

The Effect of Financial Literacy, Financial Technology and Income on Small and Medium Enterprise Financial Behavior

Nisa Ulkhair¹, Eka Siskawati*², Mohammad Nabil Almunawar³, Shalu Kumari⁴, Desi Handayani⁵

^{1,2,5} *Department of Accounting, Politeknik Negeri Padang, Padang, Indonesia*

³ *School of Business and Economics, Universiti Brunei Darussalam, Bandar Seri Begawan, Brunei Darussalam*

⁴ *Department of Economics, Patna University, Patna, India*

**Corresponding author: Eka Siskawati*

Corresponding email: eka_siskawati@pnp.ac.id

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ABSTRACT

Effective organizational financial decision-making relates to management's financial literacy level. Small and Medium Enterprise (SME), which is generally a family company, has a relatively low level of financial literacy. Meanwhile, the development of financial technology makes it easier for SME to access financial services digitally. This study aims to determine the effect of financial literacy, financial technology and income on SME financial behaviour. This study used a quantitative approach. The data collection method is carried out through the distribution of questionnaires to respondents. The population in this study is SE located in the Payakumbuh City area, with 115 SME samples. Samples are obtained using probability sampling methods and simple random sampling techniques. The results of this study showed that financial literacy variables had a significant effect on financial behaviour, while financial technology and income variables had no influence on financial behaviour. The study also shows that financial literacy, financial technology and income together significantly influence financial behaviour.

Keywords:

Financial decision, financial literacy, financial technology, Small and Medium Enterprises

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1. Introduction

Small and Medium Enterprise (SME) is a productive economic business in the informal sector run by individuals, groups, or households with the aim of earning profits. SME contributes significantly to economic growth around the globe (Bekzhanova et al., 2023; Kot, 2018; Lin et al., 2023). In Indonesia, the SME sector is dominating (99.9%) the business sector compared to the corporate sector which only amounts to 0.01%. SME is a sector that is resistant crises (Haneberg, 2021; J. S. Kim & Kim, 2022). During the global economic crisis of 1998 and 2008, the number of SMEs did not decrease. In addition, SME also creates the most jobs in Indonesia (Bressan et al., 2023).

Despite being a highly dependable sector, SME is vulnerable to external changes (Sudjatmoko et al., 2023). The SME sector has limited financial resources for business development and operation processes (Hu et al., 2022; Lin et al., 2020). Poor financial management capabilities also accompany financial limitations, affecting inefficient financial decision-making (Wu et al., 2020; Zhang et al., 2023). Financial literacy is a concept developed to explain individuals' abilities and skills in financial decision-making. Financial literacy is important for SME actors in making effective financial decisions.

Meanwhile, technological developments have entered all sectors including the financial sector (Gao, 2022; Muthukumaran & Hariharanath, 2023). The financial technology concept, which is the use of information technology in the financial sector, aims to provide ease of financial services to users (Radicic & Petković, 2023). In terms of limited financial resources, SME utilize financial technology to get business funding more quickly and easily. In addition, financial technology can help SME in completing business transaction processes more quickly and efficiently (Matarazzo et al., 2021; Skare et al., 2023). Therefore, SME must adapt to changes and technological developments in the external environment very quickly.

Economic growth of Payakumbuh city is driven by Small Medium Enterprise (SME) sector. Data from the Cooperative Office of West Sumatra Province states that the SE sector in Payakumbuh city has a fairly large number of 97%. This dominant amount of SE implies a favorable SE business climate, thus indicating an increase in the income of SE sector.

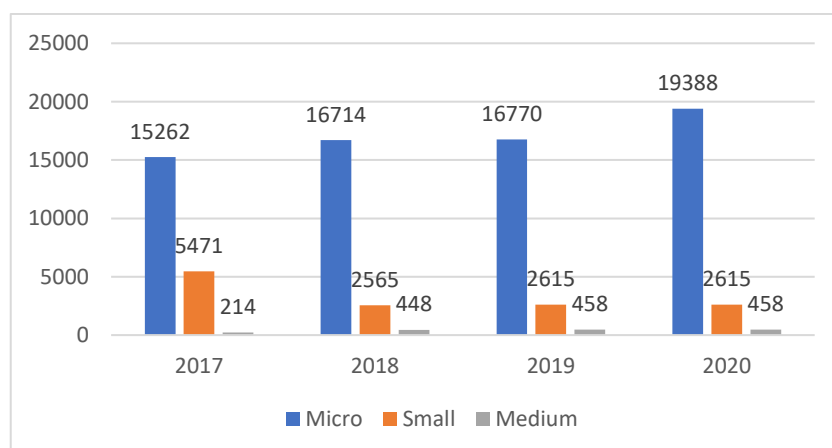


Figure 1. Growth of SME in Payakumbuh City
Source: Dinas Koperasi dan UMKM Kota Payakumbuh (2022)

However, limited resources and knowledge make SME relatively difficult to adapt to technological developments in its financial management (Dabić et al., 2019). Previous research also explained that SME still has low knowledge and management skills. Research of Sofit et al. (2021) found that 60% of SMEs in Payakumbuh City do not have adequate knowledge and skills in terms of financial management. One of the indicators found is the absence of separation of household assets from business assets. In addition, unclear business bookkeeping practices are also an indicator of low financial literacy in Payakumbuh City.

Theory Of Planned Behavior

The theory of planned behavior (TPB) provides a framework for how a person behaves towards his behavior affected by personal intentions (Yang & Kim, 2023). The underlying intentions of that behavior determine the apparent behaviour of a person. Intention will show how much a person wants to do something or behavior (Angelakis et al., 2023). In addition to intention, convenience

and subjective norms are also the cause of the creation of a behaviour (Bananuka et al., 2019; Bouarar & Mouloudj, 2021; Lou et al., 2022; Raza et al., 2019). Based on the theory of planned behaviour, the main determinants of a person's intentions and behaviour can be understood in terms of behavioural, normative and belief control (Nekmahmud et al., 2022; Saleh, 2021).

Financial Literacy

Financial literacy is the ability of individuals to manage financial problems to improve their standard of life to achieve prosperity (Madeira, 2023). Financial literacy skills enable individuals to make informed and effective financial decisions (H. H. Kim et al., 2021; West & Butler, 2023). Financial literasi seorang CEO merupakan suatu keunggulan kompetitif dari SME (Duréndez et al., 2023).

Financial Technology

Financial Technology is the use of technology in the financial system which in this case can produce new products, services, technology, or business models that greatly impact monetary stability, financial system stability or efficiency, smoothness, security, and reliability of the payment system. Financial technology has also made accessing microcredit easier through digital platforms (Tetteh, 2023). Ease of access to financial services for the community can improve the level of welfare (Sakyi-Nyarko et al., 2022).

Income

Income is one of the factors for a person in carrying out an action or behaviour. Income can be interpreted as income received by individuals within a certain period. In the theory of planned behaviour (TPB), income is included in subjective norms and normative beliefs, which are income.

The higher the business actors' knowledge and financial literacy, the better their financial behaviour. Furthermore, the better the financial management and income of the entrepreneur. Through good financial literacy, business actors can improve their welfare because they can manage financial matters wisely. In addition to financial literacy skills, financial technology such as non-cash payment acceptance systems such as M-banking or transfers, can affect the income that business actors will receive. The ease of services such as funding, spending and payments will increase the income of business actors. The research framework is shown in the figure. 2.

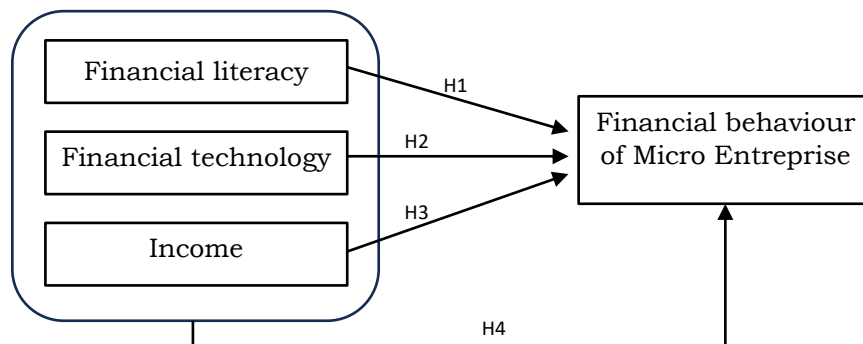


Figure 2. Research Framework

Research on the effect of financial literacy, financial technology and income on SME's financial behaviour in Payakumbuh City is still limited. Based on the previously described phenomena, this study aims to examine how the influence of financial literacy, financial technology, and income influence SE's financial behavior in Payakumbuh City. In detail, the study tested the following hypotheses:

H₁: Financial literacy affects the financial behaviour of Small and Medium Enterprise

H₂: Financial technology affects the financial behaviour of Small and Medium Enterprise

H₃: Income affects the financial management behaviour of Small and Medium Enterprise

H₄: Financial literacy, financial technology, and income affect the financial behavior of Micro Enterprise.

2. Methods

This study used a quantitative approach. The type of data in this study is quantitative data, where the data presented is in the form of a numerical scale. In this study, the measurement scale used is in the form of an ordinal scale, where on this ordinal scale, variables are not only categorized in the form of groups but also ranked against categories. The sampling technique used was probability sampling with a simple random sampling technique. The total overall sample of this study amounted to 115 respondents. Determination of the number of samples using the Slovin formula. The data used are primary data collected by distributing questionnaires directly to respondents. The results of the questionnaire were measured using the Likert scale. Likert scale is used to measure a person's attitudes, opinions, and perceptions about social phenomena, which are determined specifically by researchers and then arranged into instruments that can be statements or questions. Likert scale is an ordinal where each question has 4 (four) alternative answers. In this study, researchers did not provide a neutral answer (middle answer), because the neutral option can show respondents' reluctance to choose the direction of the response to a statement given by respondents. On the Likert scale this starts from the number 1 to strongly disagree (STS) up to 4 to strongly agree (SS) with details are as follows; number 1 = strongly disagree (STS); number 2 = disagree (TS); number 3 = agree (S); number 4 = strongly agree (SS). Data analysis using multiple linear regression analysis with the help of IBM SPSS program version 25.

2.1. Variable Definition

Independent variable (X)

Independent variables are variables that affect dependent variables. The independent variables used in this study are financial literacy (x₁), financial technology (x₂), and income (x₃).

a) Financial Literacy (X₁)

Financial literacy is a person's ability to manage his personal finances, or personal understanding of savings, insurance, and investment so that the individual has financial well-being and a more prosperous life in the future. Good financial literacy can facilitate the process of implementing financial inclusion in low-income communities (Kumari, 2022). Indicators used to measure financial literacy variables are basic knowledge of finance, savings and credit, investment ownership, and insurance ownership.

Basic knowledge of finance is a person's knowledge about finance, whether it is good for himself, his family, or business. They have good basic financial knowledge and tend to have wise financial behaviour, such as separating personal property from the company. *Savings and credit*: savings are a portion of a person's income that is not for consumption but is set aside for future needs, while credit is a debt given by creditors to someone with a certain grace period. *Investment ownership* is investing some money somewhere else and expecting the money to increase and provide future benefits. *Insurance ownership* is a form of risk control that business actors can do to provide safety for the business as early as possible.

b) Financial Technology (X₂)

Financial technology is an adaptation of technology to the financial sector to present financial transaction innovations that are more effective, efficient, modern and safe. Indicators used to measure financial literacy are personal mobility, perceived usability, ease of use, service credibility, social influence, attention to privacy, and self-efficacy.

Personal mobility is about how respondents can easily move from one system to another. Perceived usability is the respondent's subjective view of a particular system, system or service, technology used to improve that individual's performance and job performance. Ease of use ease felt by respondents when utilizing new technology in finance. Service credibility is a service technology that creates user confidence in the financial technology used. Social influence is the influence of the environment on respondents in utilizing financial technology. Attention to privacy is a user's view of the ability of financial technology to maintain the confidentiality of individual data. Self-efficacy is the user's confidence in his ability, namely organizing, performing a task, producing something new through financial technology.

c) Income (X3)

Revenue is the amount of money the business owner receives from the business processes. Business owner should be able to manage revenues obtained from operating income well. Indicators used to measure income are sources of income and income management.

Dependent variable (Y)

A dependent variable is a variable that is affected by an independent variable. The dependent variable in this study is micro enterprise financial behavior in Payakumbuh City. Financial behaviour is an individual's actions in managing finances to achieve financial success. Financial behaviour is also a form of individual responsibility for using money. Indicators used to measure financial behaviour variables are on time paying bills, preparing a business budget, having savings.

3. Results

Table 1 exhibits descriptive statistics of the data. Table 1 shows that the standard deviation is below the mean (small from the mean). This indicates that the distribution of data is good.

Table 1. Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Financial Literacy	100	18.00	32.00	26.2400	3.36086
Financial Technology	100	14.00	56.00	32.5500	10.85010
Income	100	4.00	16.00	11.6900	2.42751
Financial Behaviour	100	13.00	24.00	20.3500	2.83333
Valid N (listwise)	100				

Hypothesis testing

3.1. Multiple Linear Regression Analysis

Multiple linear regression analysis aims to determine the value of the influence of the independent variable on the dependent variable. Table 2. Shows the results of multiple analysis.

Table 2. Multiple Linear Regression Analysis

Coefficients ^a						
	Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	11.988	2.283		5.250	.000
	Financial Literacy	.234	.088	.278	2.651	.009
	Financial Technology	-.016	.028	-.060	-.554	.581
	Income	.233	.120	.200	1.941	.055

a. Dependent Variable: Financial Behaviour

Based on the regression equation in table 2, multiple linear equations can be written as:

$$Y = 11.988 + 0.234 X_1 + (-0.016) X_2 + 0.233 X_3 + e \text{ ----- (1)}$$

Equation 1. above shows that: (1) The constant value (a) of 11,988 is a state when financial behavior variables have not been influenced by other variables, namely financial literacy, financial technology and income; (2) The regression coefficient of financial literacy is 0.234, meaning that for every 1% increase in financial literacy, financial behaviour increases by 0.234; (3) The financial technology regression coefficient of -0.016, means that every 1% increase in Fintech will reduce financial behaviour by -0.016; (4) The income regression coefficient of 0.233 means that for every 1% increase in income, financial behavior increases by 0.233.

3.2. Coefficient of Determination Test (R²)

The coefficient of determination test aims to measure the value of the contribution of influence given by the independent variable to the dependent variable.

Tabel 3. Hasil Uji Koefisien Determinasi (R²)

Model Summary ^b				
Model	R	R Square	Adjusted Square	Std. Error of the Estimate
1	.357 ^a	.127	.100	2.68787
a. Predictors: (Constant), Income, Financial Literacy, Financial Technology				
b. Dependent Variable: Financial Behaviour				

The coefficient of determination test in table 3 above shows that the Adjusted R Square value is 0.100. This value indicates that the independent variable's ability to explain the dependent variable's condition is 10%. The remaining 90% is another variable not included in this research model.

3.3. Partial Regression Test (t-test)

Partial regression test (t-test) aims to partially test the regression coefficient of financial literacy, financial technology, and income variables on financial behavior variables. The t-test is shown in table 4:

Table 4 Statistical t-test

Variable	t-table	t-value	Sig.	Hypothesis
Financial Literacy	1.984	2.651	0.009	Accepted
Financial Technology	1.984	-554	0.581	Rejected
Income	1.984	1.941	0.055	Rejected

4. Discussion

a) Does Financial literacy affect the financial behavior of Small and Medium Enterprise (ME)

The results of the partial regression test show that financial literacy has a significant effect on financial behaviour (significance level of 0.009 < 0.05 and t value of 2.651 > t table 1.984). Thus, it is concluded that H1 is accepted. This means that SME actors in Payakumbuh City have managed their finances well by saving and investing to achieve welfare goals. Consistent with the theory of planned behavior (TPB) that financial literacy is included in control beliefs, where financial behavior is influenced by knowledge. The majority of respondents choose strongly agree to respondents' responses regarding positive financial literacy from the statement X1.1 that "I am aware that doing good financial planning will improve my financial well-being" the majority of respondents answered in the affirmative of the statement. Most respondents strongly agree with the statement X1.3 "I

always set aside a portion of income to save every month". From the results of the questionnaire, it shows that SME in Payakumbuh City already have good financial literacy. Financial literacy develops through the social network of the Payakumbuh community (Yan et al., 2022). It can be concluded that the higher a person's financial literacy, the better the person's financial behaviour, and vice versa (Nave et al., 2023). Greater financial literacy is also related to equity ownership, including business ownership (Bazley et al., 2021). Greater financial behaviour is a provision for running a business such as planning business goals (Cupák et al., 2021; Meyll & Pauls, 2019).

b) Does financial technology affect the financial behaviour of Small and Medium Enterprise (SME)

The results of this study show that financial technology has no partial effect on financial behavior (significance $0.581 > 0.05$ and t value $-554 < t$ table 1.984). Then it can be concluded that H2 is rejected. These results indicate that financial technology does not affect ME's financial behavior. Consistent with the theory of planned behaviour (TPB) that background attitudes towards behaviour influence a person's behavior, that is, a person's assessment of certain behaviors based on evaluations that individuals have owned (Werth et al., 2023). Individual assessment can be included in the category of behavioral beliefs, which in this study is Fintech. In this study, Fintech does not influence financial behavior due to several factors such as environmental conditions, middle to lower social status, and understanding of SME in using Fintech that has not been maximized. This is supported by data showing that most respondents are dominated by individuals over 37 years old (48% of respondents have a high school education). This supports the result that SME actors in Payakumbuh City still have minimal knowledge in terms of the benefits in using financial technology (Ain et al., 2019; Demir et al., 2022).

c) Does income affect the financial management behaviour of Small and Medium Enterprise (ME)

The results of this study showed that income did not affect ME financial behaviour (significance $0.055 > 0.05$, and t value $1.941 < t$ table 1.984). Then it can be concluded that H3 is rejected that income does not affect ME's financial behavior. According to the theory of planned behaviour (TPB), social background (normative beliefs) can motivate an individual for a particular behaviour. Income management using Fintech, such as making financial statements using electronic systems, can be diffused easily in environments that also carry out financial management with electronic systems. Environmental (normative) behavior can provide an encouragement for individuals to do the same. But in this study, the ME group with revenues of < 2 billion did not influence ME's financial behavior,

5. Conclusion

This study found that: (1) Financial literacy positively affected SME financial behavior in Payakumbuh City. This suggests that a person's high literacy level can affect his financial behavior. (2) Financial Technology has proven not to affect SME's financial behaviour in Payakumbuh City. The higher or lower one's financial technology capabilities will not affect SME's financial behavior. (3) Income does not affect SME's financial behavior in Payakumbuh City. This means that the size of a person's income does not affect his financial behaviour. (4) Financial literacy, financial technology and income simultaneously positively affect ME's financial behavior in Payakumbuh City.

This research has implications in several ways, ME actors understand that the income obtained is not spent on consumption alone, but can be processed to have more income through investment. This research also contributes knowledge about the importance of adapting to technology in the digital era, knowing the function of Fintech, and the benefits of Fintech to speed up the transaction process. In addition, this research also contributes to understanding the importance of government programs related to increasing the financial literacy of the people of Payakumbuh City, including increasing awareness about the importance of financial knowledge and introduction of basic financial technology so that ME can survive in business competition.

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