), 1047–1077.
- Berger, A., N. & Udell, G., F. (1995). Relationship lending & lines of credit in small firm finance. *Journal of Business*. 68 (3), 351–381.
- Berger, A.N., Udell, G.F., (2002).. Small business credit availability & relationship lending: the importance of bank organisational structure. *Econ. J.* 112 (477), F32–F53.
- Besley, T. & Coate, S. (1995). Group lending, repayment incentives & social collateral. *Journal of Development Economics*, 46 (1), 1–18.
- Boot, A.,W.,A.(2000).Relationship Banking: What Do We Know? *Journal of Financial Intermediation*. 9, 7–25, doi:10.1006/jfin.2000.0282.
- Bosri, R. (2016). SME Financing Practices in Bangladesh: Scenario & Challenges Evaluation, *World Journal of Social Sciences*, Vol. 6, Pp. 39 – 50.
- Boyes, W., J., Hoffman, D., L. & Low, S.A. (1989). An econometric analysis of the bank credit scoring problem. *Journal of Economics*, 40 (1), 3–14.
- Carangiu, I. & Oltean, L, (2011) Financing sources for small & medium sized enterprises. *Revista Economica*, 2 (55), pp. 121-124.
- Caroline, S.; Mikko, M. & Zongxin, Q. (2017). FinTechs in China – with a special focus on peer to peer lending, *Journal of Chinese Economic & Foreign Trade Studies Vol. 10* , pp. 215-228, DOI 10.1108/JCEFTS-06-2017-0015.
- Casey, E. & O’Toole, C. (2003). Bank-lending constraints & alternative financing during the financial crisis: Evidence from European SMEs. *The Economic & Social Research Institute (ESRI),No. 450*.

- Cenni, S., Monferra, S., Salotti, V., Sangiorgi, M. & Torluccio, G. (2015). Credit rationing & relationship lending: does firm size matter? *Journal of Banking & Finance*. 53, 249–265.
- Cortet, M., Rijks, T. & Nijl, S. (2016). PSD2: The digital transformation accelerator for banks. *Journal of Payments Strategy & Systems*, 10(1), pp.13-27.
- Cumming, D., J., Leboeuf, G. & Schwienbacher, A. (2015). Crowdfunding models: keep-it-all vs. All-Or-Nothing. *Financial Management*, 1–30.
- Degryse, H., Lu, L. & Ongena, S. (2016). Informal or formal financing? Evidence on the co-funding of Chinese firms. *Journal of Financial Intermediation*, 27, 31–50.
- Deloitte, A. (2016). Temporary Phenomenon ? Marketplace lending: An analysis of the UK market, Available at: <https://www2.deloitte.com/uk/en/pages/financial-services/articles/marketplace-lending.html>.
- Eva, J. (2014). New Trends in financing small & medium enterprise in the EU, *Actual problems of economics, Volume.II*.
- Flögel F, Beckamp M. (2020). Will FinTech make regional banks superfluous for small firm finance? Observations from soft information-based lending in Germany. *Economic Notes*. 49.
- Franks, J., R., Serrano-Velarde, N., A., B. & Sussman, O. (2020). Marketplace Lending, Information Aggregation, & Liquidity, *Review of Financial Studies*, Available at: http://ssrn.com/abstract_id=2869945.
- Ghatak, M., (1999). Group lending, local information & peer selection. *Journal of Development Economics*, 60 (1), 27–50.
- Gibson, T., & Vaart, H., J. (2008). Defining SMEs: A less imperfect way of defining small & medium enterprises in developing countries, Available at: <https://www.brookings.edu/research/defining-smes-a-less-imperfect-way-of-defining-small-and-medium-enterprises-in-developing-countries/>.
- Gronum, S., Verreyne, M., L. & Kastle, T. (2012). The role of networks in small & medium-sized enterprise innovation & firm performance, *Journal of Small Business & Management*, 50 (2), 257–282.

- Grunert, J., Norden L. & Weber, M. (2005). The role of non-financial factors in internal credit ratings, *Journal of Banking & Finance*, 29:509–531.
- Havrylchyk, O. (2018). Regulatory Framework for the Loan Based Crowdfunding Platforms. Retrieved from: [http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=ECO/WKP\(2018\)61&docLanguage=En](http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=ECO/WKP(2018)61&docLanguage=En).
- Hildebr, T., Puri, M. & Rocholl, J. (2017). Adverse incentives in crowdfunding, *Management Science*, 63 (3), 587–608.
- Huang, H., R. (2018). Online P2P Lending & Regulatory Responses in China: Opportunities & Challenges, *European business organizational law*, 19:63–92.
- Iyer, R., Khwaja, A., I., Luttmer, E., F., P., & Shue, K. (2016). Screening Peers Softly: Inferring the Quality of Small Borrowers. *Management Science*, 62, 1554–1577.
- Jacobson, T. & Roszbach, K. (2003). Bank lending policy, credit scoring & value-at-risk. *Journal of Banking & Finance*, 27 (4), 615–633.
- Jaffee, D., M. & Russell, T. (1976). Imperfect information, uncertainty, & credit rationing. *quarterly Journal of Economics*, 90 (4), 651–666.
- Justina, K. & Pula, S. (2014) Defining Small & Medium Enterprises: a critical review. *Academic Journal of Business, Administration, Law & Social Sciences*, Vol 1.
- Karadag, H. (2016). The Role of SMEs & Entrepreneurship on Economic Growth in Emerging Economies within the Post-Crisis Era: an Analysis from Turkey, *Journal of Small Business & Entrepreneurship Development*, Vol. 4, pp. 22-31, DOI: 10.15640/jsbed.v4n1a3.
- Karakas C. & Stamegna C. (2017). Financial technology (fintech): Prospects & challenges for the EU, *European Parliamentary Research Service*, Available at: [https://www.europarl.europa.eu/RegData/etudes/BRIE/2017/599348/EPRS_BRI\(2017\)599348_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2017/599348/EPRS_BRI(2017)599348_EN.pdf).

- Karakas C. & Stamegna C. (2018). Defining an EU-framework for financial technology (fintech): Economic Perspectives & Regulatory Challenges, *Law & Economics Yearly Review*, Vol. 7(1), pp. 106-129.
- Kirschenmann, K. (2016). Credit rationing in small firm-bank relationships, *Journal of Financial Intermediation*. 26, 68–99.
- lan, D., Mobius, M., Rosenblat, T. & Szeidl, A. (2009). Trust & social collateral, *Quarterly Journal of Economics*, 124 (3), 1307–1361.
- Lee, S. & Persson, P. (2016). Financing from family & friends. *Review of Finance Studies*, 29 (9), 2341–2386.
- Lel, H., E. & Pyle, D., H., (1977). Informational asymmetries, financial structure, & financial intermediation, *Journal of Finance*, 32 (2), 371–387.
- Leland, H. E. & Pyle D. H., (1977). Informational asymmetries, financial structures, and financial intermediation. *The Journal of Finance*, Volume 32, pp. 371-387.
- Lin, M., Prabhala, N.R. & Viswanathan, S. (2013). Judging borrowers by the company they keep: friendship networks & information asymmetry in online peer-to-peer lending, *Management Science*, 59 (1), 17–35.
- Liskovich, I. & Shaton, M., (2017). Borrowers in Search of Feedback: Evidence from Consumer Credit Markets. (2017-05), FEDS Working Paper No. 2017-049, Available at: <https://ssrn.com/abstract=2964440> or <http://dx.doi.org/10.17016/FEDS.2017.049>
- Lorelli S., N., Jill M., N., Deborah, E., W. & Nancy, J., M. (2017). Thematic Analysis: Striving to Meet the Trustworthiness Criteria. *International Journal of Qualitative Methods*, Volume 16, DOI: 10.1177/1609406917733847.
- Madani, E., A. (2018). SME Policy: Comparative Analysis of SME Definitions. *International Journal of Academic Research in Business & Social Sciences*. 8(8), 100–111.
- Maiti, M. (2018). Scope for alternative avenues to promote financial access to MSMEs in developing nation evidence from India. *International Journal of Law & Management*, Vol. 60, pp. 1210-1222 , DOI 10.1108/IJLMA-06-2017-0141.

- Mills, K. (2017) Use Data to Fix the Small Business Lending Gap, *Harvard Business Review*, 16.
- Omarini A. (2017). The Digital Transformation in Banking & The Role of FinTechs in the New Financial Intermediation Scenario. *International Journal of Finance*, vol.1, pp. 1-6.
- Petersen, M.A. & Rajan, R.G. (1994). The benefits of lending relationships: evidence from small business data, *Journal of Finance*, 49 (1), 3–37.
- Pranay, G & Mandy, T., M. (2019). Fintech : The New DNA of Financial Services, Available at : https://ink.library.smu.edu.sg/lkcsb_research/6000.
- Raczynska, M. (2019). Definition of micro, small & medium enterprise under the guidelines of the European union. *Review of Economic & Business Studies*, Volume 12, pp. 165-190.
- Riggins, F. & Weber, D. (2017). Information asymmetries and identification bias in P2P social microlending. *Information Technology for Development*, Vol 24. No, 1. pp. 107-126.
- S., N. (2019). Financing Solutions For Micro, Small and Medium Enterprises in Bangladesh SME Finance . Retrieved from :<http://econ.worldbank.org>.
- Savlovschi, O.,L & Robu, R., N. (2011). The Role of SMEs in Modern Economy. *The Bucharest Academy of Economic Studies*, vol. 14(1), pages 277-281.
- Schueffel, P. (2017). Taming the Beast: A Scientific Definition of Fintech *Journal of Innovation Management*, 4, DOI: 10.2139/ssrn.3097312.
- Serrano-Cinca, C., Gutiérrez-Nieto, B. & López-Palacios, L. (2015). Determinants of Default in P2P Lending. *PLoS ONE* 10(10): e0139427, <https://doi.org/10.1371/journal.pone.0139427>.
- Stan, S., A. (2014). The role of small business in economic development of European economy. *Studies & Scientific Researches*. Economics Edition, No 19.
- Steijvers, T. & Voordeckers, W. (2009). Collateral & credit rationing: a review of recent empirical studies as a guide for future research. *Journal of economics Surveys*. 23 (5), 924–946.

- Stern, C., Makinen, M. & Qian, Z (2017). Fintech in China – with a special focus on peer to peer lending, *Journal of Chinese Economic & Foreign Trade Studies* Vol. 10 No. 3, pp. 215-228, DOI 10.1108/JCEFTS-06-2017-0015.
- Stiglitz, J., E. & Weiss, A. (1981). Credit rationing in markets with imperfect information. *American Economics Review* 71 (3), 393–410.
- Stiglitz, J., E. (1990). Peer monitoring & credit markets. *World Bank Economics Review*, 4 (3), 351–366.
- Suryono, R., R., Purwandari, B. & Budi, I. (2019). Peer to peer lending problems and potential solutions: A systematic literature review. *Procedia computer science*, vol. 161, p. 204-214.
- Tikam, J. (2015). What does the future hold for Peer-to-Peer Lending? Available at: https://www.altfi.com/article/1390_what_does_the_future_hold_for_peer_to_peer_lending, Retrieved 02.01.2017.
- Tonge, J. (2011). A review of small business literature part 1: Defining the small business.
- Uesugi, A.,O.,I. (2015). Role of Collateral & Personal Guarantees in Relationship Lending: Evidence from Japan’s SME Loan Market. *Journal of Money, Credit & Banking*, Vol. 41, No. 5 (August 2009)
- Vallee, B. & Zeng, Y. (2019). Marketplace lending: a new banking paradigm? *The Review of Financial Studies*, 32 (5), 1939–1982.
- Veiga, G.; M., & McCahery A., J. (2019). The Financing of Small & Medium-Sized Enterprises: An Analysis of the Financing Gap in Brazil. *European Business Organization Law Review*, 20:633–664. Available at: <https://doi.org/10.1007/s40804-019-00167-7>.
- Voordeckers, W. & Steijvers, T. (2006). Business collateral & personal commitments in SME lending. *Journal of Banking & Finance*. 30 (11), 3067–3086.
- Wankhede, M., M. & Salunkhe, S. (2017). Role of Fin Tech Startups in Lending Services of Indian Financial Sector, *GNIMS - Research Journal “SANSMARAN”*, Vol. 7.

- Wei, Z. & Lin, M., (2017). Market mechanisms in online peer-to-peer lending. *Management Science* 63 (12), 4236–4257.
- Wonglimpiyarat, J. (2017). FinTech banking industry: a systemic approach. *The Journal of Futures Studies*, Vol. 19, DOI:10.1108/FS-07-2017-0026.
- Xuchen, L., Xiaolong, L. & Zheng, Z. (2017). Evaluating Borrower's Default Risk in Peer-to-Peer Lending: Evidence from a Lending Platform in China. *Applied Economics*,49.
- Ye, X., Dong, L., Ma & D. (2018). Loan evaluation in P2P lending based on Random Forest optimized by genetic algorithm with profit score. *Electronic Commerce Research and Applications* 32. Pp 23-36.
- Zhang, S., Xiong, W., Ni, W., & LI, X. (2015). Value of Big Data to Finance: Observations on an Internet Credit Service Company in China. *Financial Innovation*, 1.

APPENDICES

Appendix A

1. Questionnaire for SMEs

Title: **SMEs alternative financing using peer-to-peer lending**

Date:

Time:

Place:

Interviewer:

Interviewee:

INTRODUCTION

The study aims to focus on how peer-to-peer(p2p) lending can help Small and Medium-sized Enterprises (SMEs) to get required finance. The p2p lending as an alternative financing solution have gained tremendous popularity throughout the world. The p2p lending platform may create the alternative financing solutions for the SMEs for their growth and development. This paper will investigate factors that could expedite SMEs to use p2p lending for their fund. Also, this paper will try to find out the major problems related to SMEs financing. Therefore, this questionnaire will help researcher to conduct the study by providing relevant answers.

Introduction of organization

Role of Interviewee

Confidentiality

QUESTIONS

Can you please talk about the sector of your company?

How many people are currently employed in the company?

What are the main characteristics of your company?

What is the main business of your company?

Can you please tell something on the turnover of the company in the last financial year?

What difficulties you faced while establishing the company?

Is there any problem that hindrance the growth of the company?

Have the company introduced any new product in last 2 years?

What about the company indicators change? How you assess any increase, decrease on growth. turnover, fixed investment, working capital, interest rate, number of employees, debt compared to asset.

What kind of equity financing the company received?

What are the main financing needs of the enterprise?

What about the fund sourcing from traditional banks? Did the company receive any fund since its inception?

How you evaluate the financing from banks? Have the company got full fund that required?

Can you tell briefly about the growth of your organization since establishment?

What do you think about the peer to peer lending loan process time?

Do you have any problem with their interest rate compared to other lenders?

Is there any collateral requirement for the loan?

What about the documentation part? Was it too complicated to fulfil the documentation requirement?

Have you successfully delivered the necessary information required by the P2P lender firm?

How will you rate P2P platform? Will you recommend it to other entrepreneurs?

How will you evaluate P2P on below stated categories?

Interest rate

Fees and charges

Collateral/Guarantees

Processing time

What do you think about relationship with your lender?

Did you get your first loan from any familiar source? such as, family, friend or previous lender?

Have your lender provide you any waiver on collateral, interest rate?

Here, you can put 1 as strongly disagree and 5 as strongly agree.

	1	2	3	4	5
How you evaluate the help from local government					
Do the company need money from family, friends or shareholders					
In your opinion, the company gets financing from banks easily					
The company can run without external financing					
The company is well established to get loans from banks or other lenders					
We can get short-term credit from financial institutions when needed					
The company have access to all information from lenders to get loan					
The interest rate of banks is satisfactory					

The company publish all required information to the public					
The company has skilled employee to run business successfully					
The management are fully efficient					
The company introduce new products frequently					
The future projects are appealing to get financing					
Peer to peer lending is easy process compared to bank					
The interest rate is low in P2P compared to bank					
P2P need less documents					

P2P require collateral					
The company get all necessary information of loan details from P2P lender					
P2P company is satisfied with the information provided by the company					

CLOSING

Concluding statement

Collect demographic information

Thank interviewee and tell about further procedure or ask if they want to know anything

2.Questionnaire for lender

How do you attract SME customers for loan?

How do you set target group for peer-to-peer/crowdfunding loan platform?

What is the main purpose/use of the SME borrower?

What is the timeline for loan process?

Do you have enough capacity to fulfil all loan request?

9. Do you face any difficulties in loan application of SME clients for below stated criteria

	1=very high	2=high	3=Medium	4=low	5=Never
Collateral					
Financial statement					
Credit history					
Growth prospect					
Required information clarity					
Support from SME management					

What are the key factors you look before granting loan to SME borrower?

How strictly you evaluate borrowers credit history?

What are the main financial statements required for the customer credit analysis process?

What other documents you require to evaluate credit history?

Do you think SMEs have sufficient information to evaluate properly?

Do you need any types of collateral/guarantees for loan application? Yes /No ...

If yes, can you talk briefly about the collateral?

How important is the cash flow of SMEs for loan purpose ?

What about the interest rate you charge for the SME borrower? is it variable?

If yes, kindly state interest rates according to the factors? such as, loan amount, credit rating etc.

Is there any other cost in loan process ?

What about the transaction cost?

Can you tell about the loan application time?

Is default rate high?

What is your plan in default?

State something about the collection process? is it supported by clients?

What do you think P2P/crowdfunding lending be a competitor of traditional banks?

Do P2P/crowdfunding lending platforms offer more value than Banks?

How do you create awareness about P2P/crowdfunding lending among SME non user clients?

Would they try P2P/crowdfunding lending in the future?

What feedback you frequently get from SME clients?

There is certain risk factor from borrowing in P2P/crowdfunding lending. What is your plan to mitigate those?

Do you use relationship lending?

Have you prioritized loan decision based on relationship/familiar network?

What do your thought on soft information? What measures you take to get sufficient soft information of borrower?

Do you think the soft information can reduce information opacity of SMEs?

Here, you can put 1 as strongly disagree and 5 as strongly agree.

	1	2	3	4	5
In your opinion, SMEs gets financing from your firm easily					
SMEs can get short-term credit from your firm when needed					
The company have access to all information					

from SME borrower to approve loans					
The interest rate of P2P/crowdfunding lenders is satisfactory					
SMEs have skilled management to run business successfully					
The management of SMEs are fully efficient					
The future projects of SMEs are appealing to get financing					
P2P/crowdfunding lending is easy process compared to bank					
The interest rate is low in P2P/crowdfunding compared to bank					
P2P/crowdfunding need less documents					
P2P/crowdfunding require collateral					
P2P/crowdfunding provides all necessary loan information to SME clients					

CLOSING

Thank and inform details about further.

