Investigation of Online Peer to Peer Lending as a means to facilitate entrepreneurial finance in South Africa

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WITS BUSINESS SCHOOL

By

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DECLARATION

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ABSTRACT

With technological advancement in the financial sector over the last few years, there now exists digital business loan providers for both SMMEs and retail borrowers. These digital loans have expanded the scope of alternative sources of borrowing and funding alike. The adoption of these fintech funding models has been somewhat slow in South Africa, but if the success of other countries' adoption of these models, particularly peer to peer lending, is anything to go by, this fintech funding model could fill the gap that currently exists in SMME funding.

Data is gathered from SMMEs as well as potential investors on the usage of Online Peer to Peer lending as both a funding mechanism as well as an investment proposition. The purpose of this data gathering -- via a survey -- was to obtain Online Peer to Peer participants' views and/or perceptions about the effectiveness of online peer to peer lending, awareness of alternative (particularly fintech) funding models as well as their receptiveness to conducting financial transactions online.

The survey found that the majority of entrepreneurs and investors believe that online peer to peer lending can bridge the financing gap left by traditional financing institutions in South Africa. Awareness of available fintech financing methods in South Africa is very low amongst both entrepreneurs and retails investors according to the research results in this paper. This suggests more could be done around socializing this form of financing to the general populace. The findings of the research also suggested overall that there is a viable business case for alternative financing for SMMEs in South Africa. In addition, the results of the survey indicated that the slow adoption of this fintech financing models in South Africa creates an opportunity for new fintech start-ups to participate in this market due to the low barrier to entry.

Keywords: Online Peer to peer lending, P2P lending, Crowdfunding, Fintech, Investor, Lender, Borrower, SMME, Entrepreneurship

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LIST OF TABLES AND FIGURES

Table of Contents

1. CHAPTER 1: INTRODUCTION

1.1. Background of the study

South Africa has the highest unemployment rate amongst its BRICS peers with the unemployment rate sitting at 27.5% in 2017 according to Statistics South Africa. This is more than double the unemployment rate of the next closest country, which is Brazil at 12.5%. The reasons for South Africa's high unemployment rate are multifaceted, dating back to the time when the black majority were denied participation in economic activity due to segregation laws that were enacted by the apartheid government. Following the legal proscription of apartheid, more black Africans came into the labour market and the economy needed to absorb the influx of people looking for work. With limited jobs available, this meant other means of employment needed to be created. For this reason, entrepreneurship was viewed as a key factor in alleviating the pressure placed on the formal jobs sector as more people were competing for the same jobs. Over the years, Developmental and Micro-Finance institutions were set up to try and provide finance where traditional banking institutions could or would not. These institutions have, however, fallen short of addressing the huge funding gap that exists in financing those looking to create employment through entrepreneurship.

The challenges facing small business owners in a Sub-Saharan African context have been explored in numerous academic literatures. These challenges are interconnected and yet disparate enough that each of them can be explored separately as a research topic. Access to small business funding continues to be the biggest of them all. It is arguably the largest contributor to the slow growth of the SMME segment of the business population, making it the most impactful of the challenges.

Fast forward to present day, there still exists structural issues underlying lack of a vibrant entrepreneurship culture in South Africa, with lack of adequate finance being identified as but one of the hurdles. This conundrum has resulted in various scholars researching/investigating why a country like South Africa with so much physical and institutional infrastructures, and natural resources could have such high levels of unemployment. A lot of the research has pointed to this lack of access to adequate finance and lack of alternative finance models as being the key reason. Some research, like that of Ojah and Mokoaleli-Mokoteli (2010) and Fatoki (2014), have suggested alternative ways of bridging this gap. In this research I look to unpack additional modern ways -- specifically online peer to peer (P2P) lending -- of providing finance to small business start-ups as well as evaluating how these models have fared in other countries, as a way to draw potentially useful lessons for the South African space.

This paper starts off by briefly analysing the SMME funding landscape in South Africa and investigating why traditional funding vehicles have fallen short in addressing the funding gap for SMMEs. There is a discussion of online Peer to Peer (P2P) lending as a concept as well as its progress in other parts of the world and how this model could work in South Africa.

1.2. Motivation for the study and research question

The Banking Association of South Africa commissioned a study, in 2018, on the hurdles faced by SMMEs and financial institutions in the SMME finance ecosystem in South Africa. The 2018 study was a follow up to the 2010 study on the same subject, i.e. "Is access to Finance an impediment for small business start-ups?" The key findings of the study were as follows:

- Access to finance remains a challenge to small business start-ups, particularly for those requiring smaller loans sizes where demand is the greatest
- Estimation of SMME funding by OECD is only 26% of private sector funding, creating a very large funding gap for this SMME segment
- Other factors identified include unviable business proposals, lack of financial management and seeking the wrong type of funding. These are beyond the scope of this research and will not be explored/discussed

Overall, the study found that the issues identified in the 2010 FSP report still exist as findings pointed to the fact that there has not been a significant improvement in removing the hurdles that stifle access to finance for SMMEs (The Banking Association of South Africa, 2018)

For the reasons above, alternative forms of finance outside of the traditional banking sector need to be sought. The advent and rapid growth of the fintech industry has been a catalyst for the democratization of finance, particularly for SMMEs and aspirant entrepreneurs. Literature has shown that administrative costs and lengthy delays associated with the funding process of traditional banking institutions are greatly reduced when the funding process is underpinned by digitalization-based technology.

This gives rise to the problem statement: Can Online Peer to Peer financing in South Africa facilitate entrepreneurial funding where traditional financing sources have fallen short? Online Peer to Peer financing is a fintech approach to alternative funding that connects entrepreneurs with potential funders via a digital platform. It is important to note that digital platforms merely provide the platform for bringing SMMEs and funders together, firms running these platforms do not bear the risk underlying the financial transactions between funders and borrowers.

1.3. Research Objectives

The research objectives are formed on the back of the literature on Online Peer to Peer funding as a business model that has been tried and tested in other geographic locations. To investigate the viability of this model in a South African context, the research questions are designed with a deductive approach to form a set of premises that will address the questions.

Research Question 1: Can online P2P lending provide an alternative model for financing SMMEs and start-ups?

Many of the forms of financing that are discussed in the literature are still not adequate to provide access to small business financing to those who are outside of the financial centres. Introducing online peer to peer lending -- which can be readily accessible via any device with an internet access -- opens possibilities that were perhaps limited to a few individuals previously.

Research Question 2: Does online P2P lending make it easier for SMMEs to obtain financing?

This process must make it easier and faster to provide access to finance compared to the traditional methods. With this particular technology, ease of access to services should be a focal point to unlocking value for a particular service.

Research Question 3: What are the factors that drive probability of SMMEs getting access to finance in an Online Peer to Peer (business) loan transaction?

When the democratization of access to finance is achieved, the factors that would determine the extension of loans to SMMEs need to be investigated. This is in order to enable the designing of a model that would make potential borrowers of what constitutes a successful loan application.

1.4. Contribution of the study

From a South African perspective, one of the studies on peer to peer lending focuses on investigating a solution to unsecured lending in the retail credit market (Lavagna-Slater, 2017). This PhD research dissertation examined peer to peer lending as a solution to inefficiencies that exists in the broad South African credit market.

My research narrows this broad spectrum to focus on online P2P funding specifically for SMMEs and small start-ups. I am looking to answer the question of whether Online Peer to Peer Lending is a viable solution to the inefficiencies that exist in the current Entrepreneurship funding framework (small business credit market) in South Africa. Could private investors and lenders who wish to participate in this segment of business lending have a viable gateway to access this market? Can this lead to a thriving entrepreneurial activity in South Africa?

People who could benefit from this research are private investors and individuals who wish to have access to an alternative form of investment away from traditional asset classes. SMMEs could also benefit from this research by discovering how Online Peer to Peer lending can help provide the funding where they failed to secure any from traditional finance institutions. This research could also encourage more individuals to set up these Peer to Peer online platforms as the market is still in its infancy in South Africa with very few players in it.

I am looking to contribute to the existing theoretical studies on peer to peer financing by demonstrating how FinTech can propel forward the country's entrepreneurial landscape by expanding on available financing methods.

1.5.Outline of the rest of the report

The next section of the report reviews the literature as it pertains to the Entrepreneurial funding and the challenges faced by entrepreneurs in seeking funding. Traditional Funding models as well as alternative ones are discussed with a view towards demonstrating the need for more accommodative financing models. The Literature review section is followed by a detailed discussion of fintech financing models identified from the literature. The Research method used in the data collection is discussed in chapter 4 with the findings of the research outlined in Chapter 5. Recommendations for Future research as well as Conclusion of the paper is in Chapter 6.

2. CHAPTER 2: LITERATURE REVIEW

2.1. Introduction

Various literatures have shown that traditional financing institutions have fallen short of meeting financing needs of entrepreneurs, much less so for small and medium sized entrepreneurs (Abor and Quartey, 2010; Temelkov, 2020; The Banking Association of South Africa, 2018). Where traditional financing institutions and methods have fallen short in addressing the financing challenge, there has hardly been a viable alternative to come into the financing landscape and address this gap. This is despite there being several initiatives launched by the state in a bid to increase spending on entrepreneurship. Some of the reasons that have been put forth are that these institutions and initiatives are often laden with red tape and there are often requirements that are difficult to meet for the average small business starter or those requiring small amounts for business venture funding. These institutions include DFIs and other state agencies

Small, micro, and medium enterprises are responsible for most net job creation and they make an important contribution to productivity and economic growth (Organisation for Economic Cooperation and Development, 2014).

In addition, there is a consensus amongst various quarters of the economy that a thriving entrepreneurship landscape is crucial to job creation, poverty alleviation and economic growth of any society (e.g. Yeong Ng, 2012). Innovation through entrepreneurship has propelled South Africa's peer emerging market economies to greater economic heights and fast tracked their economic development particularly in the case of China (Ramesh, 2018).

Financial technology has been a major growth catalyst to this entrepreneurship growth with internet peer to peer lending business seeing a significant increase in recent years (Song et al, 2018). There currently exists 1553 P2P lending platforms in China according to Wangdaizhijia data (https://www.wdjz.com). These lending platforms facilitate the provision of finance mostly to those previously not able to acquire it from traditional financial institutions. These include individuals looking to set up start-ups or needing financing for their business. It is hence important to ensure the financing landscape of a country is greatly improved to ensure meaningful contribution to entrepreneurship development.

Bashir and Akhtar (2007) proffered that increasing competitiveness in less-advanced countries can be achieved by adopting existing technologies or making incremental improvements in other areas. Given the small number of online P2P platforms here in South Africa - the largest being RainFin, Lendico and Prodigy Finance, it could be argued that the industry is still somewhat nascent.

2.2. SMME Financing Options in South Africa

Traditional banking institutions remain the key source for SMME financing in South Africa but with limited access to start ups (The Banking Association of South Africa, 2018). These institutions have structured their product offering to cater to the needs of larger corporations

(Abor and Quartey, 2010). While Bank lending is the most common source for external financing for small businesses, this form of finance poses challenges to new fast-growing companies with a higher risk profile (Organization for Economic Cooperation and Development, 2015).

To lay the platform for the discussion that follows, it is important to explore and discuss the financing options that are currently available to entrepreneurs. Various types of financing are available to entrepreneurs and entrepreneurial development in South Africa. Traditional financial options for new entrepreneurs can generally be classified into debt and equity (Schwienbacher and Larralde, 2010). These can be classified in the follow table as adapted from Schewienbacher and Larralde (2010):

Table 1: Financing Options available to Entrepreneurs by Schewienbacher and Larralde (2010)

Equity	**Debt**
Entrepreneur and team members	Banks
Friends and Family	Micro Lending Firms
Angel Investors	Leasing Companies
Venture Capitals	Government agencies/
Stock Markets	Trade Credit
	Bootstrapping

In addition to the above forms of finance, South Africa has a unique form of financing called a stokvel. Matuku and Kaseke (2014) describe stokvels as an informal union of people with a common goal of pooling funds together on a periodic basis to address a common need. Small Start-ups often struggle to find meaningful finance even with all these options at their disposal.

Of the above forms of financing - in Table 1 - Ojah and Mokoaleli-Mokoteli (2010) identified Venture Capital, Angel Financing, SMME Credit Support and Leases as possible models for filling micro-finance gaps withing the South African context. They identified Venture Capital as a category that could address their proffered shortcomings of the current state of the micro-finance for SMMEs. More recent studies, however, have found that entrepreneurs that are financed by Venture Capitalists tend to exhibit the same characteristics - as the funders - in terms of education background, social and professional characteristics (Sorenson, Assenova, Li, Boada, Fleming, 2016). For this reason, a more inclusive approach to entrepreneurial finance is required. A model that would provide all aspirant entrepreneurs with an equal opportunity of securing funding regardless of their social standing or status.

The informal micro-finance sector in South Africa is characterized by companies that appeal more to lower income earners. The nature of such companies is such that they don’t engage in processes that are followed by traditional banking institutions. These processes include credit rationing, collateral (sometimes equity) requirements. Ojah and Mokoaleli-Mokoteli (2010) argued that these practises help traditional financial institutions overcome the problem of Information Asymmetry - which was the theoretical underpin of their paper.

Taken from the concept put forth by Akerlof (1970), Ojah and Mokoaleli-Mokoteli (2010) proffered that information asymmetry presents a situation where prospective buyers have less knowledge about a particular good or service and are thus naturally at a disadvantageous situation compared to the seller who knows more about the particular good or service and would tend to hoard the information to the detriment of the buyer. One would find that this is indeed the case with many of the potential borrowers in remote/rural areas of South Africa. Lack of knowledge and awareness about financial products greatly diminish their bargaining power and their access to sufficient capital to be able to form new entrepreneurial ventures, let alone maintain existing ones.

Adequate access to finance is particularly important towards the establishment of entrepreneurial ventures and the survival of existing ones that can contribute meaningfully to economic growth and poverty alleviation by creating sustainable employment opportunities. This argument was supported by Ahwireng-Obeng and Ncube (2007). Ahwireng-Obeng and Ncube proffered two types of entrepreneurship, namely necessity entrepreneurship (poverty alleviation) and opportunity entrepreneurs (economic growth). They have shown that both constructs have a positive correlation with entrepreneurship. It therefore stands entrepreneurship as an important tool in trying to alleviate poverty levels in South Africa.

2.3. Alternative entrepreneurial financing models

2.3.1. Balance Sheet Lending

This is a method of online lending whereby the lending platform provides loans directly to the borrowers (Temelkov et al. (2018). This method differs from Peer to peer lending in the loan origination process. The platform here assumes the risk of the borrowed funds directly whereas an Online Peer to Peer lender does not. This method of lending could be highly effective where the lender is a large corporate entity with financial back looking to increase its product offering. Large Investment banks and fund managers could set this up to take advantage of this segment of the credit market.

2.3.2. Invoice Trading

In recent years, more innovative ways of financing have surfaced in the entrepreneurship financing landscape. One of these is Invoice Financing. With the Invoice Financing, alternatively called Asset Financing, the idea to provide funding based on the value of the entity's assets. With this form of financing an Invoice linked financing, an enterprise's invoice is traded with investors for the purposes of financing the firm (Vanoni, 2020). This is done via online platform that links investors with the firms who are seeking finance, drawing similarities with Equity Crowdfunding, which is discussed in the next subsection.

This form of funding is more suitable to firms who have a more matured business and have somewhat of a solid track record of sales behind them to attract investors. Newer start-ups could potentially find that this form of financing is not suitable for them. Extensive research is still required on Invoice trading as there is very limited literature on it.

2.3.3. Crowdfunding

Perhaps the most ubiquitous form of online funding, equity crowdfunding is a model of fintech financing that provides financing to individuals via multiple investors providing funding on a small scale to a diverse set of projects. Most of the projects financed by the crowdfunding model are concentrated in certain social fields such as arts, culture and sports. Equity Crowdfunding has been in existence for well over ten year, with the pioneering firm believed to be the French platform WiSEED (Schwienbacher, 2019). Some of the Crowdfunding companies have since gone public with the first Equity Crowdfunding IPO believed to be the UK platform, Funding Circle.

Like online peer to peer lending (discussed in the next section), equity crowdfunding platforms invites entrepreneurs to advertise their business ventures on their websites and provide certain important information that helps investors know about their ventures (Schwienbacher, 2019). Most times this financing is in the form of equity where investors hold an equity stake based on the quantum of their investment into the venture. The distinguishing factor from Private Equity and Venture Capital is that investors do not have to take part in the management of the start-ups even if they have an equity stake in the companies they have extended their funds to. Also, as venture capitals and private equity firms cater to larger more established forms of entrepreneurs with some track record behind them, Crowdfunding platforms caters to smaller firms with little to no track record. Like peer to peer lending, Equity crowdfunding looks to bring in those small individual entrepreneurs and SMMEs who have faced systemic exclusion from the commercial credit market.

Contrast with Online peer to peer lending, equity crowdfunding is a mature market that is now catering to a much broader class of investment projects. Greater amounts of funding from a wider investor base makes equity crowdfunding particularly appealing for those looking for large quantum of funding. This, however, is a different research topic on its own which will not be discussed in this paper.

2.3.4. Online Peer to Peer Lending

Online Peer to peer (P2P) lending is a form of unsecured lending that connects borrowers with lenders, using a digital platform. P2P platforms can provide lending across several lending sub-sectors such as Consumer lending and business lending. The business model is such that P2P platforms originate the loans and match borrowers with the lender. To ensure the quality of the borrowers, P2P platforms provide background/credit checks on borrowers using big data analytics to determine the quality of the borrowers. The assessment of the borrowers would be to aid in determining the interest rate at which the borrower would repay the loan amount. Where no credit information is available, the discretion is purely with the lender whether they would be willing to fund the borrower. The focus of this research is P2P lending geared solely towards SME business lending.

There are 3 (or more) participants in an online P2P funding process, namely the lender, the borrower, and the P2P platform. The P2P platform connects the borrower with the lender, who would be an entrepreneur/SME. Lenders and Investors log on to the P2P site to search for entrepreneurs to fund. Borrowers log onto the site to look for funding for their small businesses. They do this by filling out certain information about themselves and their small business ventures. Borrowers fill out forms that would capture their biographical information. This information is meant to aid lenders in determining the credit quality of the borrowers for determining the loan amount. The P2P site does a background and credit check through power BI tool like Big Data. The basic peer to peer lending process is further diagrammatically described below:

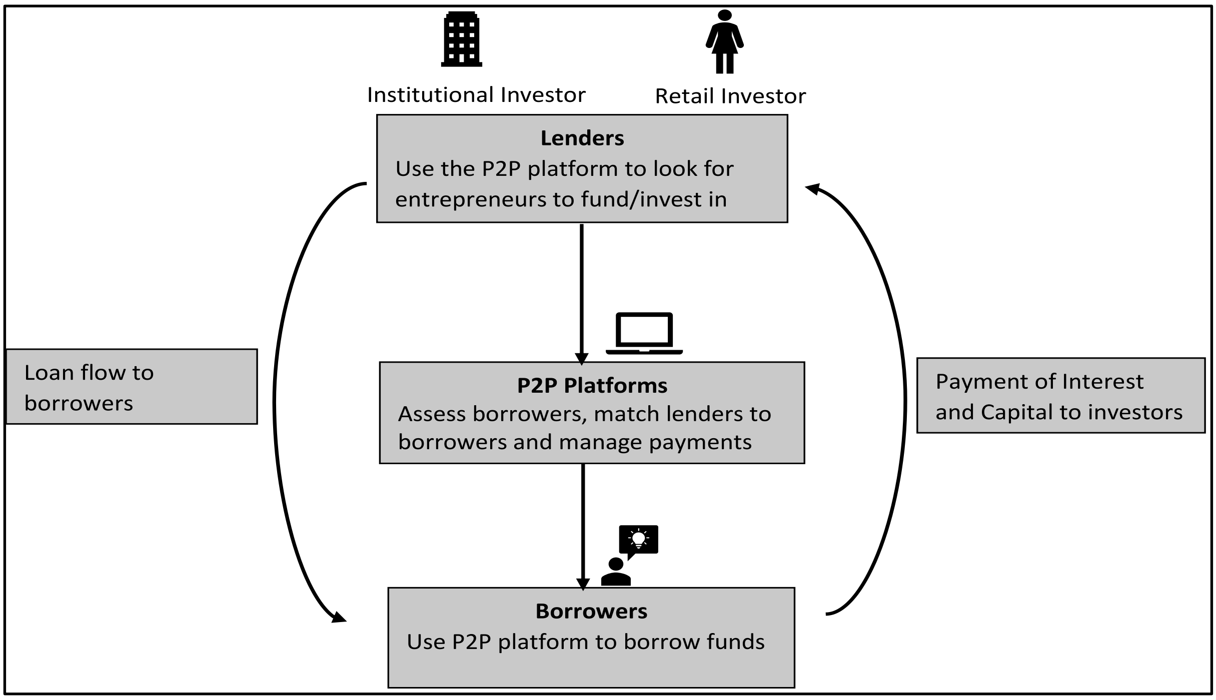

Figure 1: Online Peer to Peer lending process

It is important to note that in a peer-to-peer transaction one loan amount can be provided by many lenders, reducing the risk to one lender. This contrasts with a bank that would typically offer a loan to one customer and transact in larger amounts. P2P lending, like any form of lending, has default risks inherent in the process regardless of the reduction of information asymmetry.

I would argue that any lender on a commercial peer to peer to platform would expect (in return for expended funds) an interest rate that is determined by the borrower's credit worthiness. This credit worthiness would be determined based on information that is readily available to be used in determining the rate. The advent of big data has allowed analysis of large chunks of data using sophisticated technologies. The greater the availability of borrower information and a more accurate credit worthiness score, the lower the interest rate payable on the requested loan. Hard information obtained via Big Data and Artificial intelligence can greatly reduce the risk to the lender, thereby enabling them to provide larger amounts to the borrowers or to extend finance to more borrowers.

Many scholars have been trying to find alternative ways of designing fit for purpose financing models, not just in South Africa and Emerging Markets, but for entrepreneurship in general. Many models have been proposed where some progress has been made in addressing some of the issues that are prevalent in traditional financing methods. Ojah and Mokoaleli-Mokoteli (2010) provided guides from Micro-Finance and Venture Capital Finance. Fatoki (2014) suggested innovative ways such as Crowdfunding - which was briefly described in the previous section of this research work. The scope of financing models still needs to be expanded as there are still a lot of potential entrepreneurs at the periphery of the financial system because of limitations inherent in these models.

It is important to emphasize that one should not place the blame squarely on the shoulders of financial intermediaries. A holistic view of the issues from both sides (SMMEs and financial institutions) needs to be examined. It is largely by examining both these angles will we find an effective model that advances the growth of entrepreneurship, not only in South Africa but across sub-Saharan Africa. With the surge in FinTech (financial technology) over the past few years, as outlined in the literature review, possibilities have emerged that could present more ways of getting more people into the entrepreneurship space by using technology as a catalyst. This has provided some alternative forms outside of the traditional markets and institutions.

Online peer to peer lending has been in existence from circa 2004, with the pioneering companies believed to be Zopa in the United Kingdom and Prosper in the United States (Milne and Parboteeah, 2016). Online peer to peer lending companies facilitate borrowing and lending via a central marketplace (being the peer to peer platform itself) thereby bypassing intermediaries, such as banks (Milne and Parboteeah, 2016). Lenders and borrowers are connected via a digital platform that matches loan seekers to loan providers. The business model is such that borrowers apply - through a formal application submission on the platform - which is then reviewed and listed on the platform. A risk rating is then assigned to the application based on information provided regarding certain biographical and other relevant data about the borrower. An interest rate is then set by the platform. The rate is sometimes set by the lenders through an auction process.

Peer to Peer financing has seen a significant rise over the past few years, with the emergence of several companies in the developed world offering this form of alternative finance as traditional finance institutions promulgate more stringent credit requirements. These platforms provide facilitation of Personal Loans, small business lending and Foreign exchange amongst others (Milne and Parboteach, 2006). The success of the peer to peer financing business model in other parts of the world has seen similar platforms take off in South Africa over the past few years, with one of the first companies being Lendico.

To fully appreciate the concept behind Online Peer to peer lending and to see why it has been so successful in the lower segment of the credit market, some parallels have been drawn with other similar business models that connects consumers with each other - like that which exists in the accommodation for leisure industry, in the form of Airbnb; Airbnb can be described, colloquially, as 'Consumer to Consumer' business model. This is a business model that connects private accommodation owners with private accommodation seekers via an online/digital channel. Accommodation seekers interact directly with private property owners as opposed to going via an intermediary like a rental agency or traditional business to consumer model. The Airbnb model allows private accommodation seekers to find accommodation at lower rates than they would find at traditional lodges or via travel agencies and other accommodation intermediaries. Peer to Peer financing works in a similar manner whereby transaction costs, fees and paper applications normally inherent in the traditional finance methods, are largely eliminated.

Borrowers submitting loan requests on peer to peer websites need to provide, amongst other information, the purpose or reasons for which they need the funds. This information is collected and collated by the peer to peer loan platform and made available to investors/lenders. The more information the borrower provides the better the chance of them obtaining funding on a peer to peer website and at a lower interest rate. The salient information about the borrower's loan purpose is submitted by the borrower on the lending page and used to generate a commensurate interest rate

Elimination of traditional financial institutions suggests that peer to peer lending can be thought of as a disintermediation technology (Lee et al., 2011). By eliminating financial institutions in the lending process, transaction costs as well as lengthy approval processes are significantly lowered. There is hence an inherent incentive for both borrowers and lenders in the usage of P2P technology in the credit market. The lender assumes all the credit risk as the platform is merely the facilitator in the lending process. A lender has to weigh the advantages and disadvantages of this technology to determine if this type of investment is suitable for them.

It thus evident that P2P Lending provides an investment opportunity into an alternative asset class that small retail investors would otherwise not have access to. This is because financial regulators require investors in start-ups, companies that are not publicly listed to be accredited investors. The inherent implication is that PE firms, Venture Capitals and wealthy individuals (Angel Investors) would typically be the main investors in these alternative asset classes, precluding small retail investors. Online P2P Lending (and Equity Crowdfunding) have provided, albeit to a small scale, a gateway for ordinary retail investors to have access to this asset class

Serrano-Cinca et al (2015) put forth credit rationing to be one of the key reasons behind the growth of Peer to peer lending. In any market that has imperfect information about borrowers, some borrowers' loan applications will not succeed regardless of their ability to pay. Such a problem does not exist in P2P lending where borrowers with varying risk profiles can successfully apply for credit.

2.4. Factors affecting lending decisions in Alternative financing models

From a study conducted on the performance on Peer to peer lending in China, Song et al (2018) sought to investigate the factors that could determine whether a borrower could successfully raise enough money on a peer to peer platform. It was found that borrowers who appear more trustworthy, via personal information and pictures, appear to have higher probabilities of securing a business loan and paying a lower interest rate (Duarte et al, 2012). Hard information like credit history, property ownership, employment history, etc., account for the largest reasons for borrowers' loan approval. Because of the issue of information asymmetry, majority of credit providers tend to use soft information in their loan approval processes for borrowers as compensation. This behaviour was examined by Ravina (2008). She sought to examine the effects of overtly observable personal attributes and characteristics on lenders' borrowing behaviour.

Ravina (2008) used data from one of the largest (prosper.com) peer to peer lending platforms in the United States to test her hypotheses on borrowers' personal characteristics. The data she used is one where borrowers posted soft information like photos, personality descriptions, together with their loan applications. In a somewhat surprising finding, her results showed that the interest rate charged on a loan application and likelihood of the loan application being approved were a function, amongst others, of how a borrower presented herself. This suggests that adverse selection that exists in loan applications lead to formulation of taste-based biases in the lending process.

For illustrative purpose, when using beauty as a function of interest rate, Ravina, (2008) found that a person whose beauty/physical features were regarded as above average, had a higher probability of receiving a loan and a favorable interest rate than a person regarded as having average looks. This is despite the lack of any indication of delinquency on the part of the borrower in question. The few P2P platforms that are operating in the South African space do not seem to solicit such soft information from applicants. A loan request made on Peerfin - one of the largest P2P platforms in South Africa - seem to require hard information and only borrower information that is pertinent to the loan approval process. It is difficult to say whether soft information like that required by Prosper could lead to the growth of the industry and attract better-quality lenders and borrowers. On the other hand, the literature suggests that the South African peer to peer lending ecosystem needs to consider different approaches, like those which were investigated in Ravina (2008)'s study, that could attract more participants in this fast growing industry. As with traditional banks, factors such as borrowers' credit rating, loan rate, biographical information affect the lender's decision to allocate funds in P2P Lending (Duarte et al, 2012). Reasons for requesting funding, known as soft information, also affects the lending decision and lender's trust (Duarte et al, 2012).

2.5. Regulation of Online Peer to Peer Lending

Regulation of peer-to-peer platforms continues to be a global-wide issue that many countries where this form of financing is available continue to grapple with. The more matured markets of People's Republic of China, the United States and the United Kingdom and Japan have a targeted regulation towards online P2P lenders although these differ somewhat, according to each country's P2P lending landscape.

Regulation for peer to peer lending should seek to protect platforms from general market or systematic risk (Nemoto, Storey, Huang, 2019). Nemoto, Story and Huang (2019) further contended that regulation of this industry must strive to maintain a fair, safe and competitive market whilst encouraging growth of this sector.

There is no specific regulation governing the peer to peer lending market in South Africa (Tibane et al, 2020). Research has found, however, that all lending activities in South Africa fall under the National Credit Act of 2005 regardless of mechanisms used to facilitate the lending (Tibane et al, 2020). One of the largest online P2P platforms in South Africa, RainFin, limits the maximum amount that one lender can lend via their platform to R500,000 for lenders that are not registered with the National Credit Regulator.

Given the relatively small market of the online P2P lending in South Africa, it is perhaps not surprising that P2P lending has not warranted targeted regulation to this market and rather still falling under the broad NCA. This could explain why one of the pioneer platforms of Online P2P lending in South Africa, i.e. PeerFin, ceased operations due to "legislation that made this type of business unpractical (sic) in South Africa" (Peerfin, n.d.), as broad NCA regulations were not practical for a fintech market like that of P2P lending. The challenges highlighted in the PeerFin and RainFin cases reinforce the need for an appropriate regulation framework for Online P2P lending site.

It could be argued that regulation would lead to a more stable fintech market, which would be a boon to its growth. More competition amongst P2P firms could also encourage traditional finance to be more open to providing finance to SME through disruption created by the growth of this sector.

Yeo and Jun (2020) have argued that unclear policies and regulation have plagued the peer to peer lending industry. They argued that regulation of this industry could reduce intermediation costs even further.

A comparison of regulatory frameworks of the four biggest P2P markets is shown in the below table:

Table 2: Regulators Frameworks adapted from Nemoto, Storey, Huang (2019)

Regulatory Feature	US	UK	China	Japan
Regulatory Sandbox	No	Yes	No	Yes

Operational License required	SEC license and licenses from state governments; platforms operating without an SEC license can seek investments from accredited investors	FCA license required but provisional licenses are common	Internet content provider license	FSA license
Role of P2P platform	Facilitator of bank loans to borrowers; the platform purchases the loan using funds from investors	Facilitator of loans between investors and borrowers	Facilitator of bank loans to borrowers	Direct lender and aggregator of investment funds
Originator of the loan	Bank	P2P platform	Bank	P2P platform
Provision funds	Permitted but not a widespread practice	Permitted except for ISA (tax-free) investments	Not legally permitted but occur in practice	Not used

A regulatory sandbox resembles a "beta" version of a regulatory testing framework. The purpose of a sandbox is to provide a regulatory environment in which all regulation participants (regulators, P2P platforms) can simulate a "live" regulatory environment for the purpose of assessing its impact before rolling out the framework.

The comparison of the regulatory framework of the four countries shows how regulators in those countries have responded to this growing sector by tailoring regulation to their specific markets. The diverse regulatory frameworks suggest that regulation is tailor-made specifically to address the P2P ecosystem of each of these countries. The South African Regulators would do well to follow a regulatory approach that is a hybrid of these considering how nascent the P2P landscape still is, in South Africa. Regulation could be a boon to the South African P2P landscape as that could encourage investors and entrepreneurs to be more comfortable with the usage of Online P2P lending service.

2.6. Risks associated with Peer to Peer Lending

2.6.1. Probability of Default and late payments

P2P Lending sites operate largely on the mid and lower credit segment. Perhaps the most glaring reason for this is the fact that these individuals often struggle to get financing at traditional banks due to their higher risk profile and credit rationing process that large traditional banks apply. This higher risk profile is driven by the probability of default attached to the borrower. Business Peer to peer lending is premised on the provision of a loan amount for the advancement of a borrower's business venture. Apart from asset-backed peer to peer lending platforms, there is no collateral exchange in a peer to peer loan transaction, as such there is higher risk of probability of default. The high risk would be commensurate with the interest rate charged by the lender depending on the perceived risk of borrower default.

Lee et al (2011), argued that there is a positive relationship between the interest rate charged on a peer to peer platform and the risk of default on a loan. This means that the higher the perceived risk of the borrower the higher the interest charged. Lee et al. (2011) noted that as peer to peer lending is just another form of providing a loan, the same factors that determine probability of default in that area are also present in peer to peer lending. These factors are much elevated with the online peer to peer lending model. This means there is a higher risk of payments being late to the lender or the borrower defaulting entirely on the loan itself.

What certain platforms have done to ensure they mitigate the risk of default is to cap/limit loan amounts. This is a "type of credit rationing that can lower overall default rates" (Jaffee and Russell, 1996 as cited in Everett, 2015, p4). According to Everett (2015), another method of minimizing possibilities of default is by applying certain criteria that enforce compliance with the loan terms. These include imposition of penalties, bad credit scoring in cases of missing payments, as well as more lenient mechanisms like email reminders before payment due dates.

2.6.2. Illiquidity of the Investment

The nature of peer to peer lending is such that the matching of maturing of the loans to the borrowers makes them one of the most illiquid credit assets. Loans cannot be exchange from one lender to another easily after an investor has chosen to provide a loan via a peer to peer platform. To enhance liquidity, however, some P2P platforms break the loans into tranches and then on-lend them in the secondary market (Yeo and Jun, 2020). This would be true for a mature P2P platform with a large user base like Lending Club of the United States. The few P2P platforms that are available in South Africa offer matching services and the secondary market is little to non-existent

A mature P2P landscape would allow for an effective secondary market whereby it would be financially viable to breakup loan originated on platforms and on-lend them. This comes about from wide awareness of this kind of financing and mass adoption, which is currently lacking in South Africa. This research thesis is premised upon assessment of awareness and attitude towards alternative funding methods, vis-a-vis fintech credit.

A way to improve liquidity on Online P2P platforms might be to issue a variety of loans with differing maturing for different investor profiles. Investors with a higher risk tolerance could be screened for long maturing whilst those risk averse investors are screen for shorter maturity loans. Shorter maturity loans could aid in increasing liquidity in the platforms. For the Online P2P market to thrive however, providers have to offer financial products that meet investors' requirements

2.6.3. Information Asymmetry and Adverse Selection

In any credit or lending transaction, borrowers typically divulge information insofar as is required in order to conclude the transaction and have their transaction approved. The withholding of information that might jeopardize the borrower's chances of their loan application being successful is almost always guaranteed. Borrowers have more information about their willingness to pay than they might disclose during the application process (Barron and Staten, 2002). Lenders on the other side rely on information about the borrower's ability to pay for allaying fears about default. This is because in an online peer to peer transactions, potential lenders more often than, do not have a pre-existing relationship with the borrowers.

In addition, some of the lenders however may be institutions who provide loans on regular and formal basis as opposed to individual retail investors. These institutions will most likely have a screening process for borrowers to who they will be providing credit to. This will be in addition to the verification process carried out by the peer to peer platform. Individual investors, however, are guided by the rules of engagement set by the peer to peer lending provider and these types of investor largely rely on the verification process of the peer to peer lending provider.

One of the main challenges of peer to peer lending is identifying good borrowers from a pool of borrowers. With no tools available to lenders to do this, the onus for doing borrower background checks rests with the peer to peer platform, if such platform does provide the service. Worst case scenario is the peer to peer platform does not do borrower background checks on potential borrowers leaving the lender to potential capital loss risk. This Information asymmetry problem is prevalent in many P2P platforms and is an ever-growing challenge.

To compensate for the Information asymmetry, loan providers would charge higher interest rates on loans provided on peer to peer lending platforms. Some peer to peer platforms allow multiple lenders to provide fractional amounts to a single loan application to lessen the risk of default on lenders.

2.6.4. Herding Behaviour amongst Lenders

The key bellwether for growth of peer to peer lending is reduction of transaction costs associated with traditional financing institutions. Brick and mortar financial institutions go to great lengths to ensure they protect their capital by carrying out substantial background checks and requesting collateral on loans extended. This would follow that the information asymmetry described in the previous section would be greatly reduced when requesting funding from a traditional financing institution. This is however not the case with peer to peer lending sites. Peer to peer lending sites bypass these processes to reduce transaction costs. This however comes at risk of information asymmetry being greatly heightened in the lending process.

Information Asymmetry creates a trade-off between high interest rates and potential risk of default for lenders in a peer to peer transaction. As the lenders are facing unknown borrowers over the internet - particularly in a peer to peer lending transaction - they would be inclined to follow decisions that have been taken by other successful investors. This gives rise to what is known as a herding phenomenon in peer to peer lending. Duan et al. (2009) described herding as like a "wavelength effect". They stated that a decision that is influenced by the actions or decisions of others portrays herding behaviour. This is linked to areas such as investment recommendations, technology adoption etc (Duan et al., 2009).

As most of the investors in a peer to peer transaction would typically not be professional investors, Lee et al. (2011) speculated that herding behaviour is therefore prevalent. They stated that, to participate in some loan requests, some lenders would find out about lenders who would have already participated to minimize the risk of providing loans.

2.6.5. Platform Risk and Security

Cybersecurity, data privacy as well as compliance of P2P lending are some of the greater concerns for lenders making use of these platforms (Niu et al, 2020). Cybersecurity has to do with potential fraud associated with scams by posers pretending to be legitimate borrowers seeking funds on P2P platforms. This is a risk that Peer to peer platforms can counter by implementing more robust internal controls by either having strong technical teams or outsourcing to reputable vendors.

Protection of both investors and borrowers' information is of utmost importance in the process of concluding an online peer to peer lending transaction. Data privacy is concerned with proper handling of information to ensure user data is not exposed or compromised in any way that could leave unauthorized use. A peer to peer to platform that does not have robust data handling policies could suffer serious reputational loss and end up going bust as a result. As these platforms operate over the internet, constantly reviewing data protection and privacy policies is of paramount importance

It is important to remember that Peer to Peer lending sites operate like any business that depends on revenue and profitability to stay afloat. P2P platforms' main form of revenue is commission charged on successful loans raised on behalf of borrowers. This means 'take-on' of lenders is key to the 'going concern' of a P2P platform. If the amount of capital raised through lenders/investors dry up, a P2P site faces a real possibility of going bust. This obviously poses a serious risk to the capital of existing lenders.

Although there is no panacea for all the P2P lending sites' risks; investors can follow basic guidelines to ensure they mitigate the risks to their capital by perusing online reviews of peer to peer sites from other users, diversify their risks by allocating small sums across various P2P sites, and reviewing audited financial reports of P2P platforms where available.

2.7. Summary

The discussions in this research work have outlined the importance of Fintech as a catalyst in addressing South Africa's perennial challenge of finding alternative sources of funding for entrepreneurs. What has become starkly clear through this research work is the lack of development of alternative funding solutions to address this.

The development of not just digital lending but of Fintech as an ecosystem has progressed over the last few years in South Africa, albeit, at a slow pace. This is evidenced by the growing and vibrant Fintech culture in South Africa's Western Cape region of George. A lot of fintech start-ups are starting to emerge, however, immediate needs like that of Entrepreneurship funding need to be address as a matter of urgency. This is where Online Peer to Peer lending could play a crucial and a spurring role. This segment of financing still needs deeper understanding by the fintech community to realize its full potential. The understanding of how digital peer to peer payment systems work can only encourage the growth of start-ups, leading to increased investment flows.

3. CHAPTER 3: RESEARCH METHODOLOGY

3.1. Research design

To address the research questions highlighted in the previous section, I used a research methodology that is encapsulated in the research onion of Saunders et al (2007). The onion shows stages that are involved in the formulation of research work. It provides several layers in the research process that shows the progression of designing a research methodology (For each of the hypothesis I put forward, literature exists that supports and addresses each of the research questions.

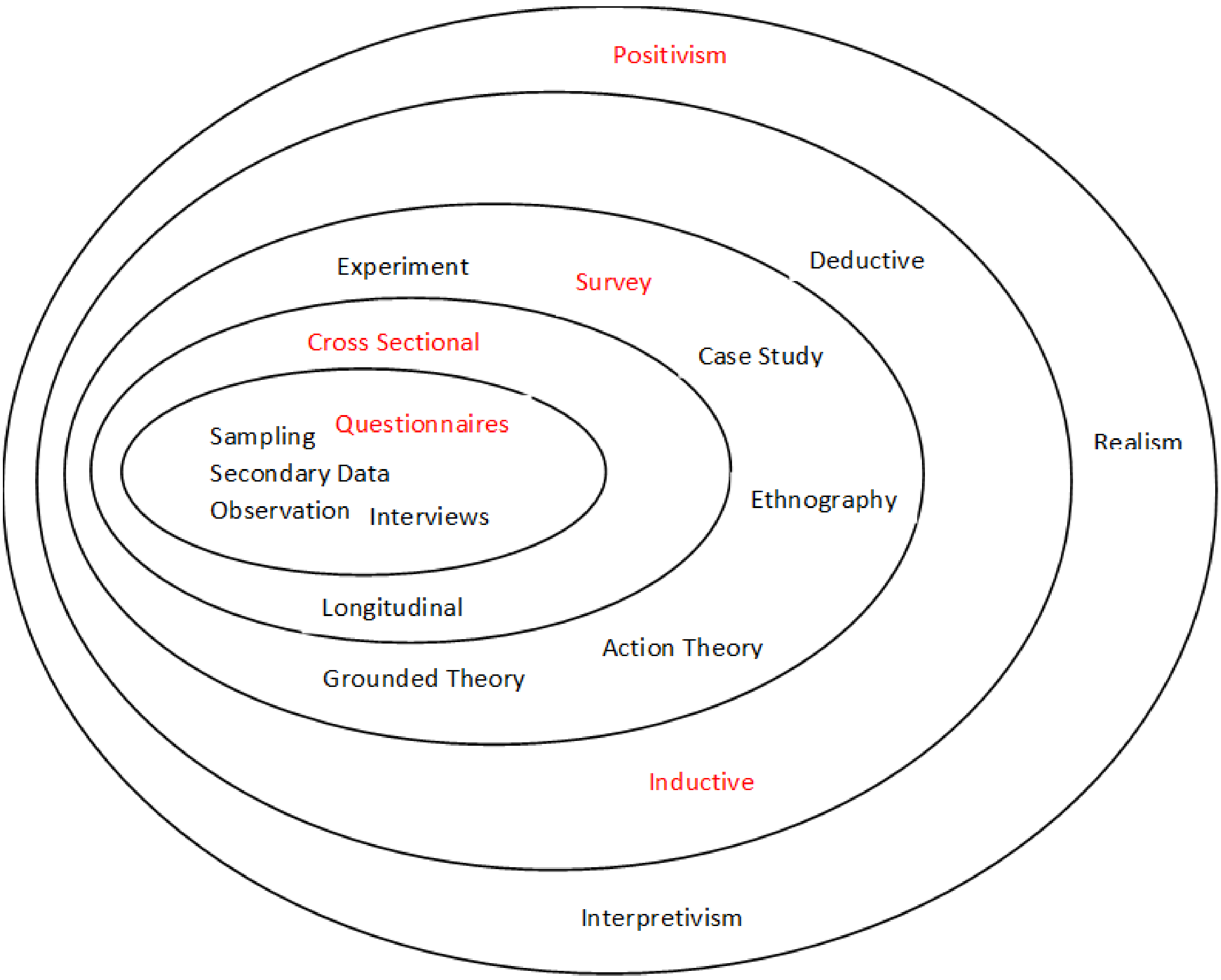

Figure 1: Research Onion for this study. Adapted from Saunders et al (2007)

According to Sanders et al. (2007), a research project is undertaken to either test a theory or develop a theory. To test a theory, one would use either an inductive or deductive approach. A deductive approach is used when a researcher is taking a certain theoretical standpoint and wishes to test this through collection of data. An inductive approach is followed in conducting research on this topic. This approach states that the purpose of a research is to build a theory on data that has been collected and analysed (Sanders et al, 2007). I am following an inductive theory as there is plenty of literature on Peer-to-Peer lending in other parts of the world and to a small degree in sub–Saharan Africa, with the exception of Kenya which has a vibrant fintech landscape. I am using this approach in my research results to form arguments based on observations and results from the research questions outlined in the survey that was distributed to participants. The usage of an inductive approach is supported by the notion that online P2P lending is still a budding industry in a South African context and with my research I aiming to demonstrate that this alternative method of finance can alleviate some of the gaps that currently exist in the SMME financing landscape.

The literature source of my research is from secondary literature. I chose this method of literature as it is the one that is widely available, easier to find or locate via search engines, books, journals, and e-libraries. This method is also is widely covered by the tertiary literature (Saunders et al, 2007) as it helps with the sublimation of related data that is in large quantities.

3.2. Research Strategies/Methodological Approach

This section describes the strategy of how I approached my research work. The chosen method for conducting this research is a multi-method of both Qualitative and Quantitative strategies with a particular focus on using a survey to obtain data from respondents. I used this method to try and sample a representative portion of the participants in a commercial peer to peer lending program. The questionnaires are derived from the research questions I put forward.

3.3. Time Horizon

A 'cross-sectional' time horizon will be used when conducting the data collection via the questionnaires in the survey. This method is often used in conjunction with a survey strategy (Saunders et al. 2007) as it provides results of a snapshot at a certain time. In addition, the results from the questionnaire in the survey are not expected to be influenced materially by the passage of time, hence the suitability of this method for my research.

3.4. Data Collection

As pointed out, primary data was collected via Questionnaires in a Survey. A probability sampling technique was used to make inferences from a sample - about the population - from the research questions that are in the survey. I preferred this sampling method as it normally associated with survey strategies (Saunders et al, 2007)

- Stutely (2013) as quoted in Saunders et al. (2012) advises to use a sample size of at least 30 respondents to ensure that the sampling distribution for the mean is as close as possible to a normal distribution. To ensure that sampling results are not fudged, Saunders et al.

(2007) recommends analysed data be normally distributed. I strived for a sample size of a much higher number than this. A sample size of 34 respondents was reached

The survey solicited responses from SMMEs and other potential entrepreneurs on the usage of P2P lending for seeking small business finance. Individuals who are willing to extend finance or looking for an alternative form of investment away from traditional investment vehicles were also the target respondents of the surveys.

With the survey I looked to investigate questions of SMMEs' perception of Peer to Peer Lending by digital means. This is particularly important to see the viability of this financing model in a South African context. The survey was also used to gauge potential Lenders' appetite to lend funds via digital channel and what influences their decisions to extend capital to small businesses. Some of the questions I looked to unpack in the survey (The full list available in the appendix section of the paper):

- What services they expect in an online lending platform?
- What interest rates they would expect to receive in return for borrowed funds?
- What would influence their decisions to lend to an SMME borrower?
- What their reservations about online lending could be?

In conclusion, the survey measures the SMMEs' perception about online peer to peer lending as well as gather information that would allow me to address the research questions I put forward. It also aided in describing and exploring variables that influences online P2P lending decisions.

3.5. Sampling Criteria

For respondents to be eligible to participate in the survey the following criteria was used:

Table 2: Eligibility Criteria for data Collection

Survey	
Population	Potential Entrepreneurs and Retails Investors
Target Sample	50 Respondents (minimum of 30)
Type of Research	Quantitative and Qualitative
Further Criteria	Aged above 18 South African Citizen (or SA domiciled foreign nationals) Would consider/have considered starting a business Would consider investing in small businesses

3.6. Data Analysis, Data Access, and Ethical Considerations

The collected data IS analysed using Descriptive Statistics. Gathering of data comprises hybrid methods that combine traditional and Internet-mediated access. Traditional access of data refers to face to face interactions, interviews and data archives. Internet-mediated is the use of internet or cloud capabilities to retrieve journals, papers and other scholarly work relating to a research work. My primary data gathering method was the internet primarily with traditional methods used where necessary and possible.

The research was carried out with the ethical consideration that is required of a research work of this nature. Confidentiality and anonymity was maintained during the data analysis stage. This includes, inter alia, allowing participants to capture their responses anonymously in the questionnaire surveys. Identities of the respondents was not captured on the respondent form used to collect the data.

Research participants were not subjected to any harm whatsoever while taking part in the survey. Participation was completely voluntary with no coercion or inducement to being a participant.

It was important that participants understood what their participation in the research meant and as such, I ensured that they participated in the survey under the notion of informed consent. For that purpose, I provided enough information on why I am undertaking this research, what their responses mean and how they will contribute in putting together findings that will be used to guide the analysis of the the collected and collated data.

I did not use any offensive, derogatory or discriminatory remarks or tone in my in the formulation of the questionnaire surveys. No particular groups of people were prejudiced from participating in the survey. No question relating to biography, ethnicity, gender, habits or everyday lives were asked. There was no human contact in the data collection process and no harm was caused in way or form during the data collection process.

I strived to maintain objectivity in my analysis of the data collected. I did not misrepresent the data and I referenced all sources of my data. Other authors' work is acknowledged in the dissertation using the Harvard referencing style. The Wits University Ethical Code of practice was followed in completing this research work.

4. CHAPTER 4: RESEARCH FINDINGS

A workflow showing how the findings of the research are analysed is depicted below. Introduction section of this chapter provides an overview of the research survey - as reported in the appendix - as well as criteria used to select participants. The results of both entrepreneurs and lenders' surveys are discussed and analysed in this section. Conclusion is derived from the aggregated results of each of the surveys.

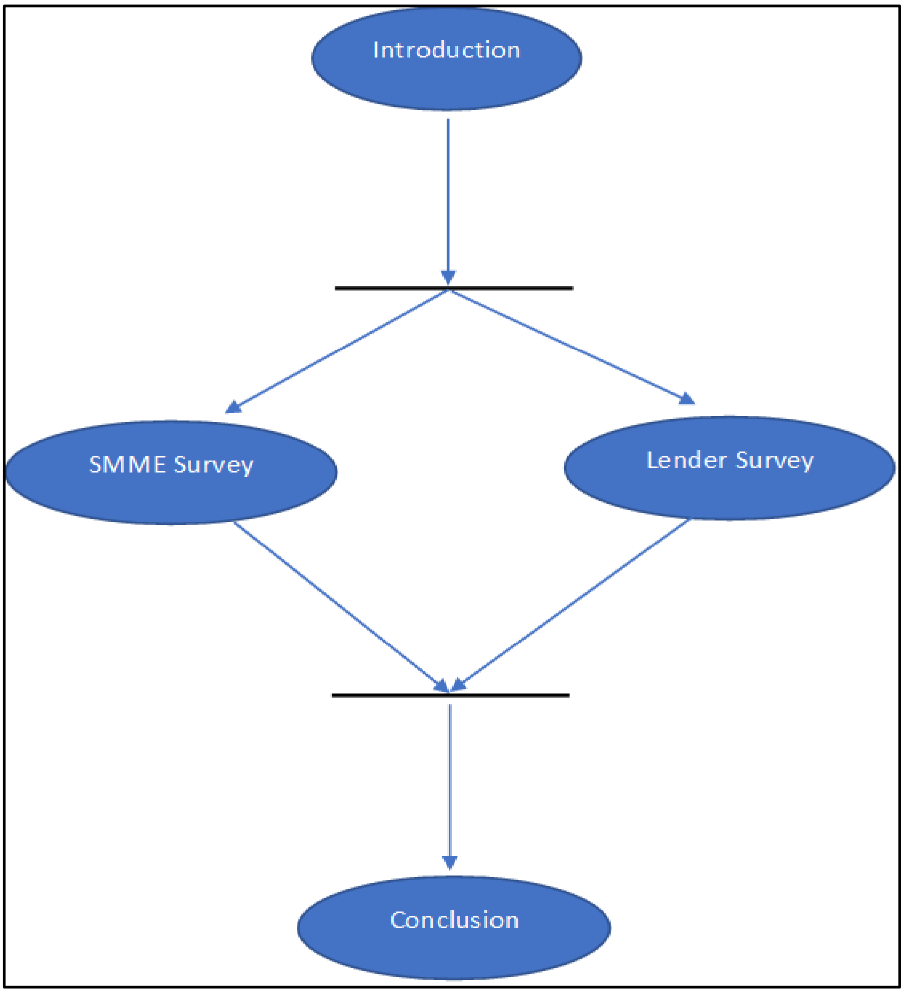

Figure 3: Research Findings Workflow

4.1. Introduction

This section provides results of the survey used to gather the data necessary to test the stated hypotheses of the research. The survey is put together such that there is a set of questions that are lender-oriented and another set that is SMME-oriented. The data was collected via a survey that was distributed online via a secure link to ensure and preserve the integrity of the data collected. The survey was distributed to entrepreneurs, potential entrepreneurs as well as potential retail investors in small businesses. The survey assumes that respondents use or have used the internet at some stage to conduct financial transactions. A level of computer literacy is hence assumed.

Furthermore, as this is a cross-sectional survey that looks to gather data about participants' thoughts, opinions, and behaviour towards Online Peer to peer lending at this present point, results are inferred directly from the data collected based on the respondents' questionnaire responses

4.2. SMME Survey Results

The first question is intended to gather SMME's thoughts about whether they still see funding as the most significant barrier to small business start-ups. The question looks to follow up on previous studies on this subject and determine whether this obstacle still exists - according to entrepreneurs and potential entrepreneurs. Whether the respondent has tried to seek funding or not is neither here nor there as the question is addressed towards both incumbent and potential entrepreneurs.

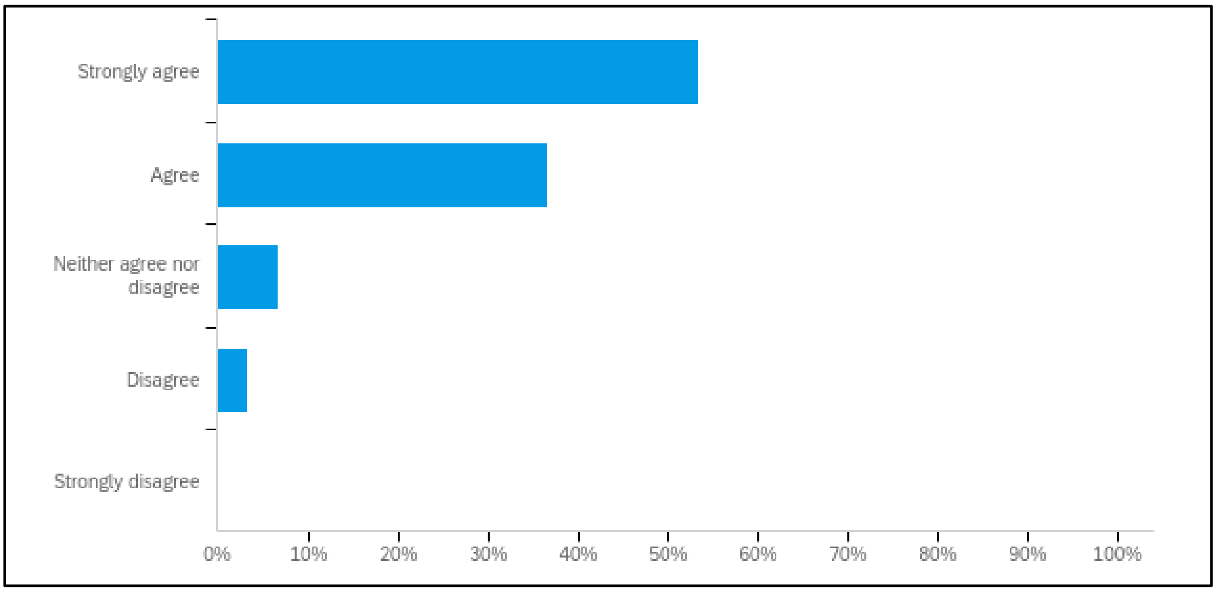

Figure 4: Entrepreneurs' perception towards traditional funding framework

The results overwhelmingly support the notion that funding is still (or perceived as) the biggest obstacle to the finding of more small businesses in South Africa, with nearly 60% of respondents strongly agreeing that entrepreneurship is stifled by funding. There could be a selection bias in the results due to there not being other factors besides funding given as options in the questionnaire. However, as only less than 10% of the respondents disagreed with the notion of the question and none strongly disagreeing, one can infer that the results of this question strongly support the notion put forth by the question.

The second question looks to gather respondents' experience on dealing with funding institutions in the traditional financing model and whether these institutions have accommodative funding policies for entrepreneurs in the country. Unsurprisingly, 52% of the respondents feel Banks and DFIs could do better in making accessibility of funding to entrepreneurs better. Results are shown below:

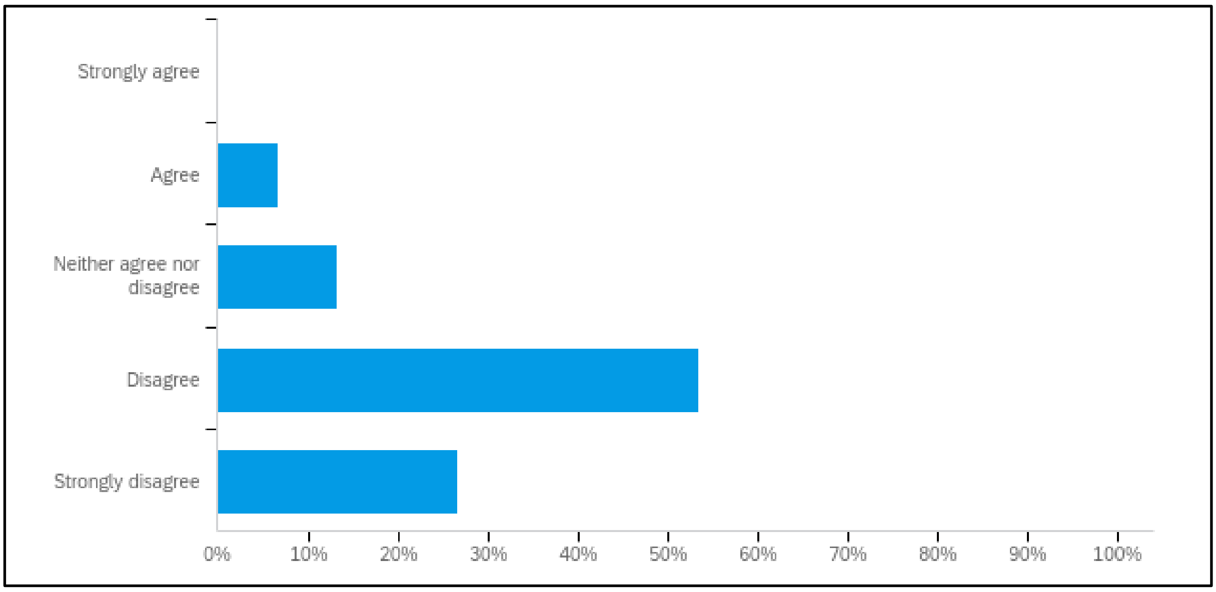

Figure 5: Experience with seeking finance from traditional finance institutions

Questions 3 builds on question 2 by asking respondents whether they believe that there are ample funding institutions outside of the traditional financing institutions. The purpose of this question is to see whether entrepreneurs are aware of alternative funding models outside of the traditional banks and DFIs. This question serves as a precursor to the subsequent questions that will address the focal point of this research paper.

As the respondents of the questionnaires were mostly working-class individuals and those with a post-graduate qualification, the result of this question can be highly relied upon as these individuals are somewhat expected to be aware of alternative funding institutions. Surprisingly, 50% of the respondents noted that they are not aware of alternative funding models outside of traditional funding institutions. One possible reason for this could be the slow technological adoption in the South African banking sector and education for SMME regarding available funding options

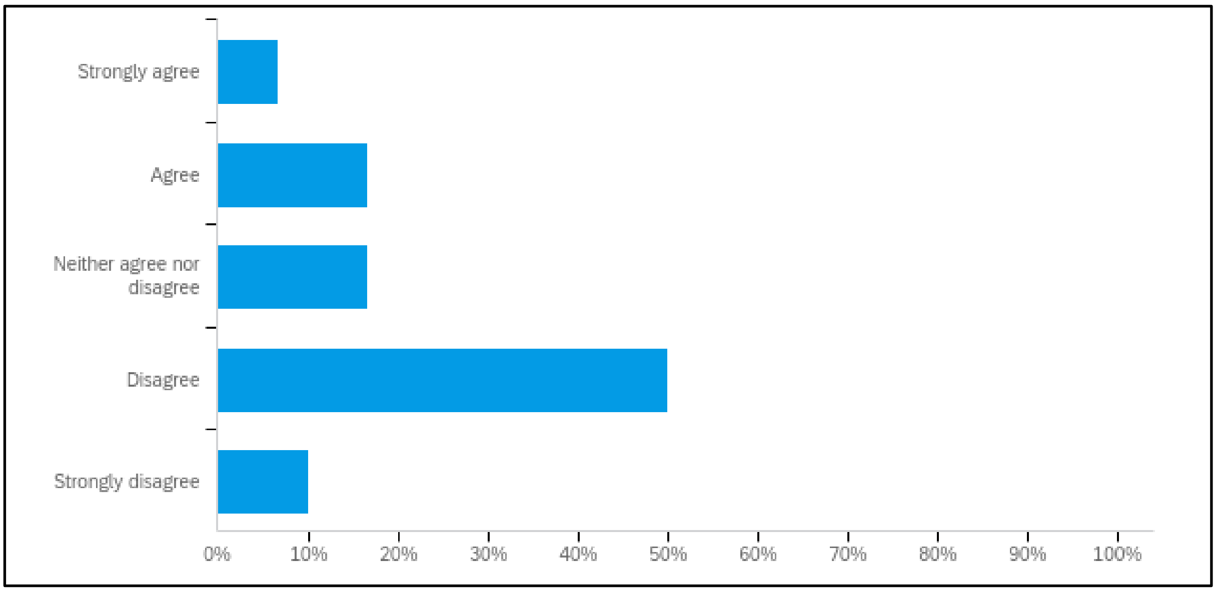

Figure 6: Alternative funding options landscape perception

The results of this question illustrate that more needs to be done to make Entrepreneurs aware of available alternative SMME funding models in the country. This could be accomplished in a variety of ways, namely, media-driven educational programs, educational roadshows by institutions and platforms that offer alternative SMME funding and incubation programs run by financing entities

Question 4 looks to gather data about SMME's reception towards the usage of technology to conduct financial transaction online, specifically in obtaining a loan. This question builds towards establishing the adoption of fintech amongst entrepreneurs. The results are shown below:

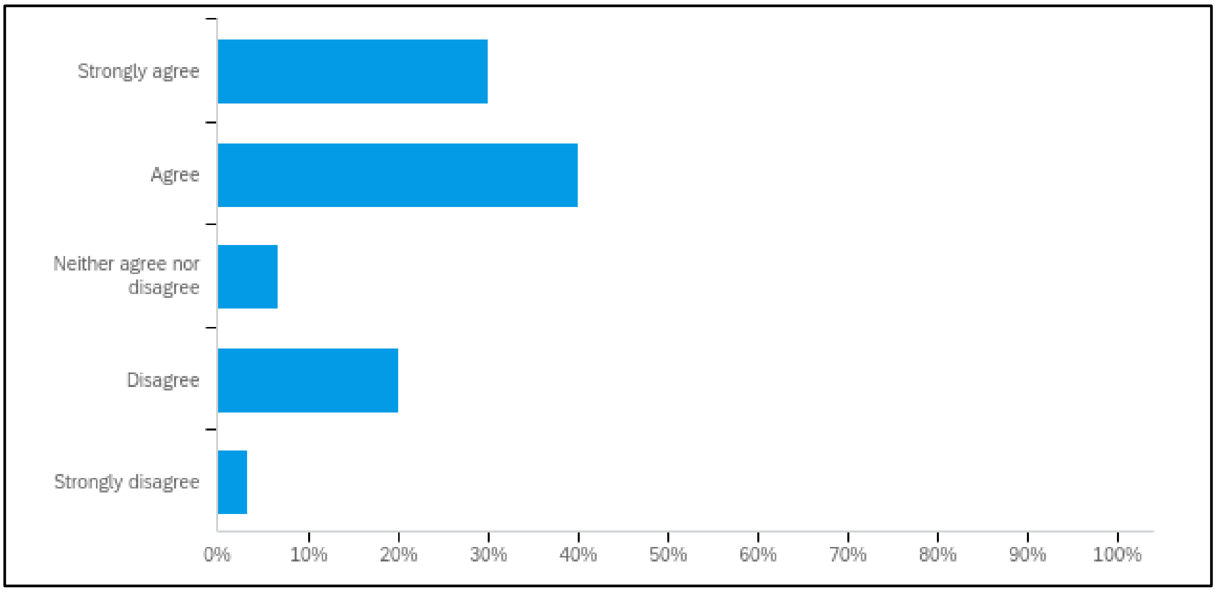

Figure 7: Usage of internet in applying for credit

The results of this question show 40% of the respondents indicating the that they would use the internet to obtain funding online. The question did not specifically ask about business funding but all kinds of funding, including personal loans. 40% indicated that they would use the internet to apply for a loan, indicating that there is propensity to use the internet for their funding needs. The results of this question also illustrate that entrepreneurs are receptive to using fintech as a tool for help in seeking funding.

The next set of SMME questions are aimed at assessing entrepreneurs' knowledge about fintech funding models with the focal point being awareness of Online Peer to peer lending.

Question 6 seeks to measure entrepreneurs' awareness and familiarity with online peer to peer lending.

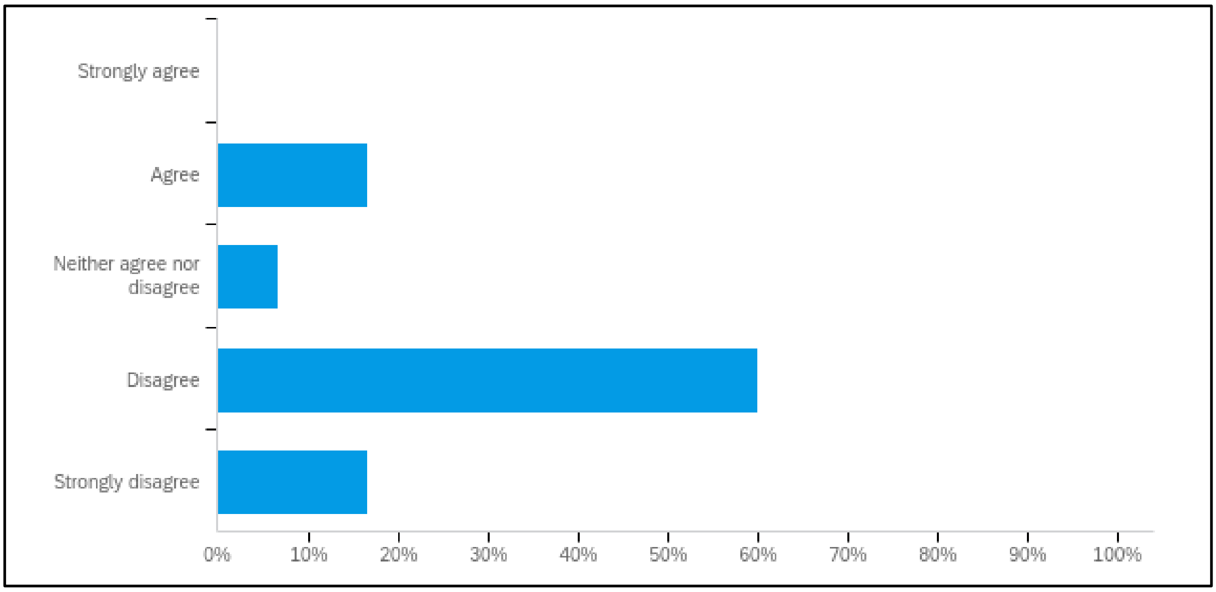

Figure 8: Awareness of Online P2P Lending as a funding vehicle for SMMEs

The responses to this question are not surprising given the small number of online P2P funding platforms in South Africa. Awareness of this forms of alternative finance plays a pivotal role is getting more entrepreneurs using these services for business funding applications. Less than 20% of respondents indicated that they are aware of online peer to peer lending as a funding avenue for entrepreneurs, which is a small number given that the respondents are largely people who at least have a 3-year university degree/diploma. What can be inferred from the result is that the majority (60%) of the population is not aware of this method of alternative finance.

For those who know about Online peer to peer funding, the next question was looking to investigate their knowledge level of the online peer to peer funding process. This question aimed to capture whether entrepreneurs knew the business process behind the lending process of online P2P platforms. Majority (60%) of the respondents indicated that they do not know how the process works. What this suggests is that respondents have either heard of online P2P platforms, but not aware if it was possible to obtain a business loan through such a platform, or how these lending platforms function.

The last of the SMME questions sought to ascertain whether Entrepreneurs believed that the Online peer to peer lending could be effective in bridging the SMME financing gap in South Africa. The premise of this question rests on condition that this industry increases in size and more entrepreneurs and people in general become aware of this mode of alternative finance. The results show 65% of respondents agreeing that fintech funding models, such as P2P Lending and Crowdfunding could be effective alternative finance models for entrepreneurs.

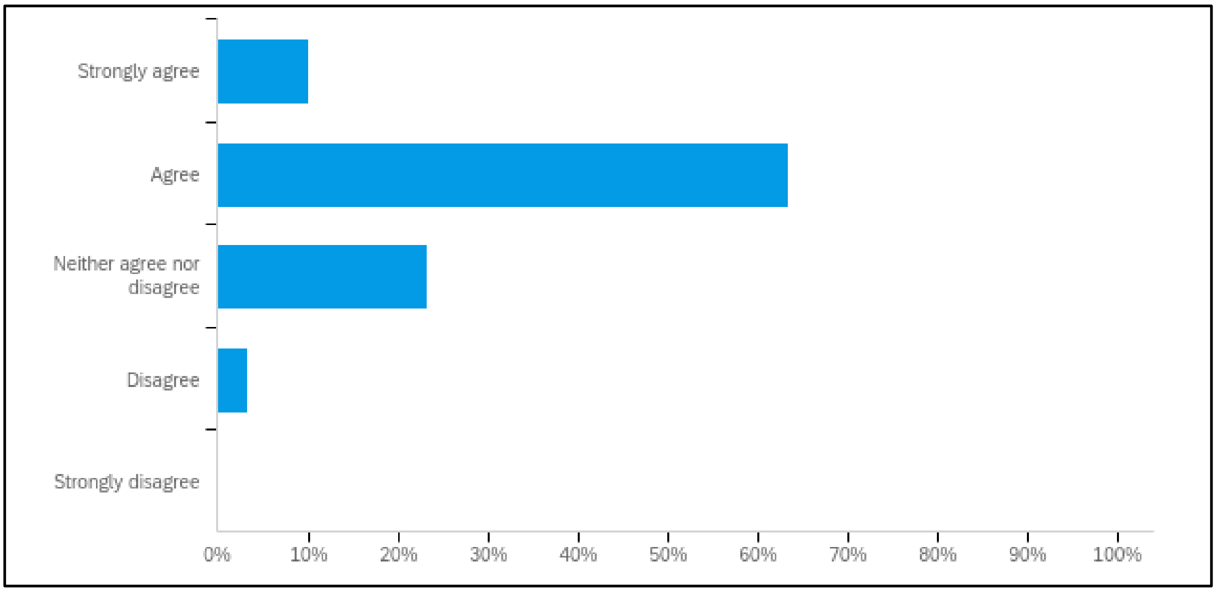

Figure 9: Effectiveness of Online Peer to Peer Lending in bridging the financing gap for SMMEs

For fintech funding in South Africa to grow to proportions of markets such as China and India, technological adoption must play a central role through widespread usage. The global fintech adoption index showed China and India having adoption rates of 87% in 2019, the highest in a poll comprising 27 countries (Fintech Market in China: Overview and Opportunities, 2020)

4.3. Lender Survey Results

The following set of questions investigates lender/retail investors' participation in the Online peer to peer lending sector, their knowledge thereof as well as their awareness of investment proposition offered by this alternative investment vehicles. The questionnaire does not seek to investigate source of funding but rather channelling those funds towards investing in small businesses

This questionnaire kicks off by asking investors about their online credit transactions. The purpose of the question is to assess investors' adoption and usage of internet finance transaction, with a focus on lending and borrowing. Without adequate number of lenders, the online peer to peer industry would struggle to become mainstream. For this reason, investors' propensity to conduct financing activities online is of paramount importance.

The results of the question show a mixed set of answer with 40% of respondents saying they use the internet to conduct credit financing whilst 30% said they do not. About 15% of the respondents said they neither agree nor disagree which means they would not see a problem with using the internet for credit transaction but may not have necessarily conducted credit transactions online. The result of this question suggests that those who indicated they do not use the internet for financing activities may want to get a better understanding of the risks involved and issues around security and safety of transacting online clarified. Those who agreed indicated they understood the risk and they are comfortable transacting online.

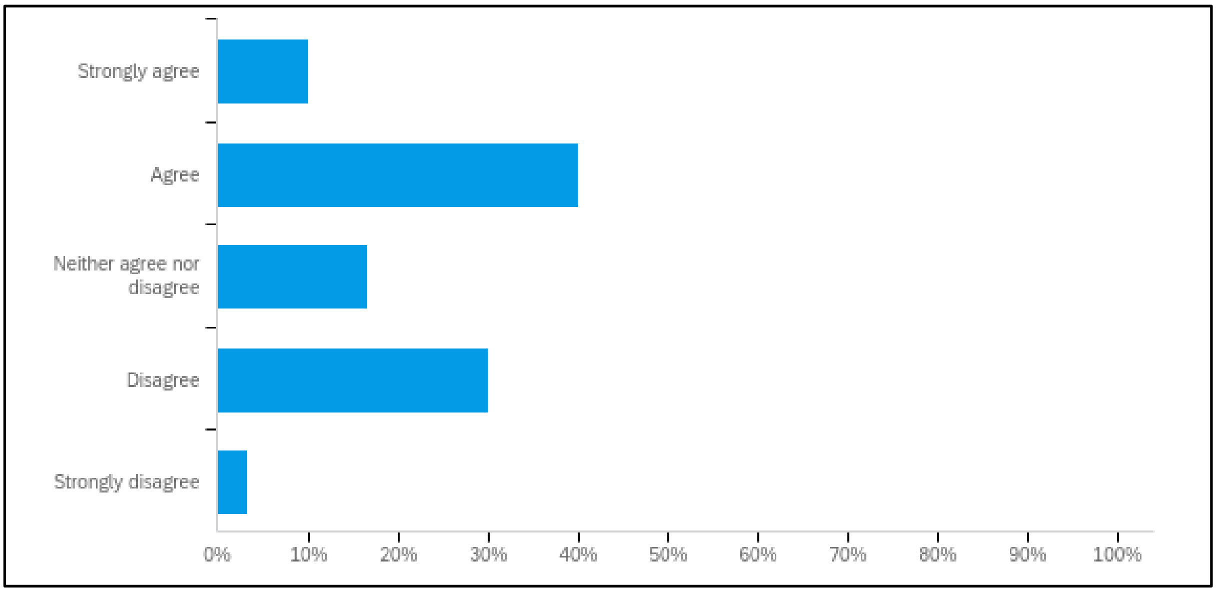

Figure 10: Usage of internet for credit transaction transactions

Question 9 follows on from the question 8 by asking respondents if they would consider giving a business loan to a stranger if they understood the risks and rewards that come with it. As discussed in the literature review and discussion section of this paper, online P2P Lending offers an alternative way for investors to tap into the fintech investment landscape with great potential for outsized returns. These returns however come at a risk premium that might be too high for investors with a low risk appetite. It is not surprising that the results of this question almost mirrors that of the previous question with 40% of respondents indicating that they would provide the loans if they are educated about risks and rewards of online P2P lending and 30% disagreeing. The more investors understand the risk (and rewards) of this method of finance, it would be expected that their likelihood towards providing SMME loans would increase.

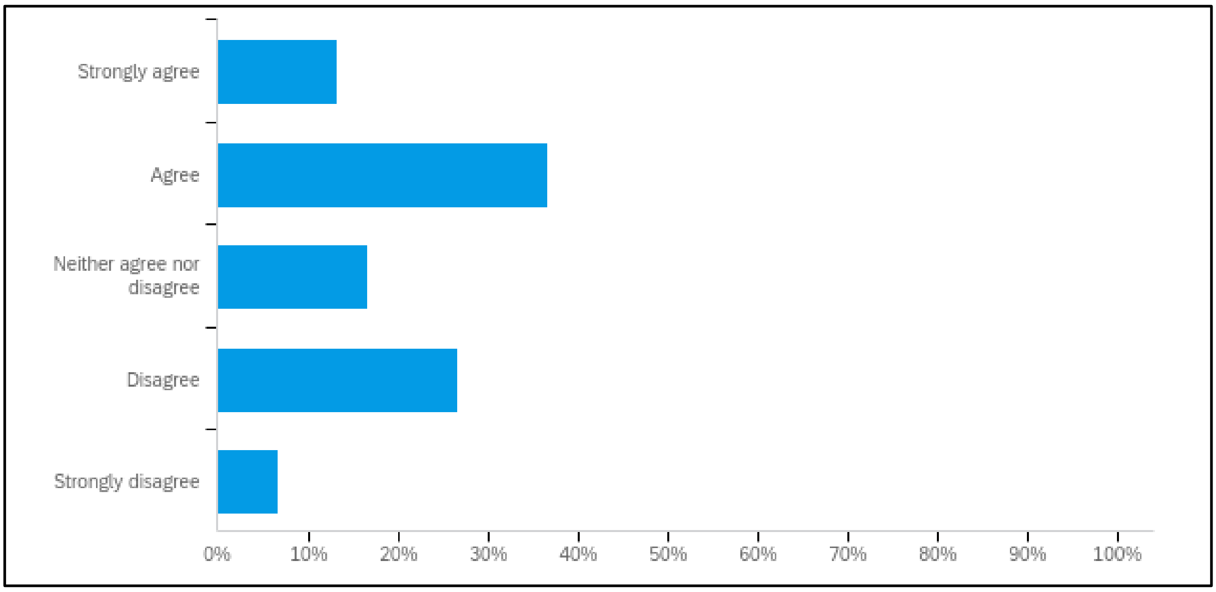

Figure 11: Awareness of Online peer to peer lending as an investment concept

Majority of the respondents (nearly 60%) indicated that they are not aware of Online P2P lending as an alternative funding tool for entrepreneurs as illustrated by figure 11 above. This finding suggests that those individuals/entities who would like to support promising start-up businesses have seen no avenue to do so as the perception is that one has be an angel investor or go the traditional route of investors via SPAC (Special Purpose Acquisition Companies) like Private Equity and Venture Capital companies. The more the Online P2P industry grows with more platforms being established, the more investors become aware creating the desire to find out more about them. The results of this question indicate that South Africa still has a long to go to ensure mainstream acceptance of this alternative form of finance

Question 11 supports question 10 by asking investors if they would be willing to invest in Online P2P lending if the risks and rewards are clearly articulated. A resounding 70% of respondents agree that they would, with not even 1 respondent disagreeing. This corroborates the previous analysis on question six (of the entrepreneur survey as outlined in the appendix) and supports the hypothesis - derived from research question 1 - that online peer to peer lending can be an effective alternative financing solution for SMMEs in the country.

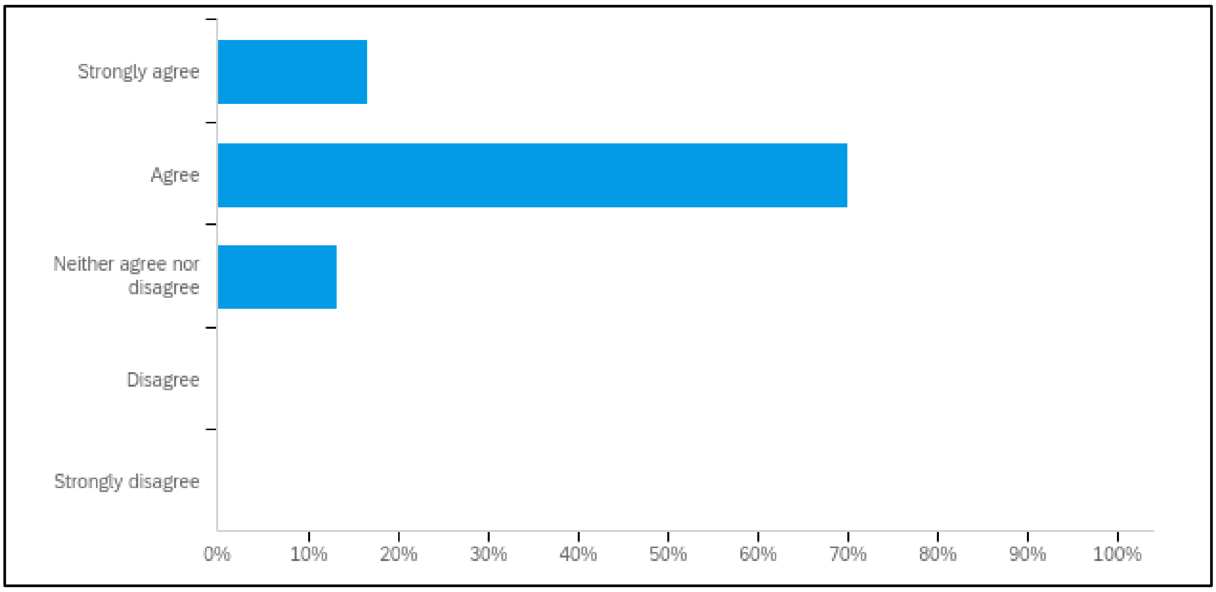

Figure 12: Willingness to invest in start-ups/small businesses via Online Peer to peer lending if the risks and rewards are clearly articulated

The penultimate question of the survey investigates arguably the very important question of this entire survey. Online P2P lending's business model relies on investor acceptance and flowing of funds into the platforms. For this to happen investors need to be believing that they can generate returns better than they would receive from savings and other investment asset classes. The positive spin-off of investing in these platforms is that they would recognize that their funds go towards making finance accessible for those individuals and businesses at the periphery of the traditional finance ecosystem

More than 50% of investors indicated that Online P2P lending can close financing gap for SMME who are not able to obtain funding from traditional sources. A relatively small percentage (21%) of investors, indicated they neither agree nor disagree with the notion of the question, whilst 17% strongly agree. These results suggest that there is a strong argument for the establishment of more online P2P lending platforms in the country. The results of this question are depicted in the below graph:

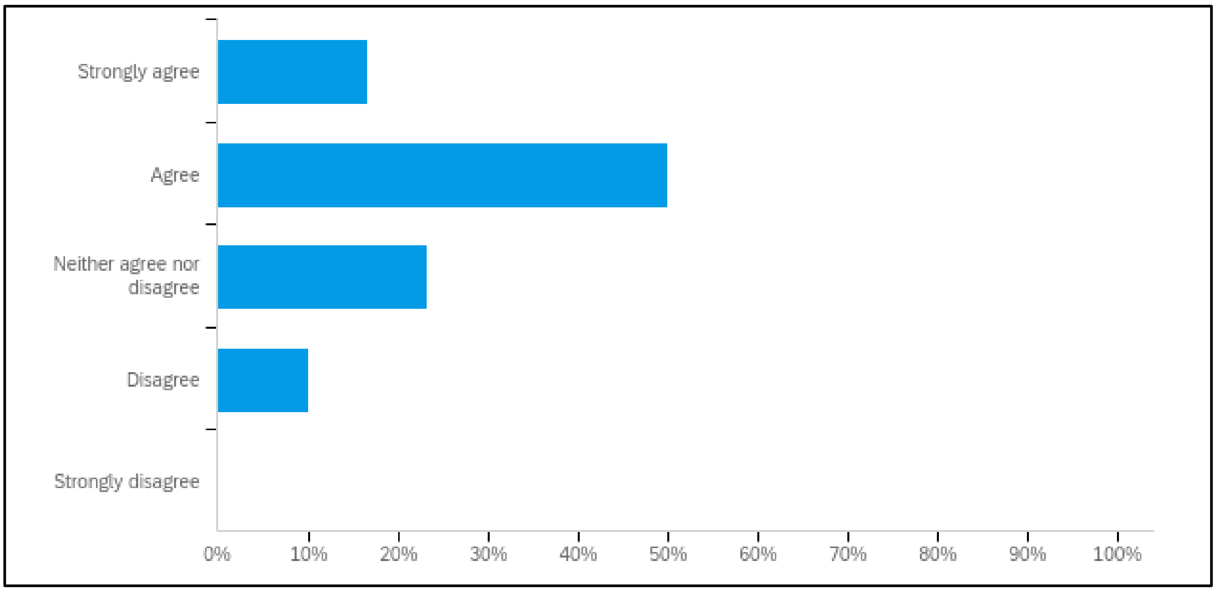

Figure 13: Online P2P Lending can bridge SMME financing gap in South Africa

4.4. Conclusion

The survey has provided very useful insights into lenders and borrowers' perception towards internet financing and investing, with a focus on online P2P lending. The results of the survey have overwhelmingly shown the potential that online P2P lending has towards becoming a mainstream alternative financing model in South Africa.

Some challenges regarding awareness and education around fintech financing are highlighted in the survey for both lenders and borrowers alike. It is however worth mentioning that all investment asset classes carry risks and that online Peer to peer lending is no different. Investors still need to do their own due diligence on both the platforms and the borrower and/or the type of project they plan on investing in via the platforms. This still does not eliminate the inherent risks but rather minimizes potential adverse surprises during the investment period.

As the industry is still nascent in South Africa, some of the responses towards awareness and adoption are not all that surprising. The bigger the industry, the more organic awareness gets created and the subsequent adoption of online P2P lending. As P2P finance is a form of social investing, lenders have shown the appetite for lending money to strangers provided risks are clearly stated and there are commensurate returns for them. Through the surveys, entrepreneurs and investors alike have shown willingness to adopt internet finance as a viable alternative to traditional finance.

5. CHAPTER 5: CONCLUSION AND FUTURE RESEARCH

Online Peer to Peer lending has grown rapidly over the last few years as both an alternative asset class and an effective financing model for retail investors and entrepreneurs, respectively. Practicality and the value of this form of finance has been evident in other parts of the world where retail (and in some instances corporate) investors have flocked to this industry in large numbers, as discussed in the literature review of this research work. Through the review of the literature on online peer to peer lending as well as data collected from both lender and investors in South Africa, it is evident that this form of financing could be, but one of the potential solutions to bridging the SMME funding gap which is occasioned largely by shortfall of the current traditional funding framework in the country.

Therefore, the research questions linked naturally to the hypotheses that alternative internet financing models can play an important role in SMME finance and in addressing the gap created by the shortfall of traditional financing institutions. These hypotheses were formed on the back of literature that showed how online peer to peer lending has fared in other countries where this form of alternative finance is thriving.

Fundamentally, the responses gleaned from the survey data of the study supports the hypothesis that online P2P lending can thrive in South African credit market and that entrepreneurs and retail investors alike are to be receptive to participating in this internet financing ecosystem.

Furthermore, through the literature review, researchers have shown that online peer to peer lending strives to solve the issue of inclusiveness in the credit market by allowing mid and low credit rated borrowers to access finance as well as offering investment opportunities to retail investors that would otherwise not be available to them.

In summary and more specifically, responses from the survey of the study have indicated that P2P lending could:

- Provide an alternative asset class for investors with superior returns to conventional savings products
- Cater to segments of retail customers that are excluded by traditional finance institutions
- Open up more finance access sources for entrepreneurs
- Democratize alternative investment asset classes to retail investors
- Lessen the financing burden on Banks and DFIs and other state finance entities/funds
- Encourage banks and other traditional finance institutions to lower transaction costs
- Encourage usage of technology to reduce transaction costs and speed up disbursement of investable funds to entrepreneurs

This research work focused solely on the viability of this model in a South African context, without considering retail investors' propensity to invest in small businesses as a function of disposable income. This is an area of research that could, in the future, be explored to determine the potential size of this industry in South Africa. Variables that determine how much retail investors allocate to savings and investments as an alternative asset class could be investigated to determine potential investment flows into online peer to peer lending.

6. APPENDICES

6.1. Appendix A: Research Instruments

6.1.1. SMME Survey

Please select an option that best describes your response to each of the questions below:	Strongly disagree	Disagree	Neither disagree nor agree	Agree	Strongly agree
SMME Survey					
1. I see Finance as the single greatest obstacle to small business starts ups in South Africa	1	2	3	4	5
2. Traditional finance institutions (Banks, DFIs) make it easy for startups to acquire business funding in South Africa	1	2	3	4	5
3. There are ample funding options outside of Banks and DFIs that I am aware of	1	2	3	4	5
4. I would use the internet to apply for a business loan - if I needed one	1	2	3	4	5
5. I am aware of Online Peer to peer lending as a funding vehicle for SMMEs	1	2	3	4	5
6. Equity Crowdfunding and Peer to peer finance can be effective in bridging the financing gap for SMMEs	1	2	3	4	5

6.1.2. Lender Survey

Please select an option that best describes your response to each of the questions below:	Strongly disagree	Disagree	Neither disagree nor agree	Agree	Strongly agree
Lenders/Investors Survey					
1. I frequently use the internet for credit transactions (personal or business)	1	2	3	4	5
2. I am aware of Online peer to peer lending as an investment concept	1	2	3	4	5
3. I am willing to invest in startups/small businesses via Online Peer to peer lending if the risks and rewards are clearly articulated	1	2	3	4	5
4. The online peer to peer lending model can bridge the SMME financing gap in South Africa	1	2	3	4	5

7. REFERENCES

Abor J., Quartey P. (2010): *Issues in SME Development in Ghana and South Africa. International Research Journal of Finance and Economics*. EuroJournals Publishing Inc. 2010 from http://www.eurojournals.com/finance.htm

Ahwireng-Obeng, F. and Ncube, M. (2007): *Entrepreneurship and Poverty Alleviation in South Africa*. In Rangan, Quelch, Herrero and Barton (Eds), Business Solutions for the Global Poor – Creating Social and Economic Value. San Francisco: Jossey-Bass Inc Publishers.

Barron M. J., Staten E M. (2002): *The Value of Comprehensive Credit Reports: Lessons from the U.S. Experience.*, Credit Research Centre, McDonough School of Business, Georgetown University, 3240 Prospect St., NW Suite 300, Washington, D.C., USA

Bashir A. H., Akhtar A. (2017): *The Role of Innovative Entrepreneurship in Economic Development: A Study of G20 Countries*. Faculty of Management Studies and Research (FMSR), Aligarh Muslim University, Aligarh, India. Centre for Management Studies (CMS), Jamia Millia Islamia University, New Delhi, India. Management Studies and Economic Systems (MSES), 3 (2), 91-100, Autumn 2016.

Brics Joint Statistical Population (2018): Retrieved August 2020

Duan W., Gu B., Whinston A. B. (2009): *Informational Cascades and Software Adoption on the Internet: An Empirical Investigation*, Funger 515, School of Business, The George Washington University, Washington, DC 20052

Duarte J., Siegel S., Young L. (2012): *Trust and Credit: The role of appearance in Peer-to-Peer Lending.* In Review of Financial Studies, version 25, Issue 8, August 2012

Everett, Craig R. (2015): *Group Membership, Relationship Banking and Loan Default Risk: The Case of Online Social Lending*. Banking and Finance Review, 7(2)

Fatoki O. (2014): *The Financing Options for New Small and Medium Enterprises in South Africa*. Mediterranean Journal of Sciences, Vol 5, No 20

Fintech Market in China: Overview and Opportunities, December 7, 2020. Retrieved from https://www.fdichina.com/blog/china-fintech-market)

http://aisel.aisnet.org/pacis2011/105

http://www.statssa.gov.za/wp-content/uploads/2018/11/BRICS-JSP-2018.pdf

Jaffee D.M., Russell T. (1976): *Imperfect Information, Uncertainty and Credit Rationing. The Quarterly Journal of Economics*, Vol. 90, No. 4 (Nov., 1976), Oxford University Press.

Lavagna-Slater S.S. (2017): *Investigating Peer to Peer Lending as a solution to unsecured lending in an unbalanced credit market*. PhD Dissertation, University of Pretoria, Pretoria, South Africa

Lee, Eunkyoung; Lee, Byungtae; and Chae, Myungsin. (2011): "*Herding Behavior In Online P2P Lending: An Empirical Investigation*" PACIS 2011 Proceedings. Paper 105.

Matuku S., Kaseke E. (2014): *The role of Stokvels in improving people's lives: The case in Orange Farm, Johannesburg, South Africa*, University of the Witwatersrand, Johannesburg, South Africa

Milne A. and Parboteeah P. (2016): *The Business Models and Economics of Peer to Peer Lending. European Credit Research Institute*. No 17, May 2016

Nemoto M., Huang B., Storey D. (2019): *Optimal Regulation of P2P Lending for Small and Medium-sized Enterprises*, ADBI Working Paper Series, No. 912, Asian Development Bank Institute (ADBI), Tokyo

Niu B., Ren J., Zhao A., Li X. (2020): *Lender Trust on the P2P Lending: Analysis Based on Sentiment Analysis of Comment Text*. College of Economics and Management, China Agricultural University, Beijing 100083, China.

OECD (2014): *Small Businesses, Joh Creation and Growth: Facts, Obstacles and Best Practices*

OECD (2015): *New Approaches to SME and Entrepreneurship Financing: Broadening the Range of Instruments*

Ojah K. and Mokoaleli-Mokoteli T. (2010): *Possible Effective Financing Models for Entrepreneurship in South Africa: Guides from MicroFinace and Venture Capital Finance*. In African Finance Journal, Volume 12, Part 1, 2010

Peerfin (n.d.) from www.peerfin.com

Ramesh S. (2018) *Entrepreneurship in China and India*. Department for Continuing Education, University of Oxford, Rewley House, 1 Wellington Square, Oxford, Oxfordshire, OX1 2JA, UK

Ravina E. (2008): *Love & Loans: The Effect of Beauty and Personal Characteristics in Credit Markets*, Columbia University, New York, USA

Saunders M. N. K., Lewis P. Thornhill A. (2007): Research *Methods for Business Students" Chapter 4: Understanding research philosophy and approaches to theory development* Pearson Education Limited, KAO Two, KAO Park, Harlow CM17 9NA, United Kingdom

Saunders, M., Lewis, & M., Thornhill, A. (2012): *Research methods for business students (6th Ed)*. Italy: Pearson education ltd.

Schweinbacher A. (2019): *Equity Crowdfund: Is there anything to celebrate?*, SKEMA Business School, France

Schwienbacher, A. and B. Larralde (2012): *Crowdfunding of Entrepreneurial Ventures*, in D. Cumming (ed.), The Oxford Handbook of Entrepreneurial Finance, Oxford, UK: Oxford University Press

Serrano-Cinca C., Gutierrez-Nieto B., Lopez-Palacios L. (2015): *Determinants of Default in P2P Lending*, Department of Accounting and Finance, University of Zaragoza, Zaragoza, Spain

Song P., Chen Y., Zhou Z., Wu H. (2018): *Performance Analysis of Peer to Peer Online Lending Platforms in China*. School of Economics, Hefei University of Technology, Hefei 23009, China

Sorenson O., Assenova V., Li G-C., Boada J., Fleming L. (2016): *Expand Innovation Finance via Crowdfunding: Crowdfunding attracts Venture Capital to new regions*, from http://science.sciencemag.org

Telemelkov Z. (2020): *Differences between Traditional Bank Model and Fintech Based Digital Bank Model and Neobank Models*, Faculty of Tourism and Business Logistics, University "Goce Delcev", Stip, Macedonia

Telemelkov Z., Boshkov T., Zezova A. (2018): *Alternative Financing Sources Supporting SMEs Growth*, Goce Delcev University, Stip, Macedonia

The Banking Association of South Africa (2018): *Hurdles faced by Financial Institutions in SMME financing - Final Report*, 6 November 2018

Tibane B., Franklyn C., Geral D., Kern K., Dyer L., Nyali X. (2020, September 18): *First-step Analysis: Fintech Regulation in South Africa*, Bowman, from www.lexicology.com

Vannoni V. (2020): *Financing Italian Firms Through Invoice Trading Platforms*, Department of Economics, University of Perugia, Perugia, Italy

Yeo E., Jun J. (2020): *Peer to Peer Lending and Bank Risks: A Closer Look*, School of Business Administration, Chung-Ang University, Seoul 06974, Korea

Yeong Ng J. C. (2012): *The role of Entrepreneurs in the Society*, Southern Cross University, Australia