



DETERMINANTS OF FINANCIAL BEHAVIOUR OF MICRO, SMALL AND MEDIUM-SIZE ENTERPRISES OWNER IN INDONESIA

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ABSTRACT

Economic activities of MSMEs in Indonesia are on the rise after pandemic. Non-cash payment systems are more attractive to consumers and producers. The non-cash payment system in the form of QRIS is increasingly being used in business transactions. Therefore, this study aims to analyze the determinants of financial behavior of MSME owners who use QRIS. This research used sample technique purposive sampling and proportional random sampling. A total of 204, respondents are small micro business owners who use QRIS from Medan, Makassar and Bali. The research instrument used a questionnaire distributed to MSME owners. The determining variables used are age, length of business, education, and religion of business owners. The data analysis technique uses multiple linear regression with SPSS tools. The results showed that education has an impact on the financial behavior of QRIS-using MSMEs, while age, religion, region, and length of business have no impact on financial behavior.
Keywords: Financial Behavior; QRIS, MSMEs

1. Introduction

Indonesia's business world is dominated by small, small and medium enterprises (MSMEs), which currently dominate in number. It impacts 64.2 million enterprises or 99.99% of the total number of economic activities in Indonesia. MSMEs can shoulder many responsibilities and contribute significantly to the Gross Domestic Product. According to the Ministry of Cooperatives in Indonesia, and Small and Medium Enterprises, MSMEs gather up to 119 million employees or 97% of the working capacity of the business world (Medcom.id, 2021). It cannot be denied that MSMEs have an important role in driving the sustainability of the Indonesian economy, even though they have shown their strengths, they still have failures that are often experienced by many large and small companies in Indonesia. The advantages of MSMEs include: First, MSMEs produce goods or services that are closely related to the community; second, MSMEs do not use imported raw materials; and third, often MSMEs use their own capital without the support of bank loans.

Despite their many advantages, MSMEs still face various limitations. These limitations make the development and competitiveness of MSMEs difficult. Sarwono (2015) describes the limitations as follows, namely: lack of banking access, such as low HR skills/knowledge, limited utilization of technology and not yet strong in balancing changes in consumer preferences/needs based on exports. As an effect of the pandemic, the Ministry of Cooperatives and Small and Medium Enterprises reported that MSMEs in Indonesia face problems such as decreased business turnover, obstructed distribution, and capital constraints (Medcom, 2021).

As technology develops, various digital markets and platforms have emerged, opening up wide opportunities for MSMEs to market their products, reaching various geographical areas in Indonesia and abroad. Accompanied by the development of various digital stores and platforms that facilitate business processes, digital payment technology has also developed. (Hadad et al., 2003). Digital payments include Go-Pay, OVO, Shopee Pay, and Quick Response Code Indonesia Standard (QRIS).

In Indonesia, non-cash payments have been made since 2017 using electronic money. However, it was found that there is still a need to increase the proportion of cooperation between the banking sector, financial institutions and the government in creating a digital financial ecosystem, especially the infrastructure supporting digital payments. (Rafferty & Fajar, 2022). Now, MSMEs have begun to widely utilize QRIS as a non-cash payment system. The advantages of QRIS include the ability to accept changes from various types of customers. Bank Indonesia also explains that QRIS is a digital payment system that is fast, cheap, safe and reliable. As of mid-September 2021, 10.4 million customers have entered QRIS, an increase of 120.22% compared to the same period last year. Bank Indonesia will make various efforts to continue to increase the number of customers added to QRIS. (Bank Indonesia, 2020).

QRIS is in great demand in Indonesia because of its ease of use so that customers become loyal. Indications of loyalty are assessed from customer satisfaction, trust and commitment to make non-cash payments using QRIS. (Chohan et al., 2022). Culinary micro-business owners in Depok City revealed that it was more efficient to use QRIS as a digital payment tool (Listiwati et al., 2022). The ease of using QRIS as a digital payment does not just happen. This is influenced by the insights and financial literacy of MSME owners in Makassar City. Financial literacy and ease of digital payment have a positive effect on the performance of MSMEs in Makassar. (Aulia et al., 2022).

The gap in individual financial literacy levels can be influenced by income and population density of an area where individuals with higher incomes have better literacy levels. (Angrisani et al., 2021). In addition, education and cultural factors are determinants of a person's financial behavior, furthermore, financial literacy affects financial attitudes, financial behavior and business performance (Graña-Alvarez et al., 2021, Graña-Alvarez et al., 2022). Where a person's financial literacy is viewed from the aspect of male and female gender, there is no difference (Nainggolan et al., 2022). (Nainggolan et al., 2022). Various independent variables such as age, gender, income, religion, social group, family size, marital status, education level, occupation, and others have a significant effect on the respondent's digital financial literacy which encourages financial behavior trends. (Azeez & Akhtar, 2021).

Based on various previous studies, the author will examine the variables that determine the financial behavior of micro business owners in Indonesia. The differentiator of this research lies in the ability of the respondents. Respondents of this study are respondents who have used QRIS as a digital payment tool. The author suspects that age, religion, region, length of business and education are independent variables of the financial behavior of MSME owners who use QRIS in Indonesia.

2. Literature Review

2.1 Financial Behaviour

Financial behavior refers to how a person handles, manages, and uses available financial resources. People who exhibit responsible financial behavior tend to use the money they have effectively (Sari, 2015). As long as MSMEs still use money as a means of transaction, good financial management is very necessary for them. The presence of financial controls will bring several benefits to MSME stakeholders, including: (a) MSMEs can determine the financial performance of a company, especially the level of operations and capital turnover. (b) MSMEs are able to recognize, classify and distinguish between company finances and owner finances.

(c) MSMEs can determine the status of their cash flow both from the source of funds and their use. (d) MSMEs are able to make proper budget planning. (e) MSMEs can calculate taxes (f) MSMEs can determine their cash flow during a certain period.

Financial behavior is the ability to understand, analyze, and manage finances in order to make good financial decisions and avoid financial problems (Nathan Austin, Joshua, 2021). Furthermore, according to Thao (2015) financial behavior is described as financial decision making, alignment of personal motives and company goals, Financial management refers to the effectiveness of fund management. If MSMEs cannot manage their finances properly, of course the company will have difficulty developing its business. There are 10 financial behavior indicators, including financial planning and budgeting, financial planning techniques, saving activities, insurance activities, retirement activities and unexpected expenses, investment activities, credit or debt bills, monitoring & evaluating financial management.

2.1.1 Demographics of MSME Owners

Religion is a belief or perception of one's religious affiliation including one's financial behavior. Someone who believes in religious teachings and avoids religious prohibitions that have been regulated in accordance with the books of their respective religions has better and wiser financial behavior, while individuals who are less devout to religion tend to have worse financial behavior. According to (Rafidah, 2020), how long MSME actors have been in business can change their attitude towards financial behavior, because they have experience in dealing with existing problems, especially financial problems.

In improving financial knowledge and encouraging good financial behavior among MSMEs, the level of education makes a very important contribution in this regard. Education affects a person's economic attitudes, knowledge and behavior. A person's level of education has a significant impact on the financial concepts and tools they can use to make smart financial decisions. (Windasari and Wijonarko, 2018). According to Eagly and Chaiken, 1993 (in (Windasari and Wijonarko, 2018).) there are two factors that have an impact on financial behavior in general, namely financial knowledge and attitudes. Education increases one's confidence in starting a business and also increases the likelihood that a business can survive past the start-up stage.

Conceptual Framework

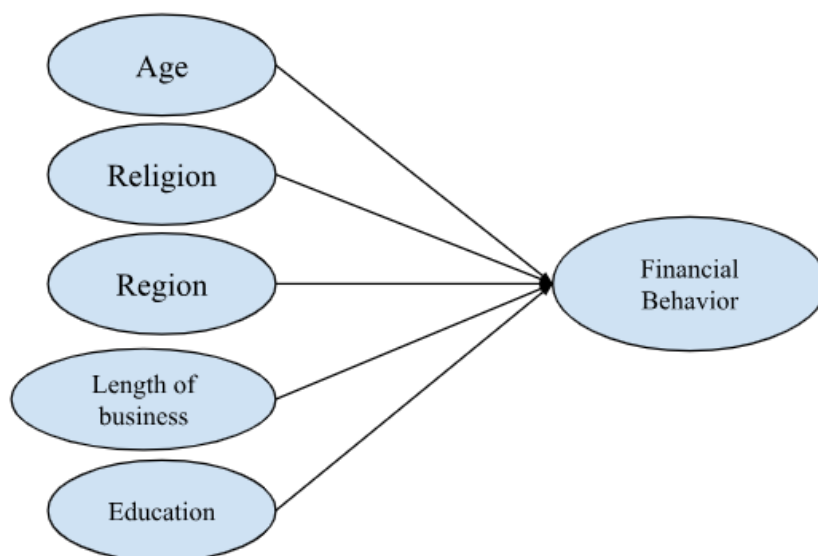


Figure 1: Conceptual Framework

The hypotheses in this study include

H1 = Age affects the financial behavior of MSME owners

H2 = Religion affects the financial behavior of MSME owners

H3 = region affects the financial behavior of MSME owners

H4 = Length of business affects the financial behavior of MSME owners

H5 = Education affects the financial behavior of MSME owners

3. Research Methods

This research is quantitative research. The research method consists of research activity design, population and research samples, tools used, place, data collection techniques, variable definitions and data analysis techniques. This research is causality quantitative research. Research that examines the relationship of influence between the variables used. The independent variables are the age of the business owner, religion, region, length of business establishment and education of the MSME owner. While the dependent variable is the financial behavior of MSME owners who use QRIS.

The research population is micro, small and medium business owners in Indonesia. The research object criteria are MSMEs that use QRIS in their business both selling goods and services. The probability sampling data collection method uses purposive sampling where the sample determination is based on the objectives made by the researcher (Hussain et al., 2018). The criteria for respondents in this study are MSME owners who have used QRIS in payment transactions. Therefore, the respondents of this study were represented by four cities ranging from Medan as many as 38 MSME owners, Surabaya as many as 53 MSME owners, Sulawesi 48 MSME owners and Bali as many as 44 MSME owners and Kalimantan there are 4 MSME owners.

The probability sampling data collection method uses purposive sampling where the sample determination is based on the objectives made by the researcher. The criteria for respondents in this study are MSME owners who have used QRIS in payment transactions. The financial literacy variable consists of five indicators which are translated into 19 statement items in a questionnaire distributed via g-form.

Data analysis techniques using multiple linear regression (Girardone et al., 2004). The initial stage conducts validity and reliability tests. the second stage, testing classical assumptions consisting of normality test, multicollinearity test, heteroscedasticity test and linearity test. The third stage, conducting hypothesis testing.

Validity and Reliability Test

The validity test according to is a technique of testing the accuracy of the item in measuring something. Items are in the form of statements or questions to respondents through a research questionnaire. Validity according to Priyatno (2014: 51) (in Nainggolan et al., 2022) is a technique for testing the accuracy of items in measuring something. Items are in the form of statements or questions to respondents through a research questionnaire. An item is declared reliable if its value is ≥ 0.6 . Significance testing is carried out using the r table with a two-sided test using a significance level of 5% (0.05). If the value is positive and $r \text{ count} \geq r \text{ table}$ then the item is valid. The item is invalid if $r \text{ count} < r \text{ table}$.

Classical Assumption Test

The residual normality test is a test of the residual value of the regression whether it has a normal distribution of data distribution using the one sample Kolmogorov-Smirnov test method. (Ngo & Tripe, 2016). One sample Kolmogorov-Smirnov test method is an effort to determine whether the distribution of data is normal, Poisson, uniform, or exponential. If the significance value is ≥ 0.05 , the residuals are declared normally distributed. The

multicollinearity test is intended to test whether there is a close or perfect correlation between the independent variables. Multicollinearity occurs if the VIF value is more than 10 and the tolerance is less than 0.1. The linearity test is used to test whether there is a linear relationship between variables or not using the Test for Linearity at a significance level of 0.05. If two variables have a Linearity significance of less than 0.05 then the two variables have a linear relationship. The heteroscedasticity test is used to test the similarity of residual variances in observations in the regression model using the Spearman's rho correlation test method. This method states that heteroscedasticity problems do not occur if the significance value between the independent variable and the residual is greater than 0.05.

Hypothesis Test

The t test is a partial regression coefficient test in order to test the level of significance of the independent variable on the dependent. (Muljawan et al., 2014). If the significance is below 0.05, then H0 is rejected and there is an influence of the independent variable on the dependent. The F test is a test of regression coefficients together in order to test the level of significance of several independent variables on the dependent. If the significance is below 0.05, then H0 is rejected and there is an influence of several independent variables on the dependent. The coefficient of determination is a calculation of the percentage contribution of the influence of the independent variable on the dependent related in the study, as well as other variables not discussed in the study.

Multiple Linear Regression Analysis

Multiple linear regression analysis is an analysis that aims to determine the effect or linear relationship of two or more independent variables on one dependent variable. (Girardone et al., 2004).. The equation form in this study is:

$$Y = \alpha + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + e$$

Description:

α = Constant

β = Regression coefficient

X1 = Age

X2 = religion

X3 = region

X4 = length of business

X5 = education

Y = financial behavior

e = Standard error or deviation

4. Research Findings and Discussion

4.1 Research results

The first section of the results shows a description of the respondents in terms of age, education, area of domicile and length of business. This description is shown in Table 1 below.

Table 1. Description of Respondents

| Characteristics | Category | Number of respondents |
|-------------------|-----------------|-----------------------|
| Age of MSME owner | <25 years | 58 people |
| | 25-34 years old | 54 people |

| | | |
|----------------------------------|-----------------------------------|------------|
| | 35-45 years old | 41 people |
| | >45 years | 35 people |
| Last education | SD | 4 people |
| | SMP | 4 people |
| | SMA/SMK | 89 people |
| | Diploma | 8 people |
| | S1 | 76 people |
| | S2 | 6 people |
| Domicile | Medan Sumatra | 42 people |
| | Kalimantan | 4 people |
| | Java | 58 people |
| | Sulawesi | 55 people |
| | Bali | 45 people |
| Business group | Agriculture, Fisheries, Livestock | 1 person |
| | Processing Industry | 17 people |
| | Trade, Hospitality, Restaurant | 149 people |
| | Services | 15 people |
| | Fashion | 6 people |
| Length of business establishment | <1 year | 15 people |
| | 1-2 years | 61 people |
| | 3-4 years | 32 people |
| | 5-6 years | 19 people |
| | >6 years | 61 people |

Source: Internal data, 2023

Table 1 shows that the age of most MSME owners is under 25 years old with the highest number of high school graduates, 89 people. Most respondents live in Java and its surroundings with 58 people. The largest number of business groups came from the trade sector, reaching 149 people. The length of business of most MSME owners is above 6 years, 61 people.

4.1.2 *Validity and Reliability Test*

The validity test was carried out on the variable financial behavior of micro business owners using QRIS in Indonesia. The results of this test are described in table 2 below.

Table 2. Variable validity test results

| Financial Behavior Indicator | Pearson Correlation | Conclusion |
|------------------------------|---------------------|------------|
| X2_1 | 0.718 | Valid |
| X2_2 | 0.688 | Valid |
| X2_3 | 0.700 | Valid |
| X2_4 | 0.651 | Valid |
| X2_5 | 0.682 | Valid |
| X2_6 | 0.588 | Valid |
| X2_7 | 0.601 | Valid |
| X2_8 | 0.650 | Valid |
| X2_9 | 0.626 | Valid |
| X2_10 | 0.632 | Valid |
| X2_11 | 0.676 | Valid |
| X2_12 | 0.679 | Valid |
| X2_13 | 0.620 | Valid |
| X2_14 | 0.562 | Valid |
| X2_15 | 0.495 | Valid |
| X2_16 | 0.528 | Valid |
| X2_17 | 0.573 | Valid |
| X2_18 | 0.741 | Valid |

Source: SPSS, 2023

Reliability tests were conducted on the financial behavior variables of micro business owners using QRIS in Indonesia. The results of this test are described in table 3 below.

Table 3. Variable reliability test results

| Variable | Cronbach Alpha | Description |
|------------------------------|----------------|-------------|
| Financial Behavior Indicator | 0.906 | Reliable |

Source: SPSS, 2023

Based on the reliability test conducted for the financial literacy variable, it is known that the resulting Cronbach's Alpha value is 0.906. Because this value is more than 0.7, this value falls into the acceptable category.

4.1.3 Classical Assumption Test

This section consists of 3 tests, namely normality test, heteroscedasticity test, multicollinearity test and linearity test. The normality test results are shown in table 4. Based on the results of the Normality test using the *Kolmogorov Smirnov* method, the significance result of the normality test is 0.042, where the result is smaller than the 0.05 significance. It can be concluded that the normality test in this study is normally distributed.

Table 4. Normality Test Results

| | <i>Unstandardized Residual</i> | Conclusion |
|-------------------------------|--------------------------------|-------------------|
| <i>Asymp. Sig. (2-tailed)</i> | 0.042 | Normal |

Source: SPSS, 2023

Multicollinearity test results are shown in table 5. The calculation results from the multicollinearity test results table, the independent variables show that the VIF for each variable is, age = 1.129; religion = 1.172; region = 1.188; length of business = 1.080; education = 1.023. Which of all the results of this variable is smaller than 10. It can be concluded that this study is free from multicollinearity. That is, there is no correlation between the independent variables.

Table 5. Multicollinearity test results

| Variables | Collinearity Statistics | | Conclusion |
|--------------------|--------------------------------|------------|----------------------|
| | Tolerance | VIF | |
| Age | 0.886 | 1.129 | No multicollinearity |
| Religion | 0.854 | 1.172 | No multicollinearity |
| Region | 0.842 | 1.188 | No multicollinearity |
| Length of business | 0.926 | 1.080 | No multicollinearity |
| Education | 0.978 | 1.023 | No multicollinearity |

Source: SPSS, 2023

The results of the heteroscedasticity test using the Glejser test show that the significance results of all independent variables or variables X1 (age) are 0.788. X2 (religion) is 0.763, X3 (region) is 0.420, X4 (length of business) is 0.528, X5 (education) is 0.248. Which the results of all these variables are above the significance standard of 0.05. So it can be concluded that there is no heteroscedasticity problem, meaning that there is no correlation between the residuals and the independent variables.

Table 6. Heteroscedasticity Test Results

| Variables | Sig.(2-tailed) | Conclusion |
|-----------|----------------|-----------------------------------|
| Age | 0.788 | No symptoms of heteroscedasticity |
| Religion | 0.763 | No symptoms of heteroscedasticity |

| | | |
|--------------------|-------|-----------------------------------|
| Region | 0.420 | No symptoms of heteroscedasticity |
| Length of business | 0.528 | No symptoms of heteroscedasticity |
| Education | 0.248 | No symptoms of heteroscedasticity |

Source: SPSS, 2023

The results of the linearity test are shown in Table 7. The results of the linearity test show that the significant value generated by the age variable is 0.149, religion is 0.815, region is 0.943, and length of business is 0.671. This shows that each independent variable mentioned earlier is linearly related to the dependent variable, namely financial behavior. Meanwhile, the education variable is 0.002 which is below 0.05, which means that this variable is not linearly related to financial behavior.

Table 7. Linearity Test Results

| Free Variable | Dependent Variable | Sig.Linearity | Conclusion |
|--------------------|--------------------|---------------|----------------------|
| Age | Financial Behavior | 0.149 | Linearly related |
| Religion | | 0.815 | Linearly related |
| Region | | 0.934 | Linearly related |
| Length of business | | 0.671 | Linearly related |
| Education | | 0.002 | Not linearly related |

Source: SPSS, 2023

4.4 Hypothesis Test

- The hypothesis test results are shown in table 8. Based on the results of the t test obtained, it shows that
- The education variable is a variable that has a positive effect on financial behavior. The significance value (sig) of the education variable is 0.002, then (sig) < 0.05, meaning that education partially affects the level of financial behavior of MSMEs.

While the variables of age, religion, region and length of business have no impact on financial behavior. The significance value (sig) of the variables of age, religion, region and length of business is sequentially 0.149, 0.815, 0.934, and 0.671 then (sig) > 0.05, meaning that partially age, religion, region and length of business have no effect on the level of financial literacy of MSMEs.

Table 8. Hypothesis Test Results

| Variables | Unstandardized Coefficients | | t | Sig. |
|-----------|-----------------------------|------------|--------|-------|
| | B | Std. Error | | |
| Constant | 68.146 | 4.308 | 15.819 | 0.000 |

| | | | | |
|--------------------|--------|-------|--------|-------|
| Age | -0.106 | 0.073 | -1.449 | 0.149 |
| Religion | -0.169 | 0.721 | -0.234 | 0.815 |
| Region | -0.064 | 0.772 | -0.083 | 0.934 |
| Length of business | -0.253 | 0.593 | -0.426 | 0.671 |
| Education | 2.221 | 0.718 | 3.095 | 0.002 |

Source: SPSS, 2023

The results of the F test are shown in table 9. The test results show that the Sig value is $0.018 < 0.05$. So it can be concluded that simultaneously the variables of age, religion, region, length of business and education affect the level of financial behavior of MSMEs.

Table 9. F Test Results

| Model | Sum of Squares | DF | F | Sig. |
|------------|----------------|-----|-------|-------|
| Regression | 1814.878 | 5 | 2.790 | 0.018 |
| Residuals | 25759.867 | 198 | | |
| Total | 27574.745 | 203 | | |

Source: SPSS, 2023

4.5 Discussion

- The effect of age variables on the financial behavior of MSME owners

Based on the results of the previous analysis, it was found that the age variable had no effect on the financial behavior of MSME owners who used QRIS. It is suspected that the owners of QRIS-using MSMEs are accustomed to the technology available in payment instruments so that their financial behavior does not directly have an impact. In line with the study conducted by Nainggolan (2022), a person's financial literacy in terms of age and religion has no difference.

- The influence of religious variables on the financial behavior of MSME owners

Based on the results of the previous analysis, it is found that religious variables have no effect on the financial behavior of MSME owners who use QRIS. This is in accordance with the study conducted by Nainggolan (2022) that a person's financial literacy in terms of age and religion has no difference. And it is suspected that the religion variable does not directly impact financial behavior, it is thought to have an impact on business performance. The length of business and religion of micro, small and medium business owners are determinants of the income performance of MSMEs in Surabaya. (Nainggolan, 2016).

- The influence of regional variables on the financial behavior of MSME owners

Based on the results of the analysis, it is found that the regional variable has no effect on the financial behavior of MSME owners who use QRIS. This is thought to be because all respondents are in one homogeneous urban area so that changes in financial behavior do not have gaps. This is explained in Solihat's research (2020) revealing changes in financial behavior during the COVID-19 pandemic, especially in urban areas that are included in the red zone. (Solihat, 2020). Changes in behavior will be seen when reviewed based on different regions or zones.

- The effect of variable length of business on the financial behavior of MSME owners

Based on the results of the previous analysis, it was found that the variable length of business had no effect on the financial behavior of MSME owners who used QRIS. It is suspected that the variable length of business does not directly impact financial behavior, it is thought to have an impact on business performance. The length of business and religion of micro, small and medium business owners are determining factors for the income performance of MSMEs in Surabaya. (Nainggolan, 2016).

- The effect of education variables on the financial behavior of MSME owners

Based on the results of the previous analysis, it is found that the education variable has an effect on the financial behavior of MSME owners who use QRIS. This is in line with research conducted by Nyoto (2021) which reveals that performance appraisal and education have an impact on individual financial behavior, especially student financial behavior. (Nyoto et al., 2021). Almost the same thing was revealed by Baiq Fitri Arianti; & Khoirunnisa Azzahra, (2020) that the level of education and work experience partially has a positive and significant effect on financial literacy and financial behavior of workers. Therefore, it is important to socialize financial literacy to students, students and workers so that it will have an impact on financial management behavior in the future. In fact, individuals, both students and college students who are highly educated, will have better financial behavior. (Sari, 2015).

5. Conclusion

Based on the results of this study, it reveals that a person's education affects the financial behavior of MSME owners. Interesting things that need to be studied more deeply are the age and religion of MSME owners who use QRIS. Classification in age needs to be specified again in order to see which generation is the more dominant contributor to the impact of financial behavior. As well as reviewing the religious aspects more specifically studied, especially Islamic MSME owners who may apply sharia financial behavior.

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