THE INFLUENCE OF LITERACY FINANCE AND FINANCIAL TECHNOLOGY ON INCLUSION FINANCE FOR SMALL AND MEDIUM ENTERPRISE (SMEs) ACTORS IN TERNATE CITY

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**Article Info**

<table>
<thead>
<tr>
<th>Article History</th>
<th>Abstract</th>
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<tr>
<td>Received: 17 July 2023</td>
<td>This research aims to analyze the role of financial literacy and financial technology on the financial inclusion of SMEs in Ternate. By applying a purposive sampling method, the number of samples used in this research were 50 SMEs engaged in the food industry. This research was carried out by using data analysis assisted by SPSS 25 software. The results of the research show that: (1) financial literacy has a significant effect on the financial inclusion of SMEs in Ternate City, meaning that the better the financial literacy implemented, the more financial inclusion behavior it will get better in certain businesses; (2) financial technology has a significant effect on the financial inclusion of SMEs in Ternate City. Financial literacy aids individuals in developing skills for managing personal finances. A thorough comprehension of budget creation, expense control, and savings can enhance a person’s financial wellness. Financial literacy reduces financial uncertainty by providing knowledge about risks and ways to manage them. Additionally, fintech, or financial technology, contributes significantly to increasing financial inclusion.</td>
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**INTRODUCTION**

Small and medium-sized enterprises (SMEs) in Indonesia demonstrate consistent growth on an annual basis. The crucial role of such enterprises in contributing to the country’s foreign
exchange and economic vitality cannot be overstated. SMEs serve as a means of promoting economic equality across all regions and expanding employment opportunities and labor absorption capacity. Additionally, SMEs make a significant contribution to Indonesia's Gross Domestic Product (GDP), thus emphasizing their crucial role in the economy (Hernikawati, 2022). For this reason, strengthening SMEs means strengthening their good financial literacy because financial literacy helps SMEs owners understand and manage their finances more effectively (Anisyah et al., 2021). With strong financial literacy, SMEs owners can make better decisions regarding investment, financing and business strategy. SMEs can evaluate risks and opportunities more carefully (Hafifah, 2019; Syamsul et al., 2023).

Remund, (2010) states that financial literacy is a measurement of the ability to understand financial design. Financial literacy also includes awareness and knowledge of financial instruments and applying them in business and everyday life (Anisyah et al., 2021). SMEs owners who have good financial knowledge or experience can influence financial behavior. Therefore, it is very important to increase the financial experience of SME owners (Purwidianti & Tubastuvi, 2019). Strengthened by Akbar & Erdawati, (2023) SMEs requires not only knowledge but also certain criteria for obtaining credit, such as easy access, which must be considered alongside financial institutions' stringent regulations. Therefore, it is crucial to enhance the financial literacy of SMEs. SMEs' financial literacy is considered very important, especially in the modern era like now where SMEs' activities tend to use technology. So it becomes a habit when carrying out daily activities using technology. Financial technology provides convenience that SMEs can use to run their business. Through the use of smartphones, SMEs can easily use financial technology to meet consumer needs, including ease of recording, ease of transaction processing and increased sales. (Irma Muzdalifa, Inayah Aulia Rahma, 2018).

The role of financial technology is not only limited to venture capital financing but also extends to various aspects such as digital payment services and financial regulators. Pakpahan et al., (2020) state that financial technology has attracted a lot of public attention because this service provides various service features from banking and insurance. One aspect of increasing financial inclusion is through the role of financial technology (Irma Muzdalifa, Inayah Aulia Rahma, 2018). Financial services through financial technology can include payments, investments, borrowing money, transfers, financial planning and comparison of financial products (Harahap, 2022).

Small and medium-sized enterprises (SMEs) in Ternate City face challenges in accessing loans for business capital and costs. Fulfilling the requirements set by banks involves lengthy procedures, terms, and guarantees that are often difficult for SMEs to meet. Consequently, SMEs experience difficulties obtaining loans.
Several previous studies have differing opinions regarding the effects of financial literacy and financial technology on financial inclusion. (Bakhtiar et al., 2022; Lastari et al., 2023; Rahmadanti et al., 2023) suggest that financial technology has a substantial impact on financial inclusion by facilitating access to financial products for business actors. However, this is different from research by (A. N. Sari & Kautsar, (2020) arguing that financial technology does not have a significant effect on financial inclusion because people do not actively use financial technology but use it to access other products and services that do not encourage financial inclusion. Research by (Y. K. Dewi, 2021; Prakoso, 2020; K. H. Y. Sari & Devi, 2023; Syamsul et al., 2023) has revealed a positive relationship between financial literacy and financial inclusion. However, Natalia et al., (2020) have suggested that financial literacy might not influence financial inclusion since literacy alone does not guarantee access to financial services and products. The purpose of this study is to examine the impact of financial literacy and financial technology on the promotion of financial inclusion among SMEs in Ternate City. Previous studies have highlighted shortcomings and gaps in this area.

THEORETICAL FRAMEWORK

Theory of Planned Behavior

Theory of Planned Behavior is defined as a theory that somebody in behave Certain based on a belief on information that has obtained (Ajzen, 1991). In theory of planned behavior, someone who has opportunities and resources power required for do behavior, then will succeed do it, where achievement behavior depends on motivation (intention) and ability (control), behavior of a person (Ajzen, 1991; Ajzen & Fishbein, 1970). Intentions and behavior individual are not only influenced by attitude subjective but also by ease and difficulty as well as various type faced different reasons someone (Haryanto & Wulandari, 2022). This in line with Theory of Planned Behavior according to Ajzen, (1991) shows that there is a number of background considerations something behavior someone, that is factor personal, social, and informational. In theory in this case, the relevant information factor for explain variable literacy finance and financial technology (Haryanto & Wulandari, 2022).

In the Theory of Planned Behavior, financial literacy and financial technology can be thought of as factors that influence a person's attitudes, so that the theory of planned behavior is often referred to as the basic theory of behavior which is the reference in this research. In the Theory of Planned Behavior (TPB) a person has the opportunity and the resources used to behave depends on the person's motivation or intention and ability (behavior control). Meanwhile, according to Ajzen & Fishbein, (2021) in the Theory of Planned Behavior, it shows that there are a number of
considerations behind a person's behavior, these factors are personality, social and information. Ajzen & Fishbein, (2021) in Theory of Planned Behavior, shows that there are a number of considerations behind a person's behavior, these factors are personality, social and information.

Theory of Planned Behavior according to Ajzen, (1991) individuals behave in certain ways based on beliefs/on the information they have received. If a person has the resources and opportunities needed to carry out a behavior, then that individual will be successful, whereas whether he or she is successful or not depends on the motivation (intention) and his ability or his control over his behavior. Ajzen, (1991) states that a person's actions in life are based on several factors, one of these factors is the information factor, financial literacy. When someone has a high level of literacy, it means that someone knows various kinds of knowledge about finance, such as interest, inflation, fraud, and so on which are related to risks in financial matters, apart from that they also know other things that are felt to be useful for financial matters, such as saving more in a bank vault compared to saving at home. So that someone can use financial literacy to make decisions in choosing available financial products or services.

Financial inclusion of SMEs

The World Bank defines financial inclusion as making it easier for individuals to have access to financial products that are useful and affordable, and can be relied upon to meet their needs in a responsible manner. According to Hilmawati & Kusumaningtias, (2021) financial inclusion is a series of definite processes to provide adequate financial and credit services at affordable costs. Financial inclusion is a complete agenda useful for eliminating all existing obstacles, both price and non-price, to channel people into using or utilizing financial services. Financial inclusion is necessary for SMEs to have ease in all business processes, including obtaining capital.

OJK, (2022) defines financial inclusion as the access that every individual has to complete financial services and channels from organizations in a timely, safe, and informative manner, achieved at a reasonable cost, while being fully recognized for their dignity and worth. Financial inclusion provides appropriate access to finances, encompassing debt, insurance, savings, and payments. Quality access is also highlighted with levels of security, affordability, suitability, and prioritization of consumer protection, with an equal availability for every individual. This inclusive approach has proven to increase the ability of small and medium-sized enterprises (SMEs) to utilize financial services. In line with Shafâ, Faradhila Azhari dan Komaladewi, (2020) that financial inclusion helps SMEs who experience declining sales and difficulties in capital. Several solutions and steps that can be taken to overcome this problem involve various parties, including the government, financial institutions and MSMEs themselves.
Financial Literacy of SMEs

The concept of financial literacy includes knowledge of financial concepts, skills in understanding and communicating financial concepts, the ability to manage personal/company finances and the ability to make financial decisions in certain situations. Financial literacy is crucial for SMEs to enhance their financial management attained through sales. (Pramestiningrum & Iramani, 2019). Financial literacy empowers SMEs owners to manage their own businesses without depending on other parties. They can make more autonomous decisions and manage their business finances more efficiently.

SMEs' financial literacy is expected to generate abilities related to the ability to differentiate financial choices, the ability to discuss financial problems, to make future financial plans (Sihwahjoeni et al., 2021), as well as to respond to all possible uncertainties. Financial literacy aids SMEs in effectively managing risks. By having a comprehensive awareness of their financial state, they can anticipate and promptly resolve financial obstacles before they escalate into critical issues.

Financial Technology

Various contemporary developments are emerging in the financial sector of numerous existing financial institutions. This growth is gradually transforming the financial sector into the digital realm, with the aim of facilitating economic development in a more organized direction. This blend of finance and technology is commonly referred to as fintech (Octaviani Salsabella & Handri, 2022).

The development of payment types of financial technology is growing rapidly in Indonesia, both those issued by financial institutions such as UnikQu, Ecash and by financial technology start-up companies such as GoPay and OVO (McClain & Zimmerman, 2016). National Digital Research Center (NDRC), in 2017, explain that financial technology refers to innovation in the field of services or innovation in financial products that are given a touch of modern technology. Financial Technology refers to new solutions that demonstrate innovation in the development of applications, products or business models in the financial services industry that use technology (Chuen & Low, 2018).

Financial technology is information technology innovation in the field of financial services (Wiyono & Kirana, 2020). Financial technology (fintech) has been touted for its ability to promote the digital economy by expanding financial access to all members of society through service and product innovations. Through its mobile and efficient character, financial technology is expected to be able to have a strong impact on the financial services industry in providing financial services through digitalization (Yahya & Rahayu, 2020).
Development Hypothesis

The Influence of Financial Literacy on Financial Inclusion

Financial literacy influences a person's way of thinking in dealing with finances and influences strategic decision making in matters of finance and management. The ability to manage a business owner's finances is very necessary for business performance and business continuity. It is important for business owners to understand financial knowledge so that their company's performance will improve. This allows SMEs to experience business growth by utilizing existing financial products (Kasendah & Wijayangka, 2019).

An individual's level of financial literacy impacts their ability to manage their personal finances. The theory of financial systems and institutions asserts that efficient allocation of financial resources by individuals is crucial for enhancing financial stability at both the micro and macro levels. Therefore, it emphasizes the significance of empowering individuals to make informed financial decisions (K. H. Y. Sari & Devi, 2023).

Financial literacy for SMEs can make it easier to manage finances. Because, the financial information held by SMEs plays an important role as a reference for making decisions in planning which is a factor in financial behavior (K. H. Y. Sari & Devi, 2023). This is in line with the theory of planned behavior which states that good financial literacy provides adequate information so that the choice of financial products is also in accordance with needs (A. L. Dewi & Setiyono, 2022). Because, according to Ajzen, (1991) theory of Planned Behavior postulates that an individual's behavior is influenced by their beliefs about the information they have.

The research findings of several scholars including (Akbar & Erdawati, 2023; A. L. Dewi & Setiyono, 2022; Purwidianti & Tubastuvi, 2019; K. H. Y. Sari & Devi, 2023), suggest that a good understanding is conducive to accessing financial services and products. The reasons behind this assertion can be used to conclude that there is a positive and significant effect of financial literacy on financial inclusion. Research findings by (Y. K. Dewi, 2021; Prakoso, 2020; K. H. Y. Sari & Devi, 2023; Syamsul et al., 2023) demonstrate that the financial literacy of small and medium-sized enterprises (SMEs) has a favorable impact on enhancing financial inclusion.

H1: Financial literacy positively affects the financial inclusion of SMEs.

The Influence of Financial Technology on Financial Inclusion

The development of increasingly advanced financial technology facilitates access for SMEs in optimizing funding sources and conducting business transactions using financial technology. Financial technology is able to become a new instrument to trigger financial development and help realize financial inclusion quickly (Puspita Sari & Imronudin, 2022). Financial technology is an innovative service in the financial sector that uses or utilizes the role of technology (Octaviani
The influence of financial technology on financial inclusion is based on the theory of planned behavior. According to Ajzen (1991) individuals behave in certain ways based on their beliefs/on the information they have received in doing something. The role of financial technology makes it easier for someone who has resources such as MSMEs to obtain financial products from bank financial institutions and non-bank financial institutions.

The theory of planned behavior according to Ajzen et al., (2011) states that the ability to utilize the role of financial technology can make it easier to access available financial products and obtain financial services such as insurance, savings and loans for capital use and the availability of quality access, including the level of security priority and consumer protection. Studies from (Kusuma & Asmoro, 2021; Octaviani Salsabella & Handri, 2022; Puspita Sari & Imronudin, 2022; Yahya & Rahayu, 2020) state that financial technology has a positive and significant effect on financial inclusion. So the existence of financial technology makes it easier for people to access available finance through digitalization.

H2: Financial technology positively affects financial inclusion for SMEs.

METHODS

This research was a quantitative research. The data sources in this research used primary and secondary data. Primary data was obtained from questionnaires and interviews, while secondary data was obtained from a number of journals, books, data from the location where this research was conducted in Ternate City. This research was conducted from April to July 2023. The population was all 108 SMEs in the industrial sector, especially the food industry in Ternate City. The sampling technique in this research used purposive sampling. According to Sugiono, (2017) purposive sampling is a technique for determining samples with certain considerations. The number of samples taken was 50 samples which the sample selection was based on several criteria that suit the needs of this research, by using financial technology in their business activities. They were SMEs who have capital of around 50 million and above, in this case they were classified as small business actors. This research used multiple linear regression analysis to partially determine
the influence of financial literacy and financial technology on financial inclusion. The regression model was developed to test the hypothesis formulated in this research.

RESEARCH RESULTS AND DISCUSSION
Validity and Reliability Test Results

The validity test was carried out and the reliability was tested with SPSS for Windows release 25.0 program. Testing validity used for measuring validity grain question statement questionnaire is Correlation Product Moment from Karl Pearson (validation/ content validity) with method correlate each question-statement item questionnaire and the total, next compare r table with r count. The instrument is considered valid if r is calculated from every grain questions on each variable > 0.05. For interpret level validity, coefficient correlation is categorized as following:

Table 1. Validity and Reliability Test

<table>
<thead>
<tr>
<th>Variable</th>
<th>Indicator</th>
<th>r value</th>
<th>Description</th>
<th>Cronbach’s Alpha</th>
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<tbody>
<tr>
<td>Financial Literacy</td>
<td>X1.1</td>
<td>0.724</td>
<td>Valid</td>
<td>0.633</td>
</tr>
<tr>
<td></td>
<td>X1.2</td>
<td>0.798</td>
<td>Valid</td>
<td></td>
</tr>
<tr>
<td></td>
<td>X1.3</td>
<td>0.800</td>
<td>Valid</td>
<td></td>
</tr>
<tr>
<td>Financial Technology</td>
<td>X2.1</td>
<td>0.810</td>
<td>Valid</td>
<td>0.632</td>
</tr>
<tr>
<td></td>
<td>X2.2</td>
<td>0.749</td>
<td>Valid</td>
<td></td>
</tr>
<tr>
<td></td>
<td>X2.3</td>
<td>0.718</td>
<td>Valid</td>
<td></td>
</tr>
<tr>
<td>Financial Inclusion</td>
<td>Y. 1</td>
<td>0.768</td>
<td>Valid</td>
<td>0.657</td>
</tr>
<tr>
<td></td>
<td>Y.2</td>
<td>0.756</td>
<td>Valid</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Y.3</td>
<td>0.752</td>
<td>Valid</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Y.4</td>
<td>0.559</td>
<td>Valid</td>
<td></td>
</tr>
</tbody>
</table>

Source: primary data processed, 2023.

Results of validity test analysis presented in table 1 show variable financial literacy, financial technology, and financial inclusion level of validity significance of 5%. Each statement is greater than 0.05 with r table value of 0.2353. It means each question is correlated with scores total and all declared valid.

Testing Cronbach Alpha was applied to test the reliability of each questionnaire variable. If the value of Cronbach Alpha is getting close to 1, it means that the more also high internal consistency reliability. Kindly concise reliability test results shown in table 1. Reliability test results show that all mark coefficient reliability (r) is greater than 0.6, so all question items are declared reliable. In accordance with opinion Gozali (2018), it reveals that statement stated reliable (reliable)
If the value of Cronbach Alpha is greater than 0.6. So it is concluded that the whole statement in questionnaire is reliable.

**Multiple Linear Regression Test Results**

Multiple linear regression models is applied to investigate the influence variable independent to dependent. This study used method analysis of multiple linear regression with SPSS 25. The calculation results multiple linear regression can be seen in the following table:

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>t</th>
<th>Sig</th>
</tr>
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<tbody>
<tr>
<td>Constant</td>
<td>4,079</td>
<td>2,180</td>
<td>0.034</td>
</tr>
<tr>
<td>Literacy Finance</td>
<td>0.520</td>
<td>3,451</td>
<td>0.001</td>
</tr>
<tr>
<td>Financial Technology</td>
<td>0.494</td>
<td>3,309</td>
<td>0.002</td>
</tr>
</tbody>
</table>

Source: primary data processed by SPSS, 2023

Based on table above, it can be formulated equality multiple linear regression as follows:

\[ Y = 4.079 + 0.520X_1 + 0.494X_2 + e \]

Constant value of 4,079 states that variable independent Financial Literacy (X1), financial technology (X2), the same with zero so variable dependent of financial inclusion (Y) is 4,079 units.

Indigo Coefficient of \( \beta_1 = 0.520X_1 \) shows that there is a positive influence of financial literacy (X1) on financial inclusion (Y) of 0.0520.

Coefficient Value of \( \beta_2 = 0.494X_2 \) shows that there a positive influence of financial technology (X2) on financial inclusion (Y) of 0.494.

**Hypothesis Testing**

**Significant Test Results (Statistical Test t)**

In this study, a hypothesis testing used Multiple Linear Regression that was tested in a manner empirical to investigate the connection of Financial Literacy (X1) and financial technology (X2), the same with zero of financial inclusion (Y). Based on Table 4.8, it is concluded that hypothesis testing in a manner Partial of each variable independent to variable dependent is as follows:

On the regression output, the number of significance for Financial Literacy (X1) is 0.001. This value is lower than level significance of 0.05 so it can be concluded that H1 is accepted because it is supported by data and appropriate research.
On the regression output, the number of significance for financial technology (X2) is 0.002. This value is lower than level significance of 0.05 so it can be concluded that H2 is accepted because supported by data and appropriate research. For further research, you can look at returns or develop return questions so that they can influence the level of significance.

DISCUSSION

Based on results of hypothesis testing by using SPSS version 25, this can be depicted as follows:

The Influence of Financial Literacy on Financial Inclusion

Based on testing the first hypothesis, the results show that there is an influence between financial knowledge and family financial management. The theory used is the Theory of Planned Behavior (TPB) which explains an action that a person is asked to carry out with intention and the behavior in a motivating way that can influence a person’s behavior to make decisions based on careful consideration of the available knowledge or information (Ajzen, 1991).

Financial literacy consists of a number of abilities and knowledge about someone finances to manage or use some money for increase level his life. SMEs need knowledge finance for get welfare from field business to be carried out at a later time came (Sihwahjoeni et al., 2021). Adapted from OECD INFE, (2012), owner or literate MSME managers financial is defined as someone recognizing the decision the most suitable financing for performance business in various stage growth business, as well know where to get inclusion appropriate finance (Remund, 2010). A study by Octaviani Salsabella & Handri, (2022) reveal that financial literacy affects positively to financial inclusion.

The Influence of Financial Technology on Financial Inclusion

According to OJK, (2022), the advantage of financial technology is that it serves Indonesian people who have not been able to be served by the traditional financial industry due to strict banking regulations and the limited existence of the traditional banking industry in serving certain local communities and being a funding alternative to the traditional financial services industry. Public needs alternative financing that is more democratic and transparent. Meanwhile, the weakness is that financial technology does not have permission to transfer funds and is less established in running its business with large capital compared to banking. There are several financial technology companies that do not have physical offices, and lack experience in operating procedures related to system security and product integrity.

Financial technology provides various financial services and financial products that are efficient and effective so that it will stimulate someone to own or access the products and services.
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contained in it. Quoted from the OJK website, that financial inclusion is the availability of appropriate financial institutions, products or services. with the needs and abilities of the community towards a level of prosperity (OJK, 2022). The existence of financial technology can bridge financial access for society.

Research conducted by (Irma Muzdalifa, Inayah Aulia Rahma, 2018; Kusuma & Asmoro, 2021; Octaviani Salsabella & Handri, 2022; Yahya & Rahayu, 2020) reveal significant positive results. This shows that the existence of financial technology provides convenience for all levels of society to use financial inclusion.

CONCLUSIONS AND RECOMMENDATIONS

The research findings demonstrate a significant correlation between financial literacy and financial inclusion for small and medium-sized enterprises (SMEs) in Ternate City, along with a corresponding impact of financial technology on SMEs’ financial inclusion.

Future researchers should refine or reassess each item of the questionnaire statement that reflects each variable to ensure appropriateness for the research. They are expected to expand the research population and sample size to enhance understanding of financial inclusion for SMEs. In similar studies that employ the same research, researchers recommend increasing the number of variables or replacing those that are more intriguing. Micro, small, and medium-sized business owners should continuously enhance their financial knowledge to manage their finances effectively, which can lead to greater prosperity. The guidance and education provided by university faculty is vital in enhancing learning and cultivating awareness among these business owners.

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