

# The Effect of Financial Technology on Financial Inclusion SMEs in Palembang City

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## ABSTRACT

The urgent of study is to optimize of the use of financial technology and to expansive of financial inclusion. The purpose of this study was to determine and analyze the effect of financial technology on financial inclusion, the object of research was conducted on SMEs in Palembang City. The population used was 287 SMEs in Palembang City. The sample used was 74 people. The data collection method used a questionnaire. The analysis technique uses statistical tests through hypothesis testing, the coefficient of determination, and simple linear regression. Based on the results of the study, the results of the linear regression test showed that there was a positive and significant relationship between financial technology and financial inclusion. Hypothesis test results indicate that the financial technology variable has an influence on financial inclusion. Demographic factors of respondents such as productive age and having an undergraduate educational background with business ownership on the SME scale of the culinary business sub-sector in Palembang City already have knowledge of fintech. Respondents at the small business scale are more enthusiastic about increasing their knowledge, confidence, skills in the use of technology (fintech) so that they can increase the use of financial products and services (financial inclusion) according to their needs for both personal and business needs.

**Keywords:** *financial technology, financial inclusion, SMEs.*

## 1. INTRODUCTION

Financial inclusion began since the financial crisis in 2008 at which time the people in the bottom of the pyramid were the people most affected by the crisis. Since then, financial inclusion has continued to develop until now, with the Financial Services Authority and other financial industries responsible for improving the welfare of the community through increasing financial inclusion.

### 1.1. Background

The priority targets for achieving financial inclusion are MSMEs where the contribution of MSMEs in Indonesia is very large for the national economy which accounts for 60% of Gross Domestic Product and is able to absorb 97% of the national workforce. According to the Institute for Development of Economics and Finance [1], the number of MSMEs in Indonesia is around 60 million. However, only 11 million MSMEs are bankable and 49 million MSMEs are still unbankable. Meanwhile, the total national financing requirement for MSMEs is IDR 1,649 trillion, but the capacity of

banking institutions is only IDR 660 trillion. Therefore, there is a difference of Rp 989 trillion which has not been disbursed to finance MSMEs. With the large financing needs in Indonesia, this is an opportunity for peer to peer landing fintech companies to meet their financing needs. SMEs do not know much about financing using fintech.

Presented at the Indonesia Fintech Forum by the Coordinating Minister for the Economy Darmin Nasution, the development of peer to peer lending to individuals / business was 40% and fintech payments was 34%. Research [2] shows that financial technology has a significant positive effect on financial inclusion in Kuningan Regency. As the capital city of the province and the largest city, Palembang City has the largest number of MSMEs in South Sumatra with around 37,351 units but only 4,000 registered units are registered at the Cooperative and UMKM Office of Palembang City [3].

In 2020, only recorded the number of small and medium enterprises (UKM) in Palembang City, namely 287 units, most of which are dominated by the culinary business sector. Even though MSMEs in Palembang are dominated by micro business, many micro-business are not active due to insufficient human resources to run their business, so the object of this research is in accordance with existing data, namely on medium and medium enterprises (UKM). It is possible that existing micro businesses will find it difficult to develop and experience business failure due to a lack of understanding in financial management and difficult in obtaining financial access. Therefore, the Financial Services Authority continues strive to increase financial inclusion in South Sumatra, including by optimizing the fintech financing model.

### *1.1.1. Research purposes*

By conducting the research, it is hoped that it will achieve the goal, namely to determine the effect of financial technology on financial inclusion in SMEs.

## **2. LITERATURE REVIEW**

### *2.1. Financial Technology*

According to IOSCO in [4], Fintech is an improvement in services in the financial industry through the use of information technology developments. Another definition is an effort to improve the financial services industry through technological developments that have the potential and variety of business models. In research [5], which is supported by previous research [6], knowledge of financial technology and user profiles or demographic backgrounds are needed to determine the level of financial inclusion.

The theory of technology acceptance or the technology acceptance model (TAM) proposed by [7], showing that when users are presented with a new technology, there are a number of variables that people who use these financial products and services. This quality can also be interpreted as the active use of financial products and services by the community, which means that the frequency of use of financial products and services is relatively high, so it will be in accordance with the needs of the community. According to Bencheikh and Taktak in [11], suggest that financial inclusion is influenced by company characteristics including business growth, business scale, and business profitability. In addition, the liquidity of collateral in

influence their decisions about how and when they will use it. There are two specific variables that influence, namely perceived benefits and perceived convenience, which are believed to be the basic determining factors for acceptance of technology users.

In a study conducted [8], the TAM Model can also be integrated with perceived risk, considering that a new breakthrough in the field of payments regarding individual finances is sensitive and important to see the risk aspects that may arise in the use of technology.

### *2.2 Financial Inclusion*

According to [9], financial inclusion is the existence of various institutions that provide financial access, the availability of financial products and services according to people's needs and capacities in order to improve people's welfare. In an effort to increase public access by providing financial products and services including four elements of financial inclusion, namely expanding access to finance, availability of financial products and services, use of financial products and services, and improving the quality of both the quality of use of financial products and services as well as product quality and financial services itself [10]. Then in the Indonesian National Strategy for Financial Literacy based on the definition of financial inclusion from experts, The Financial Services Authority concludes that there are roles for elements in financial inclusion in Indonesia, as follows: 1) Access is infrastructure provided by financial service institutions so that the public can reach both institutions, products and formal financial services. 2) The availability of financial products and services needed by all groups of society is expected to have the ability and fulfillment of their needs in the use of financial products and services. 3) The ultimate goal of financial inclusion is the use of financial products and services by the public so that they can improve their welfare not only by enjoying the financial products and services used.

financing also makes it easier for companies to access sources of financing.

## **3. METHODOLOGY**

To be able to process and find solutions to problems, the authors collected data. The data used are primary data in the form of questionnaires while secondary data are in the form of literature and documents. As for the population in this study were 287 SMEs in Palembang City. To determine the number of samples, the Slovin

formula is used, with an error accuracy of 10%, the researcher will give a lottery questionnaire of 74 to UKM players. The sampling technique in this study used a proportional random sampling technique based on the UKM sub-sector.

**Table 1 Sample of UKM in Palembang City**

Sample	amount
Culinary	42
Crafts / Handcraft	22
Services	5
Agriculture / Fisheries	3
Trading	1
<b>Total</b>	<b>74</b>

Source: Primary data processed, 2020

### 3. RESULT AND DISCUSSION

#### 3.1. Descriptive Analysis

Descriptive analysis is used to determine the distribution of research respondents. The following are the results of the demographic analysis of respondents in Table 2 below:

**Table 2 Profile of respondents**

Profile	Frequency	Percentage
<b>Age</b>		
<25 years	21	28.4%
25 years - 40 years	23	31.1%
40 years - 55 years	21	28.4%
> 55 years	9	12.2%
<b>Amount</b>	74	100%
<b>Education Level</b>		
Junior High	3	4.1%
High school	29	39.2%
Diploma	5	6.8%
S1	35	47.3%
S2	2	2.7%
<b>Amount</b>	74	100%
<b>Individual Income</b>		
≤ 5 million rupiah	23	31.1%
5-10 million rupiah	25	33.8%
10-15 million rupiah	9	12.2%
> 15 million rupiah	17	23%
<b>Amount</b>	74	100%
<b>Business Sub-Sector</b>		
Culinary	42	58.1%
handycrafts	22	29.7%
Services	5	6.8%
Agriculture and Fisheries	3	4.1%
Trading	1	1.4%
<b>Amount</b>	74	100%
<b>Scale enterprises</b>		
Small business	55	74%
Medium Enterprises	19	26%
<b>Amount</b>	74	100%

Source: Primary data processed, 2020

The majority of respondents aged 25-40 years were 23 people with a percentage of 33.1% who were of the productive age who better understood and used technology as a tool to make non-cash financial transactions easier and access to financing faster. Based on the education level, the majority of respondents at the S1 education level were 35 people with a percentage of 47.3%, which means that they better understand the use of financial products and services combined with technological developments because they have the opportunity to take more education. Based on the level of individual income, the majority of respondents have an income level of 5 - 10 million rupiah as many as 25 people with a percentage of 33, 8 who are respondents as managers because they play an important role in SME operations, especially in convincing consumers to be able to manage finances well and innovate technological developments to make it easier for SMEs to access finance and consumers to use electronic payments. Based on the business sub-sector, the majority of respondents in the culinary sector were 42 units at 58.5%. Which strengthens the data provided from the Palembang City Cooperative and UMKM Office which states that the UMKM in Palembang is dominated by culinary businesses. Based on the business scale, the majority of respondents are small-scale business as many as 55 units with a percentage of 74%, which means that small-scale businesses are more enthusiastic about increasing their knowledge, confidence, skills in using technology so as to improve people's welfare. Based on the business sub-sector, the majority of respondents in the culinary sector were 42 units at 58.5%. Which strengthens the data provided from the Palembang City Cooperative and UMKM Office which states that the UMKM in Palembang is dominated by culinary businesses. Based on the business scale, the majority of respondents are small-scale business as many as 55 units with a percentage of 74%, which means that small-scale businesses are more enthusiastic about increasing their knowledge, confidence, skills in using technology so as to improve people's welfare. Based on the business sub-sector, the majority of respondents in the culinary sector were 42 units at 58.5%. Which strengthens the data provided from the Palembang City Cooperative and UMKM Office which states that the UMKM in Palembang is dominated by culinary businesses. Based on the business scale, the majority of respondents are small-scale business as many as 55 units with a percentage of 74%, which means that small-scale businesses are more enthusiastic about increasing their knowledge, confidence, skills in using technology so as to improve people's welfare.

#### 3.2. Discussion

The results of the regression analysis can be arranged a multiple regression equation as follows:

$$Y = 9,209 + 5,002 X_1$$

Information:

Y: Financial Inclusion

X<sub>1</sub>: Financial Technology

Based on the values in the simple linear regression equation model data, it can be explained that:

The constant value of indicates that financial inclusion is 9,209

Coefficient regression on the financial technology variable is 5,002 which means that a positive value indicates a unidirectional relationship, which if the value of the financial technology variable increases by 1 then the value of financial inclusion will increase by 5,002.

**Table 3 Data Analysis Results**

Coefficient of Determination		
Model	R Square	
1	.258	
T test		
Dependent	T	Sig.
(Constant)	9,209	.000
Financial Technology	5,002	.000

Source: Primary data processed, 2020

Based on the results of the determination test, it is known that the R Square value is 0,258. The amount of influence exerted by the financial technology variable was 25,8%, while the other 74,2% were influenced by other factors not examined in this study.

Based on the results of the t test which can be explained that the t value is 5,002. Obtained t table of 1,994 / -1,994. Because the value of t count > t table (5,002 > 1,994) then H<sub>1</sub> is accepted. Based on the significance value, provided that if the significance is < 0,05 then H<sub>1</sub> is accepted, and if the significance is > 0,05 then H<sub>1</sub> is rejected and H<sub>0</sub> is accepted. Obtained significance on the t test is less than 0,05 (0,000 < 0,05) then H<sub>1</sub> is accepted. The t value is 5,002 with a significance value of 0,000, then financial technology partially has a positive and significant effect on Financial inclusion. Expected landing fintech companies can educate and promote both the advantages and benefits provided by online / peer to peer landing financing products. OJK takes an approach and synergizes with related institutions to provide policy support, supervise fintech companies and facilitate a forum for the implementation of sustainable education, customers are guaranteed safe because the existence of fintech can be accounted for.

#### 4. CONCLUSION

From the calculation and analysis simple regression methods concluded that Financial Technology has a positive and significant effect on Financial Inclusion.

Therefore, to increase financial technology need more action form fintech company to educate and to promote both the advantages and benefits provided by online / peer to peer landing financing products, also synergy with OJK as service authority in Indonesia. Futhermore this study explain that the demographic factors of respondents such as productive age and having an undergraduate education background with business ownership on the SME scale culinary business sub-sector in Palembang City already have knowledge of fintech. This result adjusted with previous studies [5] dan [6] that demographic backgrounds are needed to determine the level of financial inclusion. Respondents at the small business scale are more enthusiastic about increasing their knowledge, confidence, skills in the use of technology (fintech) so that they can increase the use and use of financial products and services (financial inclusion) according to their needs for both personal and business needs.

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#### REFERENCES

- [1] Rizal, M, Erna Maulina, and Nenden Kostini. 2018. Fintech as one of The Financial Solution for SMEs. *AdBispreneur: Journal of Business Administration and Entrepreneurship Thought and Research*. Vol. 3, No. 2, August 2018. <https://doi.org/10.24198/adbispreneur.v3i2.17836>
- [2] Hamzah, Amir and Dadang Suhardi. 2019. Level of Financial Literacy and Financial Technology for Micro, Small and Medium Enterprises (MSMEs) in Kuningan Regency. *Scientific Journal of Management, Faculty of Economics*. Vol. 5 No.2 December 2019. <https://doi.org/10.34203/jimfe.v5i2.1485>
- [3] Suud, Djoko.2020. More than 13 thousand MSMEs have grown in South Sumatra, the most in Palembang. In <https://indonesiainside.id/ekonomi/2020/02/20/le-bih-163-ribu-umkm-tumbuh-di-sumsel-paling-banyak-di-palembang> accessed on 22 April 2020, at 07.56 WIB
- [4] Financial Services Authority. 2017. *Consumer Protection Study in the Financial Services Sector: Consumer Protection in Fintech*. Jakarta: Consumer Protection Department
- [5] Pambudianti, Feronica Fa Rozalyne, et al. 2019. The implementation of fintech: Efficiency of

- MSMEs loans distribution and users' financial inclusion index. Department of Management, Faculty of Economics and Management Science, Graduate School of IPB University. *Journal of Finance and Banking*, 24 (1): 68–82, 2020.
- [6] Akmal, Huriyatul and Yogi Eka Saputra. 2016. Financial Literacy Level Analysis. *JEBI (Journal of Islamic Economics and Business)* - Volume 1, Number 2, July-December 2016.
- [7] Fishbein M, Ajzen I. 1975. *Belief, Intention and Behavior: An Introduction to Theory and Research* .. MA: Addison Wesley
- [8] Rahmatika, Ula and Muhammad Andryzal Fajar .. 2019. Factors Affecting Interest in Using Electronic Money: Integration of the TAM - TPB Model with Perceived Risk. *Journal Nominal / Volume Viii Number 2 / Year 2019*. <https://doi.org/10.21831/nominal.v8i2.26557>
- [9] Financial Services Authority. 2016. Financial Services Authority Regulation Number 76 /POJK.07/2016 concerning Increasing Financial Literacy and Inclusion in the Financial Services Sector for Consumers and / or Communities. State Sheet of the Republic of Indonesia of 2016 Number 315. Jakarta
- [10] Financial Services Authority. 2017. *National Strategy for Financial Literacy (Revisit 2017)*. Jakarta: Consumer Education and Protection Sector
- [11] Fitriana, Widya, Ernan Rustiadi, Akhmad Fauzi, Lukytawati Anggraeni. 2018. Strengthening Financial Inclusion in Small-Scale Creative Industries in West Sumatra. *Journal of Indonesian Economic Development*