

## **FINANCIAL INCLUSION AS A MEDIATING VARIABLE IN THE INFLUENCE OF FINANCIAL KNOWLEDGE, PERCEIVED RISK, AND SELF-EFFICACY ON CREDIT DECISION BEHAVIOR**

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### **ABSTRACT**

This study aims to analyze the influence of Financial Knowledge, Perceived Risk, and Self-Efficacy on Credit Decision Behavior with Financial Inclusion as a mediating variable. Conducted among MSMEs in Malang Regency, the research used a non-probability purposive sampling method involving 100 respondents. Primary data were collected and analyzed using the Partial Least Square (PLS) technique. The findings show that Financial Knowledge and Self-Efficacy positively affect Credit Decision Behavior, while Perceived Risk has no direct impact. Furthermore, Financial Inclusion does not mediate the relationship between Financial Knowledge and Credit Decision Behavior but does mediate the effects of Perceived Risk and Self-Efficacy on Credit Decision Behavior..

**Keywords: Financial Knowledge, Perceived Risk, Self Efficacy, Financial Inclusion, Credit Decision Behavior,**

### **INTRODUCTION**

As one of the largest contributors to Indonesia's economy, micro, small, and medium enterprises (MSMEs) play a crucial role in driving national growth and employment. With over 64.2 million business units, MSMEs contribute around 61.9% to the country's Gross Domestic Product (GDP) and absorb approximately 97% of the workforce. Despite this significant contribution, MSMEs continue to encounter persistent obstacles, particularly in obtaining adequate capital, facing intense market competition, and overcoming difficulties in securing raw materials. Limited access to financial resources often hampers their ability to expand, sustain operations, or even survive in competitive markets.

While Indonesia's level of financial inclusion has improved, the overall financial literacy of MSME entrepreneurs remains relatively low. Many business owners still lack the knowledge and confidence to effectively manage their finances or make informed credit decisions, which affects business continuity. In East Java, the distribution of MSME credit is heavily concentrated in several key areas—Surabaya, Sidoarjo, and Malang—where Malang Regency accounts for 5.28% of the total. This indicates that while some regions enjoy greater access to financial services, others still lag behind in obtaining the necessary financial support for business development.

Malang Regency itself holds a strategic position in promoting MSME growth. The local government, through the Department of Cooperatives and Micro Enterprises, continues to implement programs that focus on expanding access to funding, offering training for entrepreneurs, and improving market promotion for local products. In 2022, the number of MSMEs in Malang Regency reached 9,061, demonstrating their vital role in supporting regional and national economies. However, the sector still faces numerous internal and external challenges—including capital constraints, limited technology

adoption, and human resource capacity—that threaten business sustainability and hinder long-term economic contribution.

One of the most crucial factors in enhancing the productivity and sustainability of Micro, Small, and Medium Enterprises (MSMEs) is access to additional funding. MSMEs generally operate with limited capital, making it difficult for them to expand production capacity, improve product quality, or penetrate new markets without external financial support. Therefore, the ability of MSME owners to understand and utilize various financing opportunities becomes essential. One effective way to obtain additional capital is through credit facilities provided by banks or non-bank financial institutions. Access to credit enables MSMEs to increase business turnover, modernize equipment, and manage operational costs more efficiently. For small and medium entrepreneurs, credit is not merely financial assistance but a strategic instrument for business development and competitiveness in an increasingly dynamic market.

Data from *Malang Regency in Figures 2023* published by the Malang Regency Central Statistics Agency illustrates the dynamics of MSME credit distribution from 2018 to 2022. Table 1 shows that the total volume of MSME credit provided by commercial banks in Malang Regency consistently increased over this period, with micro enterprises dominating the distribution. In 2018, the total MSME credit reached IDR 3.53 trillion, which rose to IDR 5.45 trillion in 2022. This upward trend indicates that financial institutions increasingly recognize the potential of MSMEs as key drivers of the regional economy. The dominance of micro enterprises in credit absorption also reflects their significant role in creating employment and contributing to local economic growth, even though they generally have limited collateral or financial literacy compared to larger businesses.

However, the growth pattern of MSME credit in Malang Regency, particularly at the micro scale, shows noticeable fluctuations from year to year. As shown in Table 2, micro business credit experienced an 11% increase in 2019, but in 2020 the growth turned negative at -13%. This decline was largely due to the impact of the Covid-19 pandemic, which disrupted MSME operations, reduced demand, and limited the ability of entrepreneurs to meet credit obligations. The pandemic period marked a critical phase where many micro enterprises struggled to survive amidst liquidity constraints and market uncertainty. Nevertheless, in 2021, the situation improved significantly with a remarkable 56% growth in credit, showing strong recovery momentum supported by government stimulus programs and economic reactivation efforts. Yet, in 2022, the growth rate declined to 28%, suggesting that although recovery continued, it began to stabilize at a more moderate pace.

These fluctuations highlight the vulnerability of MSMEs to macroeconomic shocks, particularly those related to public health crises and financial instability. They also underscore the need for sustainable financial support systems that are adaptive to the needs of MSME players. For Malang Regency, where the MSME sector serves as an essential component of the local economy, strengthening access to financing must be accompanied by improved financial literacy, better risk management, and stronger collaboration between financial institutions and MSME development agencies. In the long term, the stability and growth of MSME credit can serve as an important indicator of regional economic resilience and the success of inclusive economic development policies. The financing or credit facilitation challenges faced by MSME actors in Malang Regency remain a significant obstacle to business sustainability. Many MSMEs struggle to survive in the face of intense competition due to their limited ability to

manage risks and adapt to market dynamics. Some MSMEs experience stagnation, being unable to expand or innovate, while others face fluctuating income levels that create uncertainty regarding their ability to meet monthly credit obligations. This condition reflects a broader issue of financial management among MSME owners and society in general. Effective financial management is a crucial foundation for maintaining stability in the midst of changing economic conditions. The uneven distribution of welfare further increases the number of middle-income groups who require additional funding sources or alternative financial solutions to support operational activities. Among various financial options available, taking credit—whether for working capital or personal needs—remains one of the most popular choices. However, before deciding to take credit, individuals must understand several fundamental aspects that influence their financial behavior, as these factors serve as the main basis for determining rational and responsible credit decisions.

Credit decisions made by individuals are not only influenced by internal company factors but also by personal, psychological, and financial aspects. One of the primary factors affecting credit decision behavior is financial knowledge. According to the Financial Services Authority (OJK, 2023), financial knowledge encompasses understanding, skills, and confidence that influence attitudes and behaviors in managing finances effectively to achieve financial well-being. Several studies have confirmed the significance of financial literacy in credit decision-making. Research by Aziz and Aryanti (2019) found that both financial knowledge and financial inclusion have a positive and significant effect on the credit usage decisions of new entrepreneurs in West Java. Similarly, a study by Puspasari, Hakim, and Kemalasari (2020) emphasized that financial knowledge significantly influences the credit decision-making process among corn farmers in Jotang District. However, not all research supports this conclusion. Puspita and Isnalita (2019) argued that financial knowledge does not necessarily affect an individual's financial management behavior, a finding also supported by Sari and Listiadi (2021), who concluded that effective financial management is not always determined by one's level of financial literacy.

Another factor influencing credit decision behavior is **perceived risk**. According to Jusuf (2018), perceived risk serves as a critical consideration during the decision-making process, particularly when it involves financial commitments such as credit. Perceived risk is subjective and may differ across individuals, depending on personal characteristics such as risk tolerance, income stability, financial obligations, and personal views on financial security. A person with higher risk tolerance may be more confident in taking credit, while someone who perceives higher risks may hesitate or avoid borrowing altogether. Empirical evidence also shows varied findings regarding the influence of perceived risk on financial decisions. Research by Irjayanti (2017) found that perceived risk significantly affects investment decisions, whereas financial knowledge, representativeness, and familiarity do not. In contrast, Apriliani (2017) reported that perceived risk has no significant impact on credit decision-making. These differing results indicate that perceived risk operates within a complex framework of personal, situational, and psychological factors that shape how individuals assess the potential benefits and drawbacks of taking credit.

Overall, these findings highlight that credit decision behavior among MSME actors is shaped by a combination of cognitive and emotional elements—financial literacy builds understanding and confidence, while perceived risk shapes caution and rational evaluation. Strengthening both aspects is therefore essential to support MSME

actors in making sound financial decisions that ensure business continuity, reduce default risk, The third factor influencing credit decision-making is self-efficacy. According to Bandura (2006), self-efficacy refers to an individual's belief in their ability to perform specific behaviors required to achieve desired outcomes. In the financial context, self-efficacy plays a crucial role in shaping a person's confidence to make sound financial choices and manage resources effectively. Sina (2013) emphasizes that financial self-efficacy enhances an individual's capability in managing personal finances, ultimately leading to greater financial satisfaction. Empirical studies support this notion — Liu and Zhang (2021) demonstrated that individuals with higher financial self-efficacy tend to assess opportunities and challenges more rationally, making them better equipped to make informed financial decisions. Similarly, Wardani et al. (2022) found a significant relationship between self-efficacy and financial management behavior among MSME actors, suggesting that belief in one's financial ability positively influences responsible financial practices. However, other studies present differing perspectives. Ismail et al. (2017) reported that self-efficacy does not significantly affect financial management behavior, a finding reinforced by Purnamasari (2018), who discovered that self-confidence—an expression of self-efficacy—does not necessarily influence financial decision-making. These mixed results indicate that the role of self-efficacy may vary depending on contextual factors such as financial education, access to resources, and individual experience in managing money or credit.

In addition to these three primary variables—financial knowledge, perceived risk, and self-efficacy—this study introduces financial inclusion as a mediating variable. Financial inclusion serves as a bridge that connects individual capacity with institutional accessibility. When individuals or MSME owners lack adequate access to formal financial services, such as banks or microfinance institutions, they face significant barriers in obtaining necessary credit. Effective financial inclusion ensures that all segments of society, including small entrepreneurs, can access affordable and appropriate financial services. This includes not only access to credit but also savings, insurance, and payment systems that enhance financial participation and security. Good financial inclusion involves policies that promote affordability, equity, and inclusiveness in the financial system, enabling previously underserved groups to engage with formal financial institutions. In this context, financial inclusion plays a strategic role in supporting MSME growth by easing access to capital through loans, microcredit schemes, and other funding instruments offered by banks and non-bank financial entities. By reducing financial barriers, financial inclusion fosters business expansion, encourages entrepreneurship, and strengthens overall economic resilience at the regional level.

Considering the existing phenomenon gap, research gap, and theoretical foundation from previous studies, it becomes evident that credit decision-making among MSME actors remains a complex issue influenced by various interrelated factors. The interplay between financial knowledge, perceived risk, self-efficacy, and financial inclusion has yet to be thoroughly explored in a unified framework, particularly in the context of MSMEs in Malang Regency. Therefore, this research seeks to examine these factors comprehensively to provide a deeper understanding of how cognitive, psychological, and structural elements jointly influence MSME actors' credit decision behavior. By doing so, this study aims to contribute to the development of strategies that can enhance financial literacy, strengthen confidence in financial management, and expand inclusive access to financial resources—ultimately supporting the sustainable

growth and competitiveness of MSMEs in the region.

## RESEARCH METHOD

This study uses a quantitative research method that emphasizes objective measurement to analyze the influence of Financial Knowledge, Perceived Risk, and Self-Efficacy on Credit Decision Behavior, with Financial Inclusion as an intervening variable among MSMEs in Malang Regency. The dependent variable (Y) is credit decision behavior, reflected through performance, satisfaction, information sharing, trust, and service considerations. The independent variables (X) include: (1) Financial Knowledge, which covers basic financial concepts, savings and loans, investment, and insurance; (2) Perceived Risk, involving awareness of potential risks, losses, and perceived product or service risks; and (3) Self-Efficacy, measured by task difficulty, strength of belief, and generality. The intervening variable (Z), Financial Inclusion, refers to access and usage of financial services measured through dimensions of access, usage, quality, and well-being.

The population in this study consists of micro business actors assisted by the Malang Regency Cooperative and Micro Enterprise Service, totaling 20 MSME associations. The sample, representing this population, was selected using a non-probability purposive sampling technique with specific criteria: MSME actors who have taken credit and have operated for at least one year. The sample size, determined using the Slovin formula, amounted to 100 respondents, ensuring representativeness for generalizing the research findings.

According to Sugiyono (2016) data analysis is an activity after carrying out the collection process from all respondents or other sources of data collected. Activities in data analysis are activities that group data based on variables and types of respondents, tabulate data based on all respondents who present data from each variable selected for research, carry out calculations to answer the problem formulation, and carry out calculations to test hypotheses that have been proposed in a study. The analysis technique in this research uses a statistical inference test approach. Inferential statistics is a statistical technique used to analyze sample data and the results are applied to the population from which the sample was taken (Sugiyono, 2016).

In this research, existing data is grouped based on variables, type of respondent, and tabulation of existing data to carry out hypotheses according to existing data. In this research, data analysis uses the help of SmartPLS (Smart Partial Least Square) software. PLS was first developed by Wold as a general method for estimating path models that use latent variables with *multiple indicators*. PLS is also a *powerful interminacy* factor analysis method because it does not assume the data must be on a certain measurement scale, the sample size is small.

Initially PLS came from social sciences, especially economics. This model was developed as an alternative for situations where the theoretical basis for designing the model is weak or the available indicators do not meet the reflexive measurement model. Apart from being able to be used as confirmation of theory, PLS can also be used to build relationships for which there is no theoretical basis or to test propositions. PLS analysis consists of two sub models, namely the structural model *or* often called the inner model and the measurement model *or* often called the outer model. The structural model or inner model shows the strength of estimates between constructs, while the measurement model or outer model shows how the indicators represent the latent variables to be measured.

**RESULT AND DISCUSSION**

**Model Analysis Using PLS-SEM**

Model analysis in this research uses the PLS-SEM method. Analysis using the PLS-SEM method includes 2 stages, namely the reflective measurement model evaluation stage, and the structural model evaluation stage.

**Evaluation of Reflective Measurement Models**

Reflective measurement model evaluation is an evaluation of the relationship between variables and their indicators where the depiction is shown by arrows from the construct (ellipse-shaped) to several indicators (box-shaped). This evaluation includes two stages, namely the *Convergent Validity* and *discriminant tests validity* .

**Stage 1: Convergent Validity Test**

*Convergent Validity* aims to measure the suitability between the indicators measured by variables and the theoretical concepts that explain the existence of indicators for these variables. The *Convergent Validity* test can be evaluated in three stages, namely by looking at *the composite reliability* , and *Average Variance Extracted (AVE)*.

Reliability is defined as the ability of an instrument indicator to produce the same value repeatedly (consistency) for each research activity. The level of reliability is measured by the *Composite Reliability value*, *Cronbach Alpha* and *the Average Variance Extracted (AVE)* value. The output *composite reliability* and *Cronbach alpha* obtained from *the SmartPLS PLS Algorithm Report* are presented in table 3 . the following.

**Table 3 . Composite reliability and Cronbach Alpha tests**

|                                     | <b>Cronbach's Alpha</b> | <b>Composite Reliability</b> |
|-------------------------------------|-------------------------|------------------------------|
| <b>Financial Inclusion (Z)</b>      | <b>0.864</b>            | <b>0.908</b>                 |
| <b>Credit Decision Behavior (Y)</b> | <b>0.893</b>            | <b>0.921</b>                 |
| <b>Financial Knowledge (X1)</b>     | <b>0.821</b>            | <b>0.881</b>                 |
| <b>Perceived Risk (X2)</b>          | <b>0.894</b>            | <b>0.934</b>                 |
| <b>Self Efficacy (X3)</b>           | <b>0.792</b>            | <b>0.877</b>                 |

Source: smart-PLS output (2023).

From table 3 . The results of *the composite reliability* and *Cronbach Alpha* tests show that all constructs are reliable or have acceptable *composite reliability* and *Cronbach Alpha values*. This is because *the composite reliability* and *Cronbach Alpha values* for each construct are greater than 0.7. Another measurement that is also used to test reliability and validity is *Average Variance Extracted ( AVE )* . The AVE value aims to measure the level of variance of a construct component which is collected from its indicators by adjusting for the error level. Tests with AVE values are more critical than *composite reliability* . The minimum recommended AVE value is 0.50. The AVE output obtained from the *SmartPLS PLS Algorithm Report* is presented in table 4 .

**Table 4 Average Variance Extracted (AVE) Value**

|                              | Average Variance Extracted (AVE) |
|------------------------------|----------------------------------|
| Financial Inclusion (Z)      | 0.712                            |
| Credit Decision Behavior (Y) | 0.702                            |
| Financial Knowledge (X1)     | 0.649                            |
| Perceived Risk (X2)          | 0.824                            |
| Self Efficacy (X3)           | 0.705                            |

Source: smart-PLS output (2023).

From table 4 the test results with AVE values show that all constructs have potential validity for further testing. This is because the AVE value for all constructs is greater than 0.50.

**Stage 2: Discriminant Validity Test**

*Discriminant validity* is the level of differentiation of an indicator in measuring instrument constructs. The examination is carried out by comparing the correlation between variables with  $\sqrt{AVE}$ . The measurement model has good  $\sqrt{AVE}$  *discriminant validity* if each variable is greater than the correlation between variables. Mark  $\sqrt{AVE}$  can be seen from the *Fornell-Larcker Criterion* SmartPLS output which is presented in table 5 .

**Table 5. Fornell-Larcker Criterion**

|                              | Financial Inclusion (Z) | Credit Decision Behavior (Y) | Financial Knowledge (X1) | Perceived Risk (X2) | Self Efficacy (X3) |
|------------------------------|-------------------------|------------------------------|--------------------------|---------------------|--------------------|
| Financial Inclusion (Z)      | 0.844                   |                              |                          |                     |                    |
| Credit Decision Behavior (Y) | 0.773                   | 0.838                        |                          |                     |                    |
| Financial Knowledge (X1)     | 0.377                   | 0.518                        | 0.805                    |                     |                    |
| Perceived Risk (X2)          | 0.591                   | 0.590                        | 0.281                    | 0.908               |                    |
| Self Efficacy (X3)           | 0.667                   | 0.731                        | 0.579                    | 0.450               | 0.839              |

*Fornell-Larcker Criterion* table in table 6 is based on the intersection of rows and columns. It can be seen that the value of  $\sqrt{AVE}$  the Financial Inclusion variable is 0.844, while the highest correlation value of the Financial Inclusion variable with other variables is only 0.773, thus the Financial  $\sqrt{AVE}$  Inclusion variable is greater than the correlation of Financial Inclusion with other variables. Likewise with other variables that show  $\sqrt{AVE}$  greater than the correlation between variables. So the conditions *discriminant validity* has  $\sqrt{AVE}$  been fulfilled.

**Structural Model Evaluation**

The structural model evaluation aims to test the presence or absence of influence between constructs, *R Square*, and the influence of indirect relationships between constructs. The structural model is evaluated using *p-value* to determine the significance

of the structural path parameter coefficients and *R Square* to determine whether the influence of the independent latent variable on the dependent latent variable has a substantive influence.

**a) Evaluate the R Square value**

*R Square* value is used to explain the influence of exogenous variables on endogenous variables. The *R Square* value is obtained from the PLS Algorithm Report SmartPLS and can be seen in table 6 .

**Table 6. R Square**

|                                     | <b>R Square</b> |
|-------------------------------------|-----------------|
| <b>Financial Inclusion (Z)</b>      | 0.551           |
| <b>Credit Decision Behavior (Y)</b> | 0.714           |

Source: smart-PLS output (2023).

*R Square* value of the Financial Inclusion variable is 0.551, meaning that the Financial Knowledge, Perceived Risk and Self Efficacy variables are simultaneously able to explain their influence on the Financial Inclusion variable by 55.1% while the remaining 44.9% is explained by other variables outside the model studied. . Meanwhile, the *R Square* value of the Credit Decision Behavior variable is 0.714, which means that the Financial Knowledge, Perceived Risk, Self Efficacy and Financial Inclusion variables are able to explain their influence on the Credit Decision Behavior variable by 71.4% while the remaining 28.6% is explained by other variables in outside the model studied.

**b) Evaluate the significance of the path relationship to the research hypothesis**

To conclude whether the hypothesis is accepted or rejected, the *p-value* is used at a significance value of  $\alpha = 5\%$  or 0.05. If *the p-value* <0.05 then  $H_0$  is rejected, meaning there is an influence. Conversely, if *the p-value* > 0.05 then  $H_0$  is accepted, meaning there is no effect. The following are the results of the structural model evaluation obtained from *the SmartPLS Bootstrapping Report* presented in table 7 .

**Table 7 Path Coefficients T-Values, P-Values**

|  | <b>Path Coefficients</b> | <b>T Statistics</b> | <b>P Values</b> | <b>Information</b> |
|--|--------------------------|---------------------|-----------------|--------------------|
| <b>Financial Knowledge (X1) -&gt; Credit Decision Behavior (Y)</b> | 0.143                    | 2,029               | <b>0.043</b>    | There is influence |
| <b>Perceived Risk (X2) -&gt; Credit Decision Behavior (Y)</b>      | 0.167                    | 1,708               | <b>0.088</b>    | No influence       |
| <b>Self Efficacy (X3) -&gt; Credit Decision Behavior (Y)</b>       | 0.287                    | 3,456               | <b>0.001</b>    | There is influence |

Source: smart-PLS output (2023).

**c) Evaluation of the significance of the indirect path relationship / indirect effect (mediation effect)**

To conclude the indirect effect or mediation effect (intervening) whether the hypothesis is accepted or rejected, the *p-value* is used at a significance value of  $\alpha = 5\%$  or 0.05. If *the p-value* <0.05 then  $H_0$  is rejected, meaning there is an indirect effect (mediation effect) . Conversely, if *the p-value* > 0.05 then  $H_0$  is accepted,

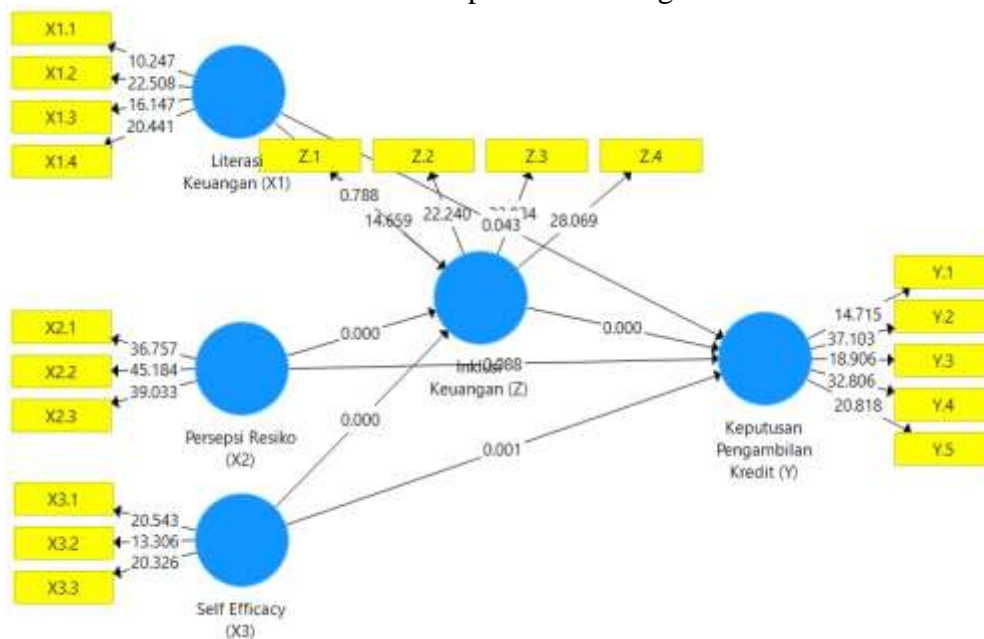
meaning there is no mediation effect . The following are the results of the structural model evaluation obtained from *the SmartPLS Bootstrapping Report* presented in table 8 .

**Table 8 Indirect Effects T-Values, P-Values**

|   | Path Coefficients | T Statistics | P Values     | Information        |
|---|-------------------|--------------|--------------|--------------------|
| <b>Financial Knowledge (X1) -&gt; Financial Inclusion (Z) -&gt; Credit Decision Behaviors (Y)</b> | -0.011            | 0.270        | <b>0.787</b> | No influence       |
| <b>Perceived Risk (X2) -&gt; Financial Inclusion (Z) -&gt; Credit Decision Behavior (Y)</b>       | 0.157             | 2,474        | <b>0.014</b> | There is influence |
| <b>Self Efficacy (X3) -&gt; Financial Inclusion (Z) -&gt; Credit Decision Behaviors (Y)</b>       | 0.222             | 3,311        | <b>0.001</b> | There is influence |

Source: smart-PLS output (2023).

The bootstrapping output for evaluating direct effects by looking at the path coefficient values and P-values is presented in Figure 1 below :



**Figure 1. Bootstrapping output with P-Value**

Source : smart-PLS output (202 3 ).

**Hypothesis testing**

From the results of table 8 it can be concluded that the hypothesis states:

- H1: Financial Knowledge has a positive effect on decisions Taking credit from MSMEs in Malang Regency **acceptable** , with *path coefficients* of 0.143 with a T-Value of 2.029 or a P-Value of 0.0 43 smaller than 0 , 0 5, then there is an influence or **is significant** ( positive ).
- H2: Perceived Risk has a negative effect on decisions Taking credit from MSMEs in Malang Regency **unacceptable** , with *path coefficients* of 0.167 with a T-Value value of 1.708 or a P-Value value of 0.088 greater than 0.05 , then there is no

- influence or **Non- Significant** ( positive ).
- H 3 : *Self Efficacy* has a positive effect on Credit Decisions among MSMEs in Malang Regency **which is acceptable** , with *path coefficients* of 0.287 with a T-Value value of 3.456 or a P-Value value of 0.001 smaller than 0, 05, then there is an influence or **is significant** (positive).
- H4: Financial Knowledge has a positive effect on Credit Decision Behaviors through Financial Inclusion among MSMEs in Malang Regency **which cannot be accepted** , with *path coefficients* of -0.011 with a T-Value value of 0.270 or a P-Value value of 0.787 greater than 0.05, then the results are **Non Significant** or there is no mediation (intervening) influence
- H5: Perception of Risk has a negative effect on Decisions to Take Credit through Financial Inclusion among MSMEs in Malang Regency **which can be accepted** , with *path coefficients* 0.157 with a T-Value value of 2.474 or a P-Value value of 0.014 which is smaller than 0.05, then the results **are significant** (positive) or there is a mediating (intervening) influence
- H6: *Self-Efficacy* has a positive effect on Credit Decision Behaviors through Financial Inclusion among MSMEs in Malang Regency **which can be accepted** , with *path coefficients* of 0.222 with a T-Value of 3.311 or a P-Value of 0.001 which is smaller than 0.05, then the result **is significant** (positive) or there is a mediation (intervening) effect.

### **Discussion**

#### **The Influence of Financial Knowledge on Credit Decision Behaviors**

Based on the results of the research that has been carried out, the results show that Financial Knowledge has a positive effect on decisions taking credit from MSMEs in Malang Regency with *path coefficients* of 0.143 with a *P-Value* of 0.043 smaller than 0, 05 , then it can be accepted as a significant (positive) effect. This influence shows that the higher the Financial Knowledge, the better the credit decisions made by MSMEs in Malang Regency . The results of this research also show that Financial Knowledge with savings and loans indicators is the highest and influences credit decisions compared to other indicators. These results support previous research conducted by Mutegi et al. (2015) emphasized that Financial Knowledge facilitates decision-making processes such as timely bill payments, proper debt management which increases the creditworthiness of potential borrowers to support livelihoods, economic growth, a healthy financial system, and poverty reduction. Then, research by Puspasari, Hakim and Kemalasari (2020) shows that literacy finance influential positive And significant to decision to take credit for corn farmers in Jotang district.

#### **The Influence of Perceived Risk on Credit Decisions**

Based on the results of research that has been carried out, the results obtained are that Perceived Risk there is no influence on the decision taking credit from MSMEs in Malang Regency with *path coefficients* of 0.167 with a *P-Value value* of 0.088 greater than 0.05, then it is non-significant (positive). It can be seen that Perceived Risk indicators which include certain risks, experiencing losses, and thinking that products or services are risky cannot influence credit decisions among MSMEs in Malang Regency. The high or low or good or bad Perceived Risk does not influence MSME actors in credit decisions. These results support previous research conducted by Apriliani And Sukanti (2017) that *perception of risk* does not influence credit decisions among

MSMEs in Yogyakarta City.

### **The Influence of *Self-Efficacy* on Credit Decisions**

Based on the results of research that has been carried out, the results obtained are: *Self Efficacy* has a positive effect on Credit Decision Behaviors among MSMEs in Malang Regency with path coefficients of 0.287 with a *P-Value* value of 0.001 smaller than 0.05, so it is acceptable with a significant (positive) influence. This influence shows that there is a relationship between *self-efficacy* and can determine a decision, one of which is regarding taking credit. In this case related to credit decision making, the more specific the individual is in assessing various considerations, the more mature his or her decisions will be in making credit decisions. These results support previous research conducted by Djou And Lukiasuti (2021) which shows that financial self-efficacy has an influence positive to intensity taking decision credit on SMEs.

### **The Effect of Financial Knowledge Regarding Credit Decisions Through Financial Inclusion**

Based on the results of the research that has been carried out, the results show that Financial Knowledge has no influence on decisions taking credit through financial inclusion among MSMEs in Malang Regency with *path coefficients* of -0.011 with a *P-Value* of 0.787 greater than 0.05, so the results are non-significant or there is no mediation (intervening) effect. It can be seen that indicators of access, use, quality and welfare cannot influence credit-making decisions among MSME actors in Malang Regency. This can be interpreted as meaning that financial inclusion cannot be a mediating variable between the Financial Knowledge variable and the credit decision variable. These results are not in line with research (Sohilauw, 2018); Kwaning et al. (2015) which states that understanding and easy access to finance in obtaining external sources of capital makes MSMEs able to survive in managing their business, if a person's knowledge regarding finance is high, but without the support of financial access to financial institutions they will find it difficult to obtain products. that is needed by financial institutions, especially financing.

### **The Influence of Perceived Risk Regarding Credit Decisions Through Inclusion Finance**

Based on the results of the research that has been carried out, the results show that Perceived Risk has an influence on decisions taking credit through financial inclusion among MSMEs in Malang Regency with a *path coefficient* of 0.157 with a *P-Value* of 0.014 which is smaller than 0.05, then the results are significant (positive) or there is a mediating (intervening) effect. This shows that MSME players prioritize business needs for capital. MSME players assume that the risk of taking out credit definitely exists even though it has been avoided with great effort. This is a certainty in the decisions that will be taken. The results of this research show that the priorities of MSME actors in Malang Regency regarding their business are the main consideration in making decisions, one of which is the decision to take credit. MSME players will continue to take credit if they need capital even though the perception of risk is high. The results of this research are in line with research conducted by Abdu, J. (2021) stating that the perception of various types of risk by SMEs in Nigeria is an important prerequisite in increasing financial inclusion and results. study from Rahmania and Ningtyas (2022) that inclusion finance own positive and significant influence on Credit

Decision Behavior, Where the more tall level access product service And service financethe better it will be in deciding to take out debt.

### **The Influence of *Self-Efficacy* on Credit Decisions Through Inclusion Finance**

Based on the results of research that has been carried out, the results show that *self- efficacy* has an influence on decisions Taking credit through financial inclusion among MSMEs in Malang Regency with a *path coefficient* of 0.222 with a *P-Value* of 0.001 is smaller than 0.05, so the results are significant (positive) or there is a mediating (intervening) effect. . The results of this research show that MSME actors with high *self-efficacy* will feel capable and optimistic in completing their work and responsibilities. The results of this research are in line with research by Andyni and Kurniasari (2021) that self-efficacy is proven to have a positive influence on financial inclusion. Apart from that, the results of research conducted by Rahmania and Ningtyas (2022) Where variable inclusion finance own positive and significant influence on credit decisions.

### **CONCLUSION**

Based on test results using analytical methods PLS to test the influence of Financial Knowledge, Perceived Risk and *Self Efficacy* on Credit Decision Behaviors with Financial Inclusion as an Intervening Variable among MSMEs in Malang Regency, conclusions can be drawn as follows:

1. Financial Knowledge plays an important role in growing decision taking credit from MSMEs in Malang Regency.
2. Perceived Risk does not play an important role in growth decision taking credit from MSMEs in Malang Regency .
3. *Self Efficacy* plays an important role in growing decision taking credit from MSMEs in Malang Regency.
4. Financial Knowledge through financial inclusion does not play an important role in fostering credit decisions among MSMEs in Malang Regency .
5. Perceived Risk through financial inclusion plays an important role in growing decision taking credit from MSMEs in Malang Regency .
6. *Self-Efficacy* through financial inclusion plays an important role in growing decision taking credit from MSMEs in Malang Regency.

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