



## **RELATIONSHIP BETWEEN MSMEs AND FINANCIAL INSTITUTIONS IN WEST ACEH**

**Yasrizal<sup>1</sup>**

Faculty of Economics, University of Teuku Umar

[yasrizal@utu.ac.id](mailto:yasrizal@utu.ac.id)

**Harmaini<sup>2</sup>**

Faculty of Economics, University of Teuku Umar

[harmaini200580@gmail.com](mailto:harmaini200580@gmail.com)

**Afni Abd Manan<sup>3</sup>**

Faculty of Economics, University of Teuku Umar

[Afniabdulmanan@utu.ac.id](mailto:Afniabdulmanan@utu.ac.id)

**Mahrizal<sup>4</sup>**

Faculty of Economics, University of Teuku Umar

[mahrizal@utu.ac.id](mailto:mahrizal@utu.ac.id)

### **Abstract**

This study aims to analyze the relationship between Micro, Small, and Medium Enterprises (MSMEs) and financial institutions concerning loan repayment. The data used in this research is both qualitative and quantitative primary data. The study collected a sample of 100 micro and small enterprises distributed in West Aceh. The data analysis employed probability and binary logit models. The results of the data analysis indicate that loan repayment difficulties, interest rates, collateral, and own capital have a negative impact on MSMEs' access to financial institutions. The variable that has the most significant impact on MSMEs' accessibility to financial institutions is the interest rate, followed by collateral and own capital. To improve MSMEs' access to financial institutions, government attention is crucial. Providing low-interest credit for MSMEs, easing collateral requirements, and promoting the establishment of various Islamic financial institutions are essential steps. This is because the growth of MSMEs contributes to increased employment opportunities and economic growth.

**Keywords:** MSMEs, Bank accessibility, Interest rate.

## A. Introduction

Indonesia is a country with an economy dominated by the micro, small and medium enterprises (MSMEs) sector. MSMEs play a key role in creating jobs, diversifying the economy, and increasing the equitable distribution of income (Balqis & Sartono, 2020; Purnama et al., 2019). In Aceh Province, one of the regions with promising economic growth potential, MSMEs are also the backbone of the local economy (Purnama et al., 2019; Tolstoy et al., 2021). In the midst of the various economic potentials that Aceh has, West Aceh District stands out as one of the areas with quite rapid development of MSMEs

MSMEs in West Aceh cover various sectors such as trade, agriculture, fisheries, crafts and services. With an increasing number of MSMEs, their potential contribution to economic growth and job creation is even greater. However, behind this potential, MSMEs also face various challenges, especially in terms of access to finance to develop their businesses (Jayani, 2021; Kusuma et al., 2022).

Financing is one of the key factors affecting the continuity and growth of MSMEs. Despite having a strategic role in the economy, MSMEs often face difficulties in obtaining access to adequate financing from financial institutions. Some of the obstacles faced by MSMEs in accessing financing include complicated collateral requirements, time-consuming filing procedures, and high interest rates (Kusuma et al., 2022)

One of the objectives of economic development in West Aceh is to increase the accessibility of financing for MSMEs. Financial institutions, such as banks, cooperatives and microfinance institutions, act as intermediaries in providing financing services for MSMEs. However, despite efforts by the government and financial institutions to increase access to finance, challenges still persist.

It is in this context that an analysis of MSME financing with financial institutions in West Aceh becomes important. This article aims to present a comprehensive picture of MSME financing in this region, by focusing on the role and contribution of financial institutions in providing financing services that suit the needs of MSMEs. The analysis will cover various aspects, such as the amount of financing disbursed, the types of financing products offered, the requirements applied, and the interest rates charged.

By analyzing the latest data and information, this article will also try to identify the obstacles faced by MSMEs in accessing financing from financial institutions in West Aceh. It is important to understand the existing obstacles so that corrective steps and appropriate solutions can be formulated. Various stakeholders, including local

governments, financial institutions, MSME associations, and society as a whole, can use the results of this analysis to formulate policies and programs that are more effective in supporting MSME development.

Of course, it cannot be denied that the role of local government is very important in creating a conducive environment for the development of MSMEs. Therefore, this article will also highlight the efforts that have been made by the West Aceh local government in supporting MSME financing. Providing fiscal incentives for financial institutions investing in the MSME sector, simplifying procedures and regulations to facilitate access to finance, and promoting financial literacy among MSMEs are some of the steps the government has taken (Hamza & Agustien, 2019).

In addition, this article will also explore the potential for implementing innovative solutions to increase access to finance for MSMEs in West Aceh. In the digital era and the development of financial technology (fintech), there is an opportunity to develop a technology-based financing model that can make it easier for MSMEs to apply for loans and access financial services. (Andriariza & Agustina, 2020; Yudha et al., 2020). In addition, a risk-based financing approach can also be applied to provide opportunities for MSMEs that are performing well but lack sufficient collateral.

Analysis of MSME financing in West Aceh must also pay attention to the potential of the economic sector that needs special attention. For example, the agricultural and fisheries sectors have a strategic role in the regional economy, but often face constraints in accessing adequate financing to develop their businesses. Therefore, this article will provide a specific overview of financing in these sectors and potential solutions that can be implemented (Maghfiroh & Rahmawati, 2021; Yusvita Aprilyan et al., 2022).

By formulating a comprehensive analysis of MSME financing in West Aceh, this article aims to provide valuable insights for all stakeholders. With a better understanding of the existing constraints and potential, it is hoped that strategic steps can be formulated and implemented to increase access to finance for MSMEs in this region. This will have a positive impact on sustainable economic growth, increase in people's welfare, and create a more inclusive and competitive business environment.

## **B. Research Methods**

1. Type of Research:

This research is a quantitative research conducted to analyze the relationship between Small Micro Enterprises (SMEs) and financial institutions regarding accessibility and the impact of the COVID-19 pandemic on loan repayments.

## 2. Data Source:

The data used in this study are primary in nature and were obtained directly from 100 micro and small businesses located in West Aceh. The primary data used includes qualitative and quantitative aspects.

## 3. Data Collection Techniques:

Data collection was carried out through a survey using a questionnaire developed to collect information about the relationship between SMEs and financial institutions

With the right research method, it is hoped that this research can provide valuable insights to support the development and growth of the SME sector and increase understanding of the relationship between MSMEs and financial institutions.

## Data Analysis Models

The analysis model used is logistic regression. Logistic regression is a part of the regression analysis that is used when the dependent (response) variable is a dichotomous variable (Purhadi & Fathurahman, 2021).

The model used in logistic regression is:

$$\text{Log} \frac{p}{1-p} = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_k X_k$$

where  $p$  is the probability that  $Y = 1$ , and  $X_1, X_2, X_3$  is the independent variable, and  $\beta$  is the regression coefficient.

## The binary logit models

This logit model produces probabilities depending on the observed variables, namely  $X_1, X_2$  and so on. These variables are multiplied by the coefficients  $b_1, b_2$  and so on. The purpose of estimation with this model is to find the best value for each coefficient. If the coefficient of a variable is positive, it means that the lower the value of the variable is related to the higher the probability that  $Y=0$ ; in other words, the higher the value of a variable means the higher the probability  $Y = 1$

The model used in this study is as follows:

$$\text{ALK} = b_0 + b_1 \text{Cv} + b_2 \text{KPSC} + b_3 \text{MS} + b_4 \text{Ag} + b_5 \text{SB} + e$$

$$\text{Cv} = \text{covid-19}$$

$$\text{KPK} = \text{Credit Refund Constraints}$$

MS = Own Capital

AG = Anxiety

CB = Interest rate

### C. Results and Discussion

#### 1. Binary Logit Model Analysis

Based on the analysis using the binary logit model, the results can be presented in table 4.1 below:

table 4.1 binary log model

Variables	coefficient	Prob.
C	-0.326342	0.5625
Economic conditions	-0.391709	0.0231
Return Constraints	0.658254	0.0082
Owner's equity	-1,771,670	0.0921
Graceful	0.840501	0.0593
Interest rate	-1,847,789	0.0147
<hr/>		
Classification Power	$\Sigma$ observation	%
Access	82,86	82.86
Non-access	21.51	17.14
Total	100	100

Source: Primary data processed in 2022

The binary logit equation model with the ratio of the access variable for SMEs and selected financial institutions based on the EVA indicator has an access group classification of 82.86 and non-access 21.51 or 82.86 and 17.14 percent respectively.

In the binary logistic regression results table, an analysis is performed to predict the possibility of access or non-access to an entity based on several predictor variables. In this analysis, the response variables (the dependent variables) are "Access" or "Non-access" categories, while the predictor variables (independent variables) consist of:

1. Economic condition: This variable reflects the economic condition of an entity. A negative coefficient (-0.391709) indicates that the worse the economic conditions, the lower the probability of access. The relatively low

- probability (0.0231) indicates that this variable has a significant influence on the prediction of the probability of access.
2. Return Constraints: This variable reflects the constraints or obstacles in the return process. The positive coefficient (0.658254) indicates that the greater the return constraint, the higher the probability of access. The low probability (0.0082) indicates that this variable has a significant effect on the prediction of the probability of access.
  3. Own Capital: This variable reflects the amount of capital owned by the entity. The very negative coefficient (-1,771,670) indicates that the greater the equity, the lower the probability of access. Probability (0.0921) which is relatively low indicates that this variable has a significant influence on the prediction of the possibility of access.
  4. Grace: This variable reflects the level of quality or superiority of an entity. The positive coefficient (0.840501) indicates that the higher the degree of grace, the higher the probability of access. The relatively low probability (0.0593) indicates that this variable has a significant influence on the prediction of the probability of access.
  5. Interest rate: This variable reflects the prevailing interest rate. The highly negative coefficient (-1,847,789) indicates that the higher the interest rate, the lower the probability of access. The low probability (0.0147) indicates that this variable has a significant influence on the prediction of the probability of access.

The low probability (0.0125) indicates that this variable has a significant influence on the prediction of the probability of access. In classification analysis, model classification power is measured through accuracy. In the table, the classification power for the "Access" category is around 82.86%, which means that the model predicts about 82.86% of observations correctly. However, the classification power for the "Non-access" category is only around 17.14%, indicating an unbalanced classification problem where the model tends to be better at predicting the "Access" category than "Non-access".

There are several theories that can be linked to provide further understanding of the factors that influence the likelihood of access or non-access in the context of the analysis. Economic Theory:

1. (Purnama et al., 2019; Russiadi; Novalina & Sembiring, 2017) Economic theory can explain the relationship between variables of economic conditions, own capital, interest rates, and access. According to economic theory, adverse economic conditions can lead to decreased access because entities or individuals may face financial difficulties or limited access to resources. Large equity may indicate strong financial capability, but a significant negative result on the coefficient may indicate that too much equity may lead to a dissipation of funds, reducing the likelihood of access. High interest rates can make it difficult for entities to raise funds and repay loans, which can affect the likelihood of access. All of this corresponds to the coefficients and probabilities found in the analysis results.
2. (Mulyawan, 2017; Rahman et al., 2021; Rambe & Herlambang, 2021) Financing and Financial Theory: Financing and financial theory can be used to explain the effect of return constraints on access possibilities. According to this theory, a greater return constraint can lead to a higher level of risk for lenders, which can lead to lower loan availability or more stringent loan terms. Therefore, high return constraints can contribute to a decrease in access probability and according to the coefficients and probabilities found in the analysis results.

Risk Management Theory:

3. (Mulyawan, 2017; Rahman et al., 2021; Setyarto et al., 2020) Risk management theory can explain the influence of collateral, interest rates, and usury variables on the possibility of access. A high level of grace can reflect a lower level of risk, thereby increasing the likelihood of access. High interest rates can lead to higher credit risk, which can affect access possibilities. The presence of riba in transactions can increase the risk and can lead to a decrease in the possibility of access. The results of the analysis, which reflect a positive relationship with collateral and a negative

relationship with interest rates and usury, are consistent with risk management theory.

4. Unbalanced Classification Theory: The results of the analysis show an unbalanced classification problem, where the model tends to be better at predicting the "Access" category than "Non-Access." Unbalanced classification theory states that an imbalance in the class distribution in the training data can cause bias in the model. Therefore, it needs to be overcome by techniques such as oversampling, undersampling, or the use of appropriate classification evaluation methods such as sensitivity, specificity, or Area under the ROC Curve (AUC).

#### **D. Conclusion**

Poor economic conditions can lead to decreased access, whereas high returns constraints can increase the likelihood of access. Large own capital, although it contributes to financial strength, it can reduce opportunities for access. On the other hand, a high degree of grace leads to increased access possibilities. Interest rate and usury variables have a significant influence on access prediction. High interest rates make it difficult for entities to raise funds and can hinder access. However, keep in mind that the results of the analysis show an unbalanced classification problem. The model tends to be better at predicting the "Access" category than "Non-Access." Therefore, further efforts are needed to improve model performance by using oversampling or undersampling techniques.

Binary logistic regression analysis provides insight into the factors that influence the likelihood of access or non-access. However, these results should be interpreted with caution and further research is needed to validate these findings in a broader and more complex context.

#### **BIBLIOGRAPHY**

Andriariza, Y., & Agustina, L. (2020). DEVELOPMENT AND CHALLENGES OF THE INDONESIAN FINANCIAL TECHNOLOGY INDUSTRY IN THE DIGITAL ECONOMY ERA. *Telematics and Information Society: Journal of Information and Communication Technology Research*, 11(2). <https://doi.org/10.17933/mti.v11i2.190>



- Balqis, WG, & Sartono, T. (2020). MICRO WAKAF BANKS AS A MEANS OF EMPOWERMENT IN MICRO, SMALL AND MEDIUM ENTERPRISES. *JURISDICTION*, 10(2). <https://doi.org/10.18860/j.v10i2.7380>
- Hamza, LM, & Agustien, D. (2019). The Effect of the Development of Micro, Small and Medium Enterprises on National Income in the MSME Sector in Indonesia. *Journal of Development Economics*, 8(2). <https://doi.org/10.23960/jep.v8i2.45>
- Jayani, HD (2021). The Contribution of MSMEs to the Economy Continues to Increase. *Katadata*.
- Kusuma, M., Narulitasari, D., & Nurohman, YES (2022). FINANCIAL INCLUSION AND FINANCIAL LITERACY ON THE PERFORMANCE AND SUSTAINABILITY OF MSMEs IN DISOLO RAYA. *Among Makarti*, 14(2). <https://doi.org/10.52353/ama.v14i2.210>
- Maghfiroh, A., & Rahmawati, L. (2021). Development of Umkm through the Participation Strategy of the Office of Cooperatives and Micro Enterprises of Jombang Regency. *Journal of Research Innovation*, 2(5).
- Mulyawan, S. (2017). Setia Mulyawan Financial Management pdf. In 1-48.
- Purhadi, P., & Fathurahman, M. (2021). A logit model for bivariate binary responses. *Symmetry*, 13(2). <https://doi.org/10.3390/sym13020326>
- Purnama, IKE, Ariastita, PGA, Handadayeni, KDME, & Nugroho, SMS (2019). Application of E-Commerce to Strengthen MSMEs Based on the One Village One Product Concept in Karangasem Regency. *SEWAGATI*, 2(2). <https://doi.org/10.12962/j26139960.v2i2.4612>
- Rahman, MIF, Nurwahidin, N., & Adnan, N. (2021). Analysis of the Cash Waqf Linked Sukuk (CWLS) Model as a Financing Instrument for the Recovery of the Impact of the Covid-19 Pandemic. *Journal of Islamic Community Guidance*, 14(1). <https://doi.org/10.37302/jbi.v14i1.343>
- Rambe, AYF, & Herlambang, S. (2021). Sharia Financial Management. In *Qusqazah* (Vol. 2, Issue 2).
- Russiadi; Novalina, A., & Sembiring, R. (2017). THE EFFECTIVENESS OF THE MONETARY POLICY TRANSMISSION MECHANISM THROUGH THE INTEREST RATE CHANNEL ON INDONESIA'S ECONOMIC STABILITY. *JEpa*, 2(2).
- Setyarto, A., Yogyarti, & Ghani, YES (2020). Analysis of the Implementation of Cico Resort Operational Risk Management in Facing the Covid-19 Outbreak. *Journal of Tourism Studies*, 2(2).
- Tolstoy, D., Nordman, ER, Hånell, SM, & Özbek, N. (2021). The development of international e-commerce in retail SMEs: An effectuation perspective. *Journal of World Business*, 56(3). <https://doi.org/10.1016/j.jwb.2020.101165>
- Yudha, ATRC, Amiruddin, AR, Hilmi, AF, Kaffah, AF, Fauzi, FN, Evarianti, I., Maghfiroh, L., Nadia, N. El, Nurmanda, PS, Rohmah, PAE, Rahayu, RD, Ningtyas, RD, Rahmadhani,

SS, Medina, SH, Solikhatin, SI, & Nadhifa, Z. (2020). *Sharia Fintech: Theory and Application*. Scopindo Media Pustaka.

Yusvita Aprilyan, Elin Erlina Sasanti, & Isnawati. (2022). THE EFFECT OF E-COMMERCE ON INCREASING INCOME OF MICRO, SMALL AND MEDIUM ENTERPRISES (MSMEs) IN LOMBOK BARAT DISTRICT. *Accounting Student Research Journal*, 2(2). <https://doi.org/10.29303/risma.v2i2.216>