

## THE IMPACT OF FINANCIAL TECHNOLOGY ON THE DEVELOPMENT OF FINANCIAL INCLUSION ON MSME



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Arie Pratania Putri<sup>1</sup>✉, Vincent Tiovandy<sup>2</sup>, Jovita Zefanya S. Kawijaya<sup>3</sup>, Rhonetta Sandy<sup>4</sup>

<sup>1,2,3,4</sup>Universitas Prima Indonesia

✉<sup>1</sup> [arieprataniaputri@unprimdn.ac.id](mailto:arieprataniaputri@unprimdn.ac.id)

Jl. Sampul No.4, Sei Putih Barat, Kota Medan, Indonesia

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### Abstract

This research aims at determining the impact of financial technology on the development of financial inclusion on MSMEs in North Sumatera. The authors took sample by using of one of the perpetrator's economies, namely SMEs in North Sumatra. The 100 samples taken in this research, only 85% of MSMEs met the requirements in the eligibility test. The results contained in this research are a description of 85 MSMEs believed to reflect the utility of fintech itself and how it developed. In this research, the authors used the analysis of multiple linear regression using SPSS. The variables of P2P Lending and Cashless Society have a significant positive effect on financial inclusion, while Risk and Investment Market Provisioning have no significant effect on financial inclusion.

## INTRODUCTION

Finance covers all aspects of economic activity, is a fundamental and essential part of an inclusive series of transactions that are important in creating economic stability, improving financial arrangements, managing government programs in the field of backwardness, and narrowing gaps between individuals and regions (Perpres 82, 2016). According to the World Bank and the European Commission, a comprehensive or inclusive mode of finance is a comprehensive activity that is expected to minimize everything that is considered to interfere with the implementation process to enable the public to optimize the use of technology in the financial sector. As presented two things above, financial inclusion focuses on the accessibility, availability, and benefits of the formal financial system owned by economic actors, which is not limited to the reach of community needs in the business sector (Sarma, 2012). This financial inclusion can certainly provide financial services to people who did not have financial facilities like banking. In addition, financial inclusion is undoubtedly able to encourage financial stability through GDP and economic efficiency, also provide new market share for industries in the fields of finance, insurance, and other services. Theoretically, financial inclusion can undoubtedly provide knowledge on the existence of a developing money market and reduce the rate of inequality which is soon expected to create stable and prosperity-oriented conditions. To further enhance the holistic role of finance, several parties who are parts of the financial sector, such as OJK (Financial Service Authority), K/L, SOE, insurance services, and other financial services, and also provide stimulus to the public such as price discounts (discounts), and promotions. Cashback and many things as a form of strategy in increasing financial inclusion.

Financial inclusion is undoubtedly related to technology. Technology is essential in boosting the growth of society in which human activities cannot be separated from the support of technology (Susilo & Afandi, 2021). The development of information technology growing significantly is characterized by the ease and speed of information technology in processing a job to produce quality information (Pratiwi et al., 2017). One of the technologies in question is a financial technology (fintech), which until the end of 2020, is believed to be very helpful for the public in conducting financial transactions.

Fintech has P2P services, that is financial stands that facilitate between parties who needed funds and those with excess funds. This P2P service enables small, medium and micro businesses that are not eligible for bank loans to obtain funds and promote financial inclusion (OJK, 2016). Optimizing financial technology in an integrated and structured manner will create a cashless culture or a cashless society where people tend to use non-cash (digital) money to carry out various daily transactions (Bank of Indonesia, 2014) which aims to create a safe, efficient, and smooth payment system that encourages financial inclusion.

Consumers as actors in consumption activities and the broader social group are expected not only to recognize and master financial management, especially in managing cash inflows and cash outflows with the existence of financial technology (Mega, 2020). Risk and investment management is a platform that provides financial planning services based on KRI (Key Risk Indicators), which is lagging and leading indicators regarding risk information in investing. Lagging indicators are events and their impacts that have already occurred while leading indicators were a series of processes carried out to achieve an event in the future that can still be changed. The better management of risk and investment management, the higher the level of investor confidence because the management of the investment is better to minimize the uncertainty that is expected to give investors' attention. Market provisioning helps collect various data and information about the market, both prices, benefits, and features of a financial product used according to consumer needs and the more accurate the data generated by the supplier tool, the more investors will use it before making investment decisions. Investors instil confidence in the fintech and provide space for the survival of the fintech to be longer with accuracy.

Moreover, this is not limited to traders, both small and large scales including MSMEs. MSMEs are one of the business units becoming the centre of attention in the last five years during their relatively rapid growth. In North Sumatra Province, MSMEs continued to be encouraged to conduct digital transactions, which are expected to support and advance MSMEs to be more classy in transactions and create stability in terms of prices and exchange rates (Bank of Indonesia, 2020). One of the activities carried out in North Sumatra was to increase the use of fintech is the "KKSU Program" (*Karya Kreatif Sumatra Utara*), which educated and accelerated MSME activists to use fintech in making transactions faster and more efficient. This program has pushed MSME to use it because of its practical benefits, namely cost efficiency.

Although a pandemic hit 2020, the use of fintech in conducting financial transactions is undoubtedly not too influential, considering that the majority of people are still very enthusiastic about online shopping, which was done through fintech. In line with developing a financial inclusion program to reduce unemployment and poverty rates (Kusuma, 2020), MSMEs in North Sumatra, which number more than 2.8 million MSMEs, of which 380 thousand MSMEs were verified in the Office of Cooperatives and MSMEs. Of the 380 thousand MSMEs, 97% were in urban areas, which managed to absorb 97.04 million workers or only set aside 0.6% of the total working workforce (Bank of Indonesia, 2020). This, of course, contributes to the formation of GDP, which is quite significant, 55.56% of the national GDP. Several Fintech companies dramatically contributed to the development of MSMEs (Muzdalifa, 2018). A total of 29 MSMEs in North Sumatra were ready to join the digital platform through an online shopping application, namely Bukalapak, which is still waiting to sign an agreement to promote the Go Digital program.

Several digital financial services have emerged, making it easier for the public to acquire financial knowledge and financial services or that is known as financial literacy with the development of information technology and the rapid popularity of the internet (Pertiwi, 2021). People with low financial understanding/literacy levels usually tended to be deceived when carrying out cash outflows or uncontrolled financial management, instead of people who had a high understanding (Yushita, 2017).

## METHOD

This research focused on MSMEs (Micro, Small, and Medium Enterprises), especially the trade sector, where data was obtained through literature studies from various books, articles, literature, journals, and the Internet. The approach used is quantitative. The nature of the research in this research was causal research involving the relationship between cause and effect (Sugiyono, 2017:2). The population and samples used were obtained from the MSME industry in the trading sector. The available data were used on derived data/archives available at the Ministry of Cooperatives and MSMEs of the Republic of Indonesia, especially in

the North Sumatra regions, and set as many as 100 MSMEs. The sampling technique was saturated sampling because all members of the population were used tending to be fewer so that they were used as samples (Sugiyono, 2017:85). This technique was used because it was easy, did not take much time, and could cover all the samples to be tested. The type of data in this research was primary data obtained from the distribution of questionnaires or questionnaires to respondents, which aimed at obtaining information and actual data. The distribution of a questionnaire whose substance was in the form of several questions to be answered was one of the methods, or data collection techniques in this research (Sugiyono, 2017). The results of completed answers from each respondent became criteria that must be met and then processed by researchers using the SPSS application so that multiple linear regression tests were carried out to see the effect of the independent variables on the dependent variable in this research.

## RESULTS

The total population with the type of MSMEs in the trade sector used is 100 MSMEs. However, in the results of the questionnaire, 15 MSMEs were not collected due to several reasons, that was the presence of some MSMEs owners who were elderly, so they could not fill out the questionnaire, and some MSMEs owners did not understand the questionnaire questions but were not visited during the Covid-19 pandemic. After collecting the questionnaire results, only 85 MSMEs entered and met the criteria as presented in Figure 1.

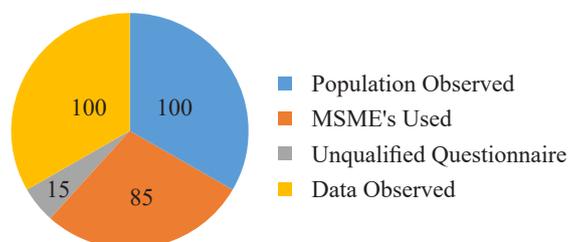


Figure 1. Number of Sample Selection

Based on the tests carried out using the SPSS program, each data and questionnaire question has been declared valid through the validity tests conducted. The research variables were normally distributed and met the normality test's data requirements with a significance  $> 0.05$ . The research variables were then tested for reliability to measure the consistency of the research questionnaire used in different symptoms and situations, which met the reliability test criteria with Cronbach's Alpha value greater than 0.6. The independent variables also did not show signs of multicollinearity, and the research regression model was free from heteroscedasticity cases. The results of multiple linear regression as presented in Table 1.

Table 1. Multiple Linear Regression Test

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	5.309	2.107		2.519	.014
	Risk and Investment Management ( $X_1$ )	-.334	.182		-1.838	.070
	P2P Lending ( $X_2$ )	.397	.086	.501	4.624	.000
	Market Provisioning ( $X_3$ )	.222	.150		1.480	.143
	Cashless Society ( $X_4$ )	.340	.093	.347	3.639	.000

a. Dependent Variable: Financial Inclusion (Y)

The coefficient of determination test determined how much the independent variables (x) affected the dependent variable (y) in this study (Table 2).

Table 2. Determination Test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.742 <sup>a</sup>	.550	.527	2.266

a. Predictors: (Constant), Risk and Investment ( $X_1$ ), P2P Lending ( $X_2$ ), Market Provisioning ( $X_3$ ), Cashless Society ( $X_4$ )

b. Dependent Variable: Financial Inclusion (Y)

Referred to Table 2, the adjusted R Square value was 0.527. This figure described the independent variables (x), namely the risk and investment management variable, peer-to-peer lending, market provisioning, and cashless society affecting the dependent variable (y) of financial inclusion in this research by 52.7%, while the other 47.3% were affected by other various variables outside the study.

Table 3. F Test ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	501.707	4	125.427	24.431	.000 <sup>b</sup>
	Residual	410.716	80	5.134		
	Total	912.424	84			

a. Predictors: (Constant), Risk and Investment ( $X_1$ ), P2P Lending ( $X_2$ ), Market Provisioning ( $X_3$ ), Cashless Society ( $X_4$ )

b. Dependent Variable: Financial Inclusion (Y)

As presented in Table 3, the calculated F value was  $24,431 > 2.49$  (F table) with a sig.  $0.000 < 0.05$ , it can be concluded that the variables Risk and Investment Management, P2P Lending, Market Provisioning, and Cashless Society simultaneously affect the Financial Inclusion variable.

## DISCUSSION

The variable Risk and Investment Management ( $X_1$ ) had a coefficient value of -0.334 and a significance of  $0.070 > 0.05$ , which indicated that the Risk and Investment Management hypothesis influences Financial Inclusion (y) which was significantly rejected and was negative. These results were in line with research conducted by Slamet (2016) which stated that fintech did not affect financial inclusion, and also research conducted by Putra et al (2016) which stated that a person's financial knowledge was obscured by information disclosure at present so that there was no longer a need for adequate knowledge in conducting digital financial service transactions or complex investment processes.

The P2P Lending variable ( $X_2$ ) had a coefficient value of 0.397 with a significance of  $0.000 < 0.05$ , indicating the P2P Lending variable influenced the Financial Inclusion variable (y), which is significantly accepted and was positive. This result was supported by Ladi & Nurul's research (2021) which states that P2P lending has a positive and significant effect on economic growth, which was also in line with the quote in the regulation (OJK No.77/POJK.01/2016) which stated that P2P lending was a lending and borrowing service. Money in rupiah currency directly between creditors (lenders) and debtors (loan recipients) based on information technology. During the current pandemic, almost all business sectors have experienced a decline in the economy and the number of workers, especially MSMEs actors who had difficulty obtaining funds from the banking sector. As a result, this made P2P Lending a foundation for MSMEs to survive in the economic conditions during the current pandemic, which made MSMEs and the public more familiar with and learned about P2P Lending.

Market Provisioning variable ( $X_3$ ) with a coefficient of 0.222 and a value of sig. as significant as  $0.143 > 0.05$  explains that the hypothesis that Market Provisioning affected Financial Inclusion (y) was significantly rejected and was positive. This result was reinforced by Mega's research (2020) where respondents disagreed with the Market Provisioning parameters in terms of features, prices, and benefits in the Financial Technology era. The results of this research explain that MSME actors in North Sumatra still did not fully convey fintech about the benefits, objectives, and advantages of investing in fintech. Its use is due to a lack of financial education/literacy. Therefore, MSME actors and the public did not have sufficient knowledge about the availability of information by fintech regarding financial products and services and price comparisons, features, and benefits of these financial products.

Cashless Society variable ( $X_4$ ) with a coefficient of 0.340 and sig.  $0.000 < 0.05$  showed that the Cashless Society hypothesis had a significant influence on Financial Inclusion (y) and was positive. The results of this research are the same as research conducted by Mega & Marini's (2020) which stated that a cashless society and fintech affect financial inclusion, ease, speed, security, and efficiency in conducting various digital transactions make fintech a forum for MSMEs and the public to manage business and business finances. This also strengthened the cashless society phenomenon, which will increase financial inclusion in the North Sumatra region through goods and services and financial services such as investment, gold, stocks, insurance, etc. This aligns with the start of the 5.0 industrial revolution era, where the focus was to form a technology society that provided a platform for people to make buying and selling transactions using digital money.

## CONCLUSION

This research variable influenced financial inclusion based on the results of multiple linear regression have tested. It is concluded that the Risk and Investment Management variable did not affect financial inclusion, the P2P Lending variable affects financial inclusion (financial knowledge), P2P Lending and Cashless Society variables had a significant positive effect on financial inclusion (financial knowledge). In contrast, Risk and Investment Management and Market Provisioning did not substantially impact financial inclusion (financial knowledge) in MSMEs in North Sumatra.

In this research, the author had limitations in collecting data on MSMEs in the North Sumatra region because they were not registered with the Ministry of Communications and MSMEs of the Republic of Indonesia, especially in the North Sumatra Region and the ongoing COVID-19 pandemic, thus limited the author to interact directly with respondents in filling out Questionnaire. Based on the research results that have been done, the authors suggest to further researchers that the results of this study can be used as a reference to determine the extent to which financial technology affects financial inclusion in MSMEs in North Sumatra when did this research a reference. The author also hoped that every MSMEs owner, especially in the North Sumatra area, registered his business at the Ministry of Communication and MSMEs of the Republic of Indonesia. So that, further researchers could obtain data quickly.

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