ROLE OF FINTECH IN FINANCIAL INCLUSION OF SMALL & MEDIUM ENTERPRISES (SME) IN INDIA

ABSTRACT: Fintech is the application of the technology in the financial services, combining technology such as hardware, software and cloud with the financial platform like Banks, NBFCs, wealth management firms etc. The traditional banking system is going through a digital transformation with the help of these Fintech companies. These companies are acting as game changer by designing innovative digital platforms, with the common end goal of enhancing financial inclusion of SMEs. Small & Medium Enterprises (SMEs) are the engine that drives the economy and contributes to the GDP in India. These entities do not have access to easy finance due to issues like lack of collateral and credit history. Traditional financial institutions adopt a cautious process when make small-unsecured loans and moreover they prefer loans only against collateral. So there is a greater need for adequate financial support for small and medium enterprises. However, Banks are partnering with FinTech firms and are taking the entire process online to reduce the transaction cost and turnaround time. They are looking for alternative sources of data to measure the creditworthiness of SMEs. This has led to the emergence of a new sector known as alternative lending, which is essentially an online platform for lenders (retail or institutional) to lend directly to borrowers (individual or corporate). While traditional organizations evaluate balance sheets, P&L statements and other documents of the business, Fintech platforms use AI and advanced machine learning algorithms to rate the SME's creditworthiness. Fintech platforms lay specific importance to digital data available in an ecosystem like bank transactions, cash flow, and importance is given to company ratings from credit reporting agencies. This research paper talks about how the fintech firms are contributing towards the financial inclusion of SMEs by introducing them with the various financial products and a digital lending platform. It looks at the opportunities available to the Fintech sector as well as the challenges faced by them. It is a qualitative study based on open questionnaire format. The study further looks at the specific needs of the SME sector regarding financing and how Fintech companies are bridging the gap of financing for these SMEs.

Keywords: Fintech, Technology, SME, Lending Platform
JEL: D25, D53, E44, O14, O33, P42

Introduction

Fintech is the application of the technology in the financial services, combining technology such as hardware, software and cloud with the financial platform like Banks, NBFCs, wealth management firms etc. The traditional banking system is going through a digital transformation with the help of these Fintech companies. These companies are acting as game changer by designing innovative digital platforms, with the common end goal of enhancing financial inclusion of SMEs.

The financial crisis of 2008 had left the traditional banking with almost no scope for innovation. The banks were heavily regulated by new rules for lending and focused to manage their liquidity and capital efficiently. Such changes led to the emergence of the Fintech to devise new ways, whereby technology could be leveraged to make borrowing easier. Furthermore, Alternative lenders have started emerging over the years to help fund businesses that are not eligible for lending from the banks, and given the decline in bank lending to SMEs, the alternative lending industry is growing at a rapid pace and is now playing a major role in the financial inclusion of SMEs by providing the small-businesses with a digital lending platform that bypasses traditional banks.

In India, the FinTech market has witnessed a period of rapid growth in the last two years. As per reports by KPMG India and NASSCOM, it is expected to cross the $2.4 billion mark by 2020.

Access to finance has been one of the challenges for the SME sector in India. Banks do not provide loans to these small-scale businesses due to non-availability of valid invoices, small customer base and improper accounting systems. Also, banks use traditional methods to do the credit underwriting of the SMEs which requires the borrower to go through a lot of formalities in addition to providing the collateral. However, on the other side, Fintech platforms make it easier for SMEs to raise unsecured loans by providing them with the right financial products through a digital platform. Also, If the SMEs do not maintain a formal balance sheet, alternate documents can be used to assess the credit worthiness of the SMEs. The fintech platforms use Big data, psychometric questions and social media behavior to perform the credit risk assessment.

Prior to the era of Fintech, SMEs had to fill in long paper-based forms, gather a list of documents such as Income Tax Returns for previous years, formal Balance sheet and offer collateral to secure the loan. However, Fintech has changed the user experience by leveraging technology to reduce the turnaround time and making the transaction easier. Therefore, Fintech has revolutionized the concept of SME lending.

Small & Medium Enterprises (SMEs) are the engine that drives the economy and contributes to the GDP in India. These entities do not have access to easy finance due to issues like lack of collateral and credit history. Traditional financial institutions adopt a cautious process when make small-unsecured loans and moreover they prefer loans only against collateral. So, there is a greater need for adequate financial support for small and medium enterprises. Fintech firms are taking the entire process online for such MSMEs to reduce the transaction cost and turnaround time. This has led to the emergence of a new sector known as alternative lending, which is essentially an online platform for lenders (retail or institutional) to lend directly to borrowers (individual or corporate). While traditional organizations evaluate balance sheets, P&L statements and other documents of the business, Fintech platforms use Artificial intelligence (AI) and advanced machine learning algorithms to rate the SME's creditworthiness. Fintech platforms lay specific importance to digital data available in an ecosystem like bank transactions, cash flow, and importance is given to company ratings from credit reporting agencies.

This research paper talks about how the fintech firms are contributing towards the financial inclusion of SMEs by introducing them with the various financial products and a digital lending platform. It looks at the characteristics and setup of the fintech firms and the setup of the peer to peer lending platforms. The study uses qualitative research in finding out the opportunities seen by the Fintech companies and the challenges faced by them in the current economic environment in India.

Review of Literature

About Fintech

FinTech which is termed as "financial technology" has been a blend of financial services and information technology as a field (Oxford English Dictionary n.d.). The concept of FinTech was first used in the early 1990s to foster technological collaboration (Hochstein 2015) and since 2014 has gained tremendous attention amongst financial institutions as a innovative business model (Google 2016). This field has taken shape into both commercial and academic literature differently. FinTech was referred as a personalized and innovative financial service (Allen and Overy LLP 2016; Chuen and Teo 2015; Dany et al. 2016, H. Gimpel et al. 2015; Gulamhuseinwala et al. 2015; Kim et al. 2016). Whereas Drummer et al. (2016), as a business model (Drummer et al. 2016), as an entire sectoral understanding (Kim et al. 2016), as a field summarizing new services, processes, new products or new business model (Zavolokina et al. 2016). Research scholars have also highlighted that customer centricity has characteristic of FinTech services (Dany et al. 2016). Literature agrees that FinTech leverages on the digital technology viz. internet, mobile computing, social media and internet of things (Allen and Overy LLP 2016; Gulamhuseinwala et al. 2015). Additionally, literature also indicates that the field uses artificial intelligence and business analytics thereby enabling, disrupting and innovating the field of financial services market (Allen and Overy LLP 2016; Gulamhuseinwala et al. 2015; Kim et al. 2016; Zavolokina et al. 2016).

Fintech Revolution

Jaffe and Russell (1976) highlighted the fact that lending institutions performed credit rationing in view of less information available to them about the borrowers. Stiglitz and Weiss (1981) talked about disequilibrium in lending market due to asymmetrical information available in the market. This asymmetrical information has been a topic of research in papers such as Boot & Thakor (2000), Berger et al (2005), and Drexler & Schoar (2014). Subsequent research has focused on bridging this asymmetry in information Freedman and Jin (2011). It has been found that personal relationships with customers and soft information offer lot of advantages in borrower screening. Lin et al (2013) look at using various types of soft information related to a borrower's social network to infer creditworthiness. However, judging credit risk from one's social network presents privacy issues and the danger of misuse of data is always there.

Liberti and Petersen (2017) differentiate between hard information and soft information accessed by modern Fintechs. Hard information is supposed to be more quantitative and impersonal in nature as compared to soft information. With the change in technology, the way the information about borrowers and customers of financial institutions is collected and processed leads to changes in the design and structure of the financial products available to them.

Jagtiani & Lemieux (2018) talk about the increasing role of Fintech in US economy in shaping the current financial landscape. They find that specialized Fintech companies were able to penetrate areas where traditional banks were unable to leave their mark in funding.

Financial technologies are the technology enabled financial solutions which has a long history from 1866 to 1987 known as the FinTech 1.0, which looked into financial globalization and technological infrastructure. Fintech 2.0 from 1987 to 2008 where-in financial services increasingly digitized their regulatory frameworks Arner et.al (2015). Fintech in a broader sense includes technology focused startups in the financial services industry who have innovated the products and services by way of introducing novel consumer payment devices, introducing services viz. blockchain, big-data and robo-advisors Chiu (2016). The importance of digital based financial services has been increasing rapidly under the realm of fintech-philanthropy development which supports expand and monetize digital footprints Gabor & Brooks (2017). Fintech has allowed both fintech lenders and banks to serve small business enterprises and consumers who are on click and portal. The study also indicated that fintech lenders can fill the credit gaps in places where the offices of banks are unavailable thereby supplementing the availability of unsecured consumer credit as per Jagtiani & Lemieux (2018). Literature also depicted that not all fintech companies have been successful; the LASIC principles apply which are low margin, asset light, scalable, innovative and compliance easy as pointed out by Chuen & Teo (2015).

The authors Brummer & Gorfine (2014) posited that technology has not only disrupted the financial markets but has created newer challenges towards developing regulatory frameworks at different points in time. The Fintech innovation would require rethinking on the various processes and approaches that are required for the regulation and rulemaking. Kim et.al (2016) described Fintech services requiring convenience and usefulness as the crucial variables for payment –type promotions of such services which from the institutional point of view, government deregulation and security are the influential variables. Shim & Shin (2015) studied

China’s fintech industry by exploring social and political context which attempted to elucidate the process involved in disrupting the various networks which comprises of heterogeneous actors. In yet another study which was conducted in China reveals that the applications of mobile payment and internet finance along with the economic impact of ICTs have been the under researched areas (2016).

Financial Inclusion

Financial inclusion has been conceived as an analytical lens which shows a strong relationship between the financial field and the poor section of the country (Marron 2013). Financial exclusion has explored the manner in which financial institutions have discriminated certain socio-economic groups of the society (Dymski and Veitsch 1992; Leyshon and Thrift 1995, 1996). This early research has led to critically analyzing on how the financial sector has sharpened and structurally shaped the inequality by way of systematically favoring the rich and the powerful. In the late 2000s, financial inclusion was the most important system which had travelled across countries as a new finance-based development paradigm. The economists/ The World bank have put in tremendous efforts to demonstrate through empirical research that financial development would ultimately lead to the growth of the economy at large (Beck, Levine and Loayza 2000; Beck, Demirguc-Kunt and Levine 2004). This would legitimize the World bank’s financial liberalization schema. Research from eastern Europe, Latin America, south and south east Asia and south Africa revealed that a development approach which is centered towards microcredit would prove disadvantageous to the poor in the long run (Bateman 2014). This is so because this concept directs resources towards one-person and often very small firms of low productivity which would might otherwise have channeled towards a nascent SME sector which is a foundation for employment and economic growth (Duvendak et al. 2011). Thus, Financial inclusion has helped re-frame the concept of micro finance as a market-based solution towards poverty (Soederberg 2013).

Role of FinTech in Financial Inclusion

CGAP has analyzed digital financial inclusion as the use of formal financial services having digital access to by the excluded and the underserved population (CGAP, 2015). The innovative digital financial services by way of mobile phones and the like in almost 80 countries (GSMA, 2014) to boost millions of poor customers to entirely mover from cash-based transactions to the use digital financial services. This concept of digital financial inclusion began with the assumption that those who underserved populations which were excluded have a formal bank account and need access to digital technology thereby enabling them to carry basic financial transactions in a remote manner. If the underserved and the excluded population can be persuaded on the intended use of digital financial inclusion with an effective digital financial program being launched, would lead to delivering responsibly at a cost that is sustainable to the providers and being affordable to the excluded and underserved population. Digital financial inclusion assures to support banks in lowering the costs by reducing the queueing lines in banks and reducing manual documentation and paperwork and maintaining few bank branches (IFC, 2017; Manyika et al., 2016). Since 2010, the World Bank and the G-20 have led the initiative for having financial inclusion in developing countries to reduce poverty levels in emerging economies and the developing countries (GPFI, 2010). Among the academicians and policy makers, the relevance of financial inclusions and digital finance is catching attention for the reduction of poverty and economic growth to make digital finance work better among the businesses, governments, individuals and the economy at large. This has ultimately led to reducing the cost of financial intermediation of fintech providers, banks and increasing the aggregate expenditure for the governments. Digital platforms have adopted financial services to contribute to the cause of poverty reduction thereby contributing to the objectives of financial inclusion among developing economies (United Nations, 2016). Digital financial service has three key components viz. retail agents, digital technology platform and the use by agents and customers of a device like mobile phone to conduct transaction using the digital platform (CGAP, 2015). The digital financial service (DFS) user will use DFS by having their existing bank account or having third party accounts with approved permission to use them and should have available funds or overdraft in their accounts to make cash payments/ outflows and receive revenue/ cash flow via digital platforms which include personal computers, mobile devices or the use of internet. Digital finance lead to greater financial expansion, financial inclusion of financial services to non-financial sector along with the expansion of basic services to individuals due to the usage of mobile phones among nearly 50% of the people in the developing world (World Bank, 2014).

Objective

The study aims to look at the different Fintech companies which have started in India in the last few years. The study tries to determine how much these Fintech companies have been able to bridge the financing gap of SMEs and the steps taken by them to become more inclusive in their credit disbursal.

Methodology

Participants

To get the viewpoint on role of fintech in financial inclusion among SME, a semi structured interview was administered on top management at Fintech Companies. Only those Fintech companies were chosen which described their business model as lending to SMEs and MSMEs.

Some of the Fintech companies approached for the study were Anytime Loans, Rubique, Bizloans, Billionloans etc. Before conducting the interviews authors explained the topic and purpose of the study to the participants. After getting their consent, the respondents were approached for the interview. Most of the participants were owners of the fintech companies considered in the study. Total of 55 Fintech companies across India were contacted for the interview of which 40 agreed to participate in the study.

Procedure

A semi structured questionnaire was used to interview top management at Fintech companies. The importance of an appropriate research design was emphasized by Sekaran et.al 2010, who accentuated the research design should address the proposed research question. Hence, for a descriptive research of this kind, a qualitative research design was considered suitable (Collis and Hussey, 2009). The importance of qualitative studies which help in realizing the research problem has also been explained by Sekaran and Bougie, (2016). Such studies were used to collect the viewpoints and opinions from top management at Fintech Companies. Semi-structured interviews were organized around a set of open-ended questions. These experts were interviewed in a controlled environment, individually in their offices. Some of the questions included in the interview included: What is the advantage that Fintech brings to SMEs in loan disbursement vis a vis the traditional channels? Deloitte's 'Fintech in India: Ready for Break Out', reports a credit demand-supply gap of about $127 billion for SMEs in India? Do you believe that Fintech is likely to bridge this gap in next 5 years? Explain. What is the role played by technology in the lending arena? According to you, which are the important technologies that are going to shape the industry for the next five years? What is the impact of the technology on the below mentioned items which will help you in increasing your business? 1. Expand products and services 2. Increase customer base 3. Respond to competition faster 4. Reduce cost headcount 5. Decrease IT infrastructure costs 6. Leverage existing data and analytics. Etc. The analysis of interview data was intended to be primarily descriptive and inductive, as is consistent with the study's aim of understanding the role of fintech in financial inclusion among SME's.

Analysis

Transcripts of all the interviews conducted for the study were considered for further analysis. To analyze these transcripts, thematic analysis (Braun, V. and Clarke, V. 2006) was used which reverberated perceptions of all the employees. Manual color-coding of themes and concepts (Burnard, 1991; Creswell, 2009) was used to quote related segments of transcript, capturing the different views about Fintech, Financial inclusion, use of Fintech by SME's challenges of Fintech. In agreement with the above quoted papers, the authors discreetly read all the transcripts and instigated through coding it into themes. The recognized themes were based on the formerly noted themes during the author's literature review as well as the transcripts from the interviews. These themes were related to the study's research question. Transcripts were also examined for any new theme emerging from the discussions. Then, a summary description of each theme's meaning along with sub-themes was highlighted. The overall findings are presented in the Table 1.

Table 1: Summary description of Sub-themes

Themes	Sub-themes	*Percentage of employees	*Sample statements

		responded (no of employees)	
Role of Fintech	Digital Transformation	100(40)	Fintech companies are a major breakthrough in digital transformation, which has offered wider financial inclusion
	Integrating disruptive technologies	75(30)	Fintech companies have been at the forefront of integrating disruptive technologies such as AI, Machine Learning coupled with solutions based on India Stack platform.
	Credit facilitation opportunity	90(36)	Fintech companies have created larger credit facilitation opportunities for organizations
	Convenient	85(34)	Operating with Fintech companies around has become very convenient
	Digital lending	65(26)	Fintech firms also have been trying to modify the SME lending space by using

			technology to make it more transparent
	Co-lending	80(32)	co-lending is helping SMEs where fintech firm comes together with a traditional lender, to disburse loans
Benefits of Financial Inclusion	Enabling access to credit	90(36)	With appropriate access to credit, personal and small businesses can drive stronger and more inclusive growth
	Digital remittance	75(30)	Remittance to people in rural areas is slow and expensive. Technology-based models adopted by many banks (at times backed by FinTech partnerships) are helping people solve this problem.
	Cashless payment	95(38)	With approximately 90% of retail transactions still in cash,16 simplification of digital payments is driving financial inclusion

	Digital transformation enabling FI for masses	50(20)	Payments and financial technology is one of the areas experiencing maximum enablement and hence transformation in the Indian mass market
	Simplify government payment	70(28)	Many banks are driving financial inclusion by acting as sponsor banks for disbursing government to payment
	Low cost technology	95(38)	It is a Low-cost technology to improve acceptance infrastructure and widen reach
Challenges for SME’s	Small ticket size of loans	50(20)	a majority of the SMEs do not have access to formal credit due to issues like small ticket size of loans
	High underwriting	60(24)	High underwriting is one of the concerns for SME’s

	High transaction and acquisition cost	90(36)	The high cost of transaction and acquisition has been a problem area for most of the SME’s
	Lack of formal credit rating	100(40)	lack of formal credit rating leading to perception of high risk
	High turnaround time for loan processing	100(40)	All the issues in turn results in high turnaround time for loan processing.
Benefits of Fintech for SME’s	Reduces transaction cost	100(40)	FinTech digital lending companies agrees that technology has enabled them to reduce the transaction cost
	Reduced turnaround time	100(40)	FinTech digital lending companies agrees that technology has enabled them to reduce the turnaround time
	Creditworthiness	75(30)	technologies such as big data to analyze the creditworthiness of the borrowers

	financial matchmaking platform	90(36)	unique ‘Technology Thinking’ approach that have enabled a robust financial matchmaking platform
	End to end fulfilment program	80(32)	end to end fulfillment platform brining predictability in the loan process right at discovery stage itself
	Facilitate instant proposal	60(24)	Financial Institutions for digitizing the credit policies and ensuring deep integrations with them to facilitate instant approval
Opportunities for Fintech	Expand products and services	90(36)	“Expand products and Services” is one of the biggest opportunity
	Increase customer base	75(30)	They can also look forward by increasing the customer base
	Respond to competition faster	80(32)	

	Reduce cost headcount	50(20)	
	Decrease IT infrastructure costs	70(28)	
	Leverage existing data and analytics	50(20)	
Challenges for Fintech	Regulatory Uncertainty	95(38)	biggest and foremost barrier is complex processes and governance that has built up around risk and regulation
	Lack of IT support	60(24)	Large enterprises attract a lot of IT personnel which results in lack of IT support for enterprises in these sectors.
	Lack of confidence	80(32)	ending off cyber-attacks in one of the greatest challenges faced by businesses and governments around the world, and given the sensitive nature of the client data they hold, they're a serious

			concern for Fintech firms. So gaining confidence is one of the biggest concern
	Lack of resources	90(36)	Lack of resources like financial, human, technical resources etc. are quite common in these industries

*Total no of companies :20

Discussion

Fintech has changed the landscape of the financial services industry worldwide. The same holds true for India also. Fintech has brought about a digital transformation which has revolutionized the ways in which the financial services industry and its participants interact with each other. Digital transformation is described as a complete change in the process and competencies of business organizations to take advantage of the modifications and opportunities brought about by the improvements in digital technology and its impact on the participants of the industry and the society as a whole (Matt et al, 2015). The survey indicated that the all the participants believed that Fintech has brought about a digital revolution in the Indian Financial services industry.

Around three fourth of the participants believed that disruptive technologies are integrated into the financial landscape and as a result lot of Fintech companies have come up. The disruptive innovations (Yu and Hang, 2010) are believed to have a significant impact on the firm's performance. The technologies which have disrupted the financial services industry include machine learning and artificial intelligence. The participants primarily believed that Fintech had created new avenues and opportunities for SMEs and MSMEs for availing credit. The technologies used by Fintech companies made process of giving credit more streamlined. This made it easier and convenient for many of the credit partakers. The advent of Fintech companies also introduced newer models of credit like co-lending and peer to peer lending which opened new avenues for the participants in the financial services industry.

More than three fourths of the participants in the survey believed that Fintech has led to financial inclusion of the different socio-economic groups in the mainstream economy in India. This kind of financial inclusion is seen as an important step in the development of the economy as a whole (Dymski and Veitsch, 1992; Leyshon and Thrift, 1996). One of the biggest advantages of new technology is the ease with which money is transmitted to the end recipients. This digital transformation of the economy which is embodied in the form of cashless payments has helped in financial inclusion to a great deal. Seventy percent of the participants feel that Fintech has led to the simplification of the payments to be received from the government in many forms. The lowering cost of technology is also seen as one of the important factors in the acceptance of these new age Fintech models. Around 95% of the respondents felt that acceptance of new lending models was high due to ease of using them and the ease of disbursement with the help of inexpensive technology.

Though MSMEs and SMEs form a significant part of an economy, their inclusion in mainstream credit facilitation has always been a little sketchy (Deitsche and Petey, 2002). Some of the participants believe that credit access is difficult for small companies at times due to the small loan size. Big financial companies are not interested in small loans due to multiple reasons. Small loan size meant higher acquisition costs of new customers, higher cost of doing credit appraisal, large turnaround time for loan processing, higher transaction costs per proposal and higher amount of defaults on loans. The participants in the survey believed that MSMEs and SMEs faced lot of challenges in availing credit for their projects. These challenges have contributed to lower growth for these companies and where growth has happened, has come at an exorbitant cost of capital.

This is the area where Fintech are believed to have made a difference to the MSMEs and the SMEs. The digital transformation and the introduction of innovative technologies in Financial markets has led to better credit alternatives to these companies. All the participants believed that this has led to reduced turnaround times for the application as well as the loan disbursement process. The novel technologies utilized by the Fintech companies have led to reduction in the transaction costs and helped the small companies get better access to credit. This access is facilitated by faster checking of credit worthiness of the borrowers. The faster checking is eased by the use of artificial intelligence and big data analysis by the Fintech companies.

Fintech has provided MSMEs and SMEs with a financial matchmaking platform where the potential lenders and borrowers can meet. The participants believed that this was one of the unique benefit propositions of the Fintech companies. Most of them believed that Fintech companies unlike traditional financial institutions could facilitate instant credit approval and end to end fulfilment of the credit partaking process.

There are a lot of opportunities seen by the Fintech companies in today's scenarios. Around three fourth of the participants in the survey felt that there were opportunities to expand into more financial products and services. Fintech are also seen as credit institutions for all the companies irrespective of size and age. They are seen responding to the competition and the changing market conditions faster. This has led to an increasing customer base over the last few years. Another opportunity seen for the Fintech companies is seen in the decreasing cost of IT infrastructure. This in turn helps the Fintech companies in increasing their business and customer base. There are a large number of MDMEs and SMEs in India and Fintech are seen to be having a golden opportunity in harvesting new business.

With all the above mentioned benefits, there are lot of challenges ahead for the Fintech companies. One of the biggest challenge recognized by the participants in the survey is the regulatory uncertainty. RBI has recently started regulating the Fintech sector. Some of these regulations are retrospective in nature and may affect the business and growth of certain Fintech companies. Even though cost of infrastructure has come down from before, these new age companies may face lack of IT support due to their small size. The respondents also felt that Fintech companies are at a cusp of growth and may be lacking in resources to compete with large financial institutions. The sectors willing to take loan may have crisis of confidence in the new age companies.

Despite the challenges, it is seen that Fintech companies are making a big mark in the credit markets in India. By extending credit to MSME and SME companies, they have opened new doors in financial inclusion. The Fintech companies are thus seen as heralding financial inclusiveness and credit for all philosophy in the Indian financial service market.

Implications

The thematic analysis highlights the fact that innovative credit rating methods adopted by the new Fintech companies have led to more SMEs becoming eligible for loans. The rise of these new age companies has given a boost to inclusion in the traditional financing sector. The benefits accruing to the SME sector are huge due to the entry of Fintech as a new avenue of funding has opened up for them. The biggest advantage to the SMEs is the ease with which they are able to procure funding from these non-traditional resources. The norms of these funding agencies are also much simpler and easy to follow unlike those of traditional financing companies.

At the same time, it also shows that there is a still a long way to go for the Fintech companies to make a substantial inroad in the loan giving setup to SME sector. There are a lot of challenges in front of these Fintech companies such as evolving government regulations, lack of resources and infrastructure due to their small size and limited amount of funding.

This study can be further expanded by interviewing more Fintech companies. It may also be expanded by taking into account the view of the SME companies and the advantages seen by them of dealing with Fintech companies as compared to traditional Banking and finance companies.

References

Allen and Overy (2016), "Fintech", available at: www.allenovery.com/SiteCollectionDocuments/Fintech. PDF (accessed 21 April 2019)

Arner, D. W., Barberis, J., & Buckley, R. P. (2015). The evolution of Fintech: A new post-crisis paradigm. Geo. J. Int'l L., 47, 1271.

Bateman, M. (2014), 'South Africa's Post-Apartheid Microcredit-driven Calamity', Law Democracy and Development, 8, pp. 92-135.

Beck, T., Levine, R. and Loayza, M. (2000), 'Finance and the Sources of Growth', Journal of Financial Economics, 58 (1), pp. 261-300.

Beck, T., Aslı Demirgüç-Kunt, E.F. and Levine, R. (2004), 'Finance, Inequality and Poverty Alleviation: Cross-Country Evidence', World Bank Policy Research Working Paper (Washington DC, The World Bank).

Berger, A. N., Miller, N. H., Petersen, M. A., Rajan, R. G., & Stein, J. C. (2005). Does function follow organizational form? Evidence from the lending practices of large and small banks. Journal of Financial economics, 76(2), 237-269.

Boot, A. W., & Thakor, A. V. (2000). Can relationship banking survive competition?. The journal of Finance, 55(2), 679-713.

Braun, V. and Clarke, V. (2006), "Using thematic analysis in psychology", Qualitative Research in Psychology, Vol. 3 No. 2, pp. 77-101

Brummer, C., & Gorfine, D. (2014). FinTech: Building a 21st-century regulator's toolkit. Milken Institute, 5.

Burnard, P. (1991), "A method of analyzing interview transcripts in qualitative research", Nurse Education Today, Vol. 11 No. 6, pp. 461-466

Chiu, I. H. (2016). Fintech and disruptive business models in financial products, intermediation and markets-policy implications for financial regulators. J. Tech. L. & Pol'y, 21, 55.

Chuen, K., Lee, D., & Teo, E. G. (2015). Emergence of fintech and the LASIC principles. Journal of Financial Perspectives, 3(3).

Consultative Group to Assist the Poor (CGAP) (2015), "Top 10 Things to Know About M-Shwari", Tamara Cook and Claudia McKay, 02 Apr. 2015, http://www.cgap.org/blog/top-10-things-knowabout-m-shwari

Collis, J. and Hussey, R. (2009), Business Research: A Practical Guide for Undergraduate & Postgraduate Students, 3rd ed., Palgrave Macmillan Ltd., London

Creswell, J. W. (2009). Mapping the field of mixed methods research.

Dany, O., Goyal, R., Schwarz, J., van den Berg, P., Scortecci, A., & to Baben, S. (2016). Fintechs may be corporate banks' best "Frenemies." Retrieved 6 September 2018. from https://www.bcgperspectives.com/content/articles/financial-institutions-technology-digital-fintechs-may-be-corporate-banks-best-frenemies/

Dapp, T. F. (2015). Fintech reloaded – Traditional banks as digital ecosystems. Retrieved 9 September 2018. from http://www.dbresearch.com/PROD/DBR_INTERNET_DE-PROD/PROD0000000000356835/Fintech+reloaded+–+Traditional+banks+as+digital+ec.PDF

Dietsch, M., & Petey, J. (2002). The credit risk in SME loans portfolios: Modeling issues, pricing, and capital requirements. Journal of Banking & Finance, 26(2-3), 303-322.

Drexler, A., & Schoar, A. (2014). Do relationships matter? Evidence from loan officer turnover. Management Science, 60(11), 2722-2736.

Drummer, D., Jerenz, A., Siebelt, P., & Thaten, M. (2016). FinTech – Challenges and Opportunities – How digitization is transforming the financial sector. Retrieved 6 June 2019 from https://www.mckinsey.de/files/160525_fintech_english.pdf

Duvendack, M.; Palmer-Jones, R.; Copestake, J.G.; Hooper, L.; Loke, Y.; Rao, N. (2011) What is the Evidence of the Impact of Microfinance on the Well-Being of Poor People? Systematic Review. London: EPPI-Centre, Social Science Research Unit, Institute of Education, University of London.

Dymski G A (2006), 'Targets of Opportunity in Two Landscapes of Financial Globalisation', Geoforum, 37 (3), pp. 307–11

Freedman, S. M., & Jin, G. Z. (2011). Learning by Doing with Asymmetric Information: evidence from Prosper. com (No. w16855). National Bureau of Economic Research.

Gabor, D., & Brooks, S. (2017). The digital revolution in financial inclusion: international development in the fintech era. New Political Economy, 22(4), 423-436.

G20 Principles for innovative financial inclusion - executive brief (2010) Available at: http://www.gpfi.org/publications/g20-principles-innovative-financial-inclusion-executive-brief, Accessed 21st June2019

Google. (2016). Google trend for fintech. Retrieved 8 September 2018. From https://www.google.com/trends/explore?date=all&q=fintech

Gulamhuseinwala, I., Bull, T., & Lewis, S. (2015). FinTech is gaining traction and young, high-income users are the early adopters. The Journal of Financial Perspectives, 3(3), 1–17.

Hochstein, M. (2015). Fintech (the word, that is) evolves. American Banker, 5.

IFC , Digital financial services: challenges and opportunities for emerging market Banks. EM Compass Report, No 42, August International Finance Corporation, World Bank (2017) Available: https://www.ifc.org/wps/wcm/connect/4e45d83f-e049-41d3-8378 2e388ffc1594/EMCompass+Note+42+DFS+Challenges+updated.pdf?MOD=AJPERES, Accessed 9th Nov 2018

Intelligence, G. S. M. A. (2014). Understanding 5G: Perspectives on future technological advancements in mobile. White paper, 1-26.

Jaffee, D. M., & Russell, T. (1976). Imperfect information, uncertainty, and credit rationing. The Quarterly Journal of Economics, 90(4), 651-666.

Jagtiani, J., & Lemieux, C. (2018). Do fintech lenders penetrate areas that are underserved by traditional banks?. Journal of Economics and Business, 100, 43-54.

Kim, Y., Park, Y. J., & Choi, J. (2016). The adoption of mobile payment services for "Fintech". International Journal of Applied Engineering Research, 11(2), 1058-1061.

Liberti, J. M., & Petersen, M. A. (2018). Information: Hard and soft. Review of Corporate Finance Studies, 8(1), 1-41.

Lin, M., Prabhala, N. R., & Viswanathan, S. (2013). Judging borrowers by the company they keep: Friendship networks and information asymmetry in online peer-to-peer lending. Management Science, 59(1), 17-35.

Leyshon, A. and Thrift, N. (1995), 'Geographies of Financial Exclusion: Financial Abandonment in Britain and the United States', Transactions of the Institute of British Geographers, 20 (3), pp. 312–41.

Leyshon, A. and Thrift, N. (1996), 'Financial Exclusion and the Shifting Boundaries of the Financial System', Environment and Planning A, 28 (7), pp. 1150–56.

Matt, C., Hess, T., & Benlian, A. (2015). Digital transformation strategies. Business & Information Systems Engineering, 57(5), 339-343.

Manyika, J., Lund, S., Singer, M., White, O., & Berry, C. (2016). Digital finance for all: Powering inclusive growth in emerging economies. McKinsey Global Institute.

Marron, D. (2013) 'Governing Poverty in a Neoliberal Age: New Labour and the Case of Financial Exclusion', New Political Economy, 18 (6), pp.785-810.

Sekaran, U., & Bougie, R. (2016). Research methods for business: A skill building approach. John Wiley & Sons.

Shim, Y., & Shin, D. H. (2016). Analyzing China's fintech industry from the perspective of actor–network theory. Telecommunications Policy, 40(2-3), 168-181.

Soederberg S. (2014) Debtfare States and the Poverty Industry: Money, Discipline and the Surplus Population. New York: Routledge.

Stiglitz, J. E., & Weiss, A. (1981). Credit rationing in markets with imperfect information. The American economic review, 71(3), 393-410.

Yu, D., & Hang, C. C. (2010). A reflective review of disruptive innovation theory. International journal of management reviews, 12(4), 435-452.

Zavolokina, L., Dolata, M., & Schwabe, G. (2016). FinTech – What's in a name? In Proceedings of the International Conference on Information Systems (pp. 1–19). Dublin, Ireland.