Does Asymmetric Information Perception Relate to MSMEs' Access to Banking Credit?

Syti Sarah Maesaroh[1](✉), Agus Rahayu[1], Lili Adi Wibowo[1], Alfira Sofia[1], and Risma Rahatuningtyas[2]

[1] Faculty of Economic and Business Education, Universitas Pendidikan Indonesia, Bandung, Indonesia
sytisarah@upi.edu

[2] Tasikmalaya Campus, Universitas Pendidikan Indonesia, Tasikmalaya, Indonesia

Abstract. One of the problems faced by MSMEs in Indonesia is related to finance. MSMEs experience obstacles, especially in obtaining loan funds for business operations. This study analyzed the factors that determine MSMEs' access to formal credit from banks. The research method used was path analysis to test a theory-based model of causal, direct, and indirect relationships among financial literacy, the proportion of owned capital, use of fintech, asymmetric information perception, and access to bank credit. The results showed that the asymmetric perception of information positively and significantly mediated the relationship between the effect of financial literacy and the proportion of own capital on access to bank credit. Meanwhile, asymmetric information perception did not affect the mediation of the relationship between fintech use and access to bank credit. This study showed that reducing information asymmetry can be done to increase MSME access to credit.

Keywords: Credit · Financial · Loan · MSMEs

1 Introduction

Micro, small, and medium-sized enterprises (MSMEs) are an important part of the world's growing economies; they are critical to ensuring long-term growth, job creation, income inequality reduction, poverty alleviation, and so on [1]. MSMEs have been identified as critical to economic development in both developed and developing countries. MSMEs, on the other hand, face numerous challenges to their expansion and growth [2]. According to the literature, a lack of finance is a significant constraint that SMEs face in any region of the world [3], as they require financial resources that match their characteristics to fill the financing gap [4]. According to the findings, the main impediment to the development of MSMEs in Indonesia is a lack of access to finance. Access to finance is an important factor in MSMEs' ability to compete in global markets [5].

Access is defined as providing customers with convenient and responsible service delivery at an affordable cost, allowing financially insecure customers to use formal financial services instead of only informal financial services [6]. Access to credit from

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banking institutions is a common issue in the field. Making it easier for people who do not have access to formal financial services to use them is now a top priority in all countries and regions [7, 8].

Several recent studies have been conducted to determine the factors influencing MSMEs' access to bank credit. Access to financial resources is one of the most significant challenges that MSMEs, which are typically family businesses, face [9, 10]. Access to finance is influenced not only by borrowers' perceptions of default risk and uncertainty, but also by lenders' perceptions of default risk and uncertainty [11]. Some evidence suggests that limited access to finance can occur when lenders and borrowers have asymmetric information and unequal information is available to both parties, resulting in adverse choices and moral hazard problems [12, 13]. Financial power information asymmetry is greater in developing countries than in developed countries, increasing firms' perceived risk [14].

According to [15], the characteristics of MSMEs increase the risk of default, making them undesirable borrowers for financial institutions. Some researchers also stated that the influence of business actors' resources is both tangible and intangible. The capital structure is one of the tangible resources that affects SMEs' financial access. It was also revealed [16] that small businesses face more barriers to credit in developing countries than large businesses. According to [17], many MSMEs around the world have significant financial needs but do not apply for credit. Several studies have found that firm characteristics, rather than industry factors, determine capital structure [18]. According to [19, 20], small firms perceive debt as an expensive resource due to the costs of information asymmetry and credit services. As a result, small businesses avoid debt and only use it in emergency situations.

Another factor affecting capital structure is the availability of alternative financial sources for obtaining external credit, one of which is fintech. Fintech is a practical, efficient, convenient, and cost-effective way to access financial services. The growing number of Indonesians who use this service makes the technology popular among users, and the dominance of fintech use is increasing. According to [21], fintech loans enable MSMEs to increase assets, employment, and sales in comparison to MSMEs that are denied loan applications. MSMEs use fintech debt to replace long-term bank debt. Pinochet et al. [22] conducted another study that yielded different results. The use of fintech in MSMEs has no discernible effect on the number of bank loan applications. This is due to the fact that the allocation of fintech loans is used for consumption. MSMEs continue to require loan funds from other sources to meet their operational requirements.

The managerial competence of business actors is an intangible resource related to MSME credit access [23]. One of the critical management competencies in business and MSME development has been identified as financial literacy. The ability to understand key financial concepts and demonstrate good financial management skills by making sound financial decisions to improve one's economic situation is referred to as financial literacy [28]. Fatoki [29] believes that financially literate MSME owners make better financial decisions and have less mismanagement than their non-financially literate counterparts.

In contrast to the preceding study, Lyons et al. [24] found that financial literacy has no significant effect on people who are vulnerable to fraud from non-formal financial institutions. Clients with low financial literacy may be hesitant to purchase more complex financial products like insurance because they do not fully understand how they work [25]. Discovered a lack of financial literacy in India and Indonesia. They discovered that financial literacy had no effect on the creation of bank accounts. Financial subsidies had a significant and positive impact on demand for bank accounts. Furthermore, Cole et al. [26] demonstrated that financial literacy can boost individuals' confidence in participating in financial markets. People are generally unable to repay loans because they lack adequate financial literacy, which affects their ability to accurately calculate interest rates, the cost of borrowing requested, and the misuse of funds. As a result, they will cease borrowing [25].

As a result, this study bridges the gap between tangible and intangible resources owned and access to bank credit. There is inconsistency in the effect of the proportion of own capital, the use of fintech, and financial literacy on access to MSME banking credit, according to research. The Resources Based View Theory (RBVT) underpins this investigation. This theory incorporates the company's existing organizational resources (tangible and intangible) in order to facilitate the creation of strategic value while also achieving effectiveness and efficiency [27]. According to this theory [28, 29], intangible resources outperform tangible resources in terms of performance.

2 Methods

A quantitative-descriptive approach was used in this study. The first step was to identify the variables and indicators used in the study. Variables and indicators were obtained through literature searches based on previous research. The preparation of the research model is the second stage. The hypothesis was developed using previous research studies. Figure 1 depicts the study's relationship chart between variables and hypotheses.

The study will provide answers to the following research questions: 1. Do X1, X2, and X3 have an effect on Y? 2). Do X1, X2, and X3 have an effect on Z via Y? 3). Does Y influence Z? Two research equations were compiled based on the model, namely:

$$\text{Model 1}: Y = 1X1 + 2X2 + 3X3 + e1 \tag{1}$$

$$\text{Model 2}: Z = 4Y + e2 \tag{2}$$

The third stage was data collection. The data used was secondary data from the Central Statistics Agency 2020 in the form of a profile report of Indonesian MSMEs in 2020. The information covers 23 different types of MSME industries in Indonesia. The fourth stage was data processing and analysis. Path analysis was used to test theory-based models of causal, direct, and indirect relationships between two or more causal variables and one or more effect variables in data analysis. Exogenous variables' direct and indirect causal effects on endogenous variables were investigated using path analysis. As a result, at least two models were examined in path analysis, in which SPSS software was used to process data.

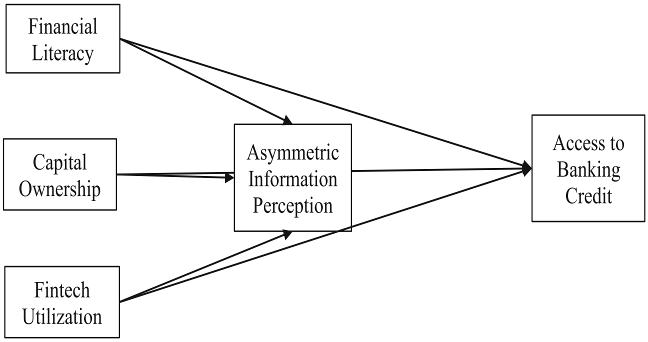

Fig. 1. Research Model Framework

Table 1. Model Suitability Test.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson	sig	e
Model 1	.791a	0.626	0.567	3.636	2.407	<.001b	0.374
Model 2	1,000a	1,000	1,000	0.005	2.414	<.001b	0.001
W			0.001				

3 Results and Discussion

3.1 Model Fit Test

The classical assumption was tested before testing the model's suitability to ensure there was no correlation between the variables in the study. According to the objective data, there is no correlation coefficient between variables with values greater than 0.80. The sample correlation matrix is thus a positive-definite matrix. That is, the assumption is that the sample dataset does not have a multicollinearity problem.

The purpose of testing the model's suitability is to determine whether or not the model can be generalized to the population. Table 1 displays the results of model testing. The R2 adj value shows that the adjusted R2 value increased significantly, from 0.567 to 1,000 (p = 0.001; 0.05). This explains how the model can estimate the population covariance and correlation matrix, which is identical to the sample covariance and correlation matrix. In other words, the outcomes of estimating the model's parameters can be used to explain how people can obtain MSME loans.

3.2 Hypothesis Test

Seven hypotheses were generated by the two models tested in the study. Three hypotheses test the effect of financial literacy, own capital ownership, and use of fintech on perceived information asymmetry; three hypotheses test the effect of financial literacy, own capital ownership, and use of fintech on access to bank credit through perceived information asymmetry; and one hypothesis tests the effect of perceived information asymmetry on access to bank credit. Table 2 displays the results of hypothesis testing.

Table 2 shows that the coefficient values for the seven hypotheses proposed have varying 5% significance levels. The model equation depicts how each variable affects the dependent variable.

$$\text{Model 1}: \mathrm{Y} = -0.3759^{**}\mathrm{X1} - 0.6923^{**}\mathrm{X2} - 0.00234\mathrm{X3} + 0.374 \tag{3}$$

$$\text{Model 2}: \mathrm{Z} = -0.9689^{**}\mathrm{Y} + 0.001 \tag{4}$$

Every organization has a variety of resources (tangible and intangible) that affect its performance and ability to maintain its competitive advantage and viability [30]. The findings of Arzubiaga et al. [11] shed more light on how access to financial resources is influenced by intangible factors such as a family image. Different assumptions are made by different researchers. A firm's family nature either improves or hinders access to financial resources [31]. Financial literacy and the use of fintech are two of the intangible resources owned by MSMEs that affect access to bank credit, according to this study. MSMEs can obtain SME banking credit as a source of funding to help them run their businesses. This is also consistent with research conducted by Teima et al., [32], which states that access to finance and financial management have been identified as the most important factors in determining the survival and growth of MSMEs in many survey businesses.

Twumasi et al. [33] added that access to financial services is an important factor in explaining how financial literacy affects household income. MSMEs are currently underutilized in terms of access to financial services, particularly banking credit [2]. This is due to the difficulties that MSMEs face in obtaining these loans. MSMEs in general struggle to obtain bank credit because their business characteristics render them unbankable. MSMEs face difficulties in increasing external finance because of limitations in owner characteristics, company characteristics, creditworthiness, and collateral [34]. According to the banking sector, low bank credit in Indonesia is also due to bank distrust in providing such credit. The barriers that prevent the two parties from cooperating are trust and guarantees.

Table 2. Hypothesis Testing Results

Path Coef	Standardized Coefficients	t	sig
X1 → Y	−0.376	−2,637	0.008
X2 → Y	0.000	−4.739	0.000
X3 → Y	−0.023	−0.158	0.438
X1 → Z	0.000	−0.658	0.260
X2 → Z	−1,389	−4694.528	0.000
X3 → Z	0.000	0.792	0.219
Y → Z	−0.969	−3080,349	0.000

According to the findings, the perception of information asymmetry hampered access to MSME banking credit. The greater the perception of information asymmetry toward banking, the more difficult it is for MSME banks to obtain credit. MSME perceptions of bank credit include procedural difficulties, high-interest rates, rejected credit proposals, and a lack of interest in using banking services. This follows the statement of [35], which shows that most people, particularly rural residents, refuse to have a savings account or borrow because accessing financial services is complicated, and most financial terms, such as interest rates, treasury bills, fixed deposits, and many others, are misunderstood. The study's findings are also consistent with research conducted in Ghana by [36], which claims that many people have lost trust and confidence in the banking sector as a result of the central bank's efforts to strengthen the banking sector, which resulted in the failure of many local bank financial institutions (e.g., banks, microfinance).

Financial literacy, the proportion of owned capital, and the use of fintech loans were identified as factors that influence the level of perception of information asymmetry. The findings showed that financial literacy and capital ownership both had a significant positive effect (p 0.05) on the perception of information asymmetry, whereas using fintech had no effect on the perception of information asymmetry. Financial literacy is essential in running a business. Financial literacy is defined as the ability to comprehend and apply key financial concepts, as well as to demonstrate good financial management skills by making sound financial decisions in order to improve one's economic situation [37]. As a result, good financial management is critical for the survival and management of SMEs because it provides SME owners with the skills and knowledge required to evaluate financial products and make decisions that are in their best interests.

[19] goes on to argue that people with adequate financial literacy made better financial decisions. According to research, the higher MSMEs' financial literacy, the lower their perception of information asymmetry. According to [38] financial literacy skills encouraged MSMEs to evaluate financial products and make sound decisions. Finance is a critical factor in the management and survival of MSMEs, so good financial management is critical. As a result, good literacy can help to reduce the perception of information asymmetry between banks and SMEs. Twumasi et al. [33] implies that financial literacy boosted individual confidence, which in turn boosted individual trust in obtaining bank credit.

In this study, financial literacy had no effect on access to bank credit. This indicates that although MSMEs have adequate financial knowledge, they are still unable to access bank credit. The study's findings are consistent with research conducted by [39], which explains that financial literacy prepared MSME owners for difficult financial times by reducing risk through strategies such as saving, diversifying assets, and avoiding debt. The presence of good financial literacy causes MSMEs to reduce bank loans in order to reduce financial risk. In addition to risk management, the presence of the second observed variable, namely the proportion of own capital ownership, can explain the lack of influence between financial literacy and access to bank credit. The capital proportion had a significant negative impact on perceptions of information asymmetry and access to bank credit. The greater the proportion of one's own capital, the lower the perception of asymmetry and access to bank credit. MSMEs do not require loans because they have adequate capital. MSMEs that do not require loans do not consider administrative difficulties, procedures, interest rates, and so on when conducting business operations.

The capital structure of a company is related to its liquidity and leverage. The ability of a company to meet its short-term obligations at maturity is referred to as liquidity, whereas leverage is the use of borrowed funds or capital to increase profits in a business. This loan will help to build equity and will be used for business operations. Hacini et al. [40] discovered a link between liquidity and leverage in MSMEs. The findings indicate a negative relationship between liquidity and leverage because MSMEs that generate more liquidity can meet their short-term obligations without the need for loans.

Evidence suggests that transaction costs vary with the scale of operations, and that transaction costs are negatively related to firm size. Small-sized businesses, on the other hand, face high transaction costs and, as a result, borrow less [41]. Large corporations, on the other hand, have easy access to credit because they have large assets and can generate consistent profits [40]. MSMEs typically use their profits to fund their operations. Similarly, according to the pecking order theory, firms prefer internal capital and avoid debt. As a result, MSMEs with high profits tend to use less debt because they have sufficient funds from other sources [42].

The third factor identified in the study was MSMEs' use of fintech. The findings showed that it had no effect on perceptions of information asymmetry or access to bank credit. Fintech is a popular loan source at the moment. Fintech is an alternative for MSMEs that are generally not bankable due to its ease of access and quick procedures. The use of fintech causes MSMEs to disregard the requirements and procedures for obtaining bank credit. In addition, fintech and financial had a positive relationship with financial inclusion. Financial inclusion will occur when policies are capable of providing financial services to a larger portion of the population in an efficient and sustainable manner [43].

4 Conclusion

Reducing the perception of information asymmetry that exists between MSMEs as potential debtors and banks as potential creditors is needed to increase access to MSME banking credit. It is possible to reduce asymmetric information by increasing MSMEs' financial literacy. Actual steps can be taken to socialize with MSMEs in terms of administration, procedures, interest rates, collateral, and so on. Access to MSME credit is also limited due to the ownership of own capital. MSMEs are typically small family businesses, so the high proportion of their capital prevents them from seeking bank loans.

References

1. Uddin, M. A., Jamil, S. A. & Khan, K. Indian MSMEs amidst the COVID-19 Pandemic: Firm Characteristics and Access to Finance. Acad. J. Interdiscip. Stud. 11, 71–81 (2022).
2. Sarah Maesaroh, S. Determinants of Loan Access towards Financial Performance in MSMEs. Conf. Ser. 3, (2021).

3. Yingjun, Z., Jahan, S. & Qamruzzaman, M. Access to finance and legal framework in female entrepreneurship development in Bangladesh: The mediating role of self-leadership. Asian Econ. Financ. Rev. 11, 762–780 (2021).
4. Nemati, A. & Muhammad, J. Determinants of capital structure in Iran. Life Sci. J. 9, (2012).
5. Najib, M., Ermawati, W. J., Fahma, F., Endri, E. & Suhartanto, D. Fintech in the small food business and its relation with open innovation. J. Open Innov. Technol. Mark. Complex. 7, (2021).
6. Kurnia, S. & Chartady, R. THE EFFECT OF FINANCIAL TECHNOLOGY (FINTECH) ON INCLUSIVE FINANCIAL DEVELOPMENT ON MSMEs. … Int. Semin. … 615–625 (2022).
7. Nar, M. The relationship between credit default swaps and net portfolio investments: The case of turkey. Univers. J. Account. Financ. 9, 252–261 (2021).
8. Lyons, A. C., Grable, J. & Zeng, T. Impacts of Financial Literacy on the Loan Decisions of Financially Excluded Households in the People's Republic of China. SSRN Electron. J. (2019) https://doi.org/10.2139/ssrn.3370021
9. Cihak, M., Mare, D. S. & Melecky, M. The Nexus of Financial Inclusion and Financial Stability: A Study of Trade-Offs and Synergies. The Nexus of Financial Inclusion and Financial Stability: A Study of Trade-Offs and Synergies (2016). https://doi.org/10.1596/1813-9450-7722
10. Mandl, I. Overview of Family Business Relevant Issues Contract No . 30-CE-0164021/00-51 Final Report. 1–175 (2008).
11. Arzubiaga, U., De Massis, A., Maseda, A. & Iturralde, T. The influence of family firm image on access to financial resources in family SMEs: a signaling theory perspective. Rev. Manag. Sci. (2022). https://doi.org/10.1007/s11846-021-00516-2.
12. Macha, J. J., Chong, Y. L. & Chen, I. C. Smallholder farmers' intention to adopt microfinance services in rural areas of Tanzania - A behavioural study. Int. J. Bus. Innov. Res. 19, (2019).
13. Moro, A., Fink, M. & Maresch, D. Reduction in information asymmetry and credit access for small and medium-sized enterprises. J. Financ. Res. 38, (2015).
14. Eldomiaty, T. I. Determinants of corporate capital structure: Evidence from an emerging economy. Int. J. Commer. Manag. 17, (2008).
15. Ayadi, R., Gadi, S., Technical, M. & No, R. Access by MSMEs to Finance in the Southern and Eastern Mediterranean : What role for credit guarantee schemes ? Ceps (2013).
16. Kuntchev, V., Ramalho, R., Rodríguez-Meza, J. & Yang, J. S. What Have We Learned from the Enterprise Surveys regarding Access to Credit by SMEs? Policy Research Working Papers (The World Bank, 2013). https://doi.org/10.1596/1813-9450-6670.
17. Čihák, M. & Demirgüçkunt, A. Rethinking the State's Role in Finance. World Bank Policy Res. Work. Pap. 6400, (2013).
18. Palazuelos, E., Herrero Crespo, Á. & Montoya del Corte, J. Auditing and credit granting to SMEs: an integrative perceptual model. Manag. Audit. J. 35, (2020).
19. Nkundabanyanga, S. K., Kasozi, D., Nalukenge, I. & Tauringana, V. Lending terms, financial literacy and formal credit accessibility. Int. J. Soc. Econ. 41, (2014).
20. Rao, P., Kumar, S. & Madhavan, V. A study on factors driving the capital structure decisions of small and medium enterprises (SMEs) in India. IIMB Manag. Rev. 31, (2019).
21. Eca, A., Ferreira, M. A., Porras Prado, M. & Rizzo, A. E. The Real Effects of FinTech Lending on SMEs: Evidence from Loan Applications. SSRN Electron. J. (2022) https://doi.org/10.2139/ssrn.4035081
22. Liu, H., Lee, Y.-H. & Lee, M.-C. Forecasting China Stock Markets Volatility via GARCH Models Under Skewed-GED Distribution. J. Money, Invest. Bank. 7, 542–547 (2009).
23. Aminu, I. M. & Shariff, M. N. M. Influence of strategic orientation on SMEs access to finance in Nigeria. Asian Soc. Sci. 11, (2015).

24. Lyons, A. C., Grable, J. E. & Zeng, T. Infrastructure, Urbanization, and Demand for Bank and Non-Bank Loans of Household in the People Republic of China. Asian Development Bank Institute (ADBI) Working Paper Series No.767 (2017).
25. Wasiuzzaman, S. Resource sharing in interfirm alliances between SMEs and large firms and SME access to finance: A study of Malaysian SMEs. Manag. Res. Rev. 42, (2019).
26. Cole, S., Sampson, T., & Zia, B. Prices or Knowledge? What drives the demand for financial services in developing countries. Harvard Bus. Sch. Work. Pap. No. 09-117 LXVI, (2011).
27. Barney, J. Firm Resources and Sustained Competitive Advantage. J. Manage. 17, (1991).
28. Anwar, M., Shuangjie, L. & Ullah, R. Business experience or Financial Literacy? Which one is better for opportunity recognition and superior performance? Bus. Strateg. Dev. 3, (2020).
29. Ying, Q., Hassan, H. & Ahmad, H. The role of a manager's intangible capabilities in resource acquisition and sustainable competitive performance. Sustain. 11, (2019).
30. Khan, R. U., Salamzadeh, Y., Kawamorita, H. & Rethi, G. Entrepreneurial Orientation and Small and Medium-sized Enterprises' Performance; Does 'Access to Finance' Moderate the Relation in Emerging Economies? Vision 25, (2021).
31. Steijvers, T. & Voordeckers, W. Private family ownership and the agency costs of debt. Fam. Bus. Rev. 22, (2009).
32. Teima, G. et al. Scaling-Up SME Access to Financial Services in the Developing World. Int. Financ. Corp. (2010).
33. Twumasi, M. A., Jiang, Y., Ding, Z., Wang, P. & Abgenyo, W. The Mediating Role of Access to Financial Services in the Effect of Financial Literacy on Household Income: The Case of Rural Ghana. SAGE Open 12, (2022).
34. Gaudence, M., Patrick, M. & Denys, M. Effects of Financial Literacy on loan Repayment among Small and Medium Entrepreneurs of Microfinance Institutions Case Study of Inozamihigo Umurenge Sacco in Nyaruguru District. IOSR J. Bus. Manag. 20, 19–37 (2018).
35. Andoh, F. K., Nunoo, J., Kwabena, & & Darfor, N. Sustaining Small and Medium Enterprises through Financial Service Utilization: Does Financial Literacy Matter? Journal of Business and Enterprise Development vol. 5 (2015).
36. Owusu-Antwi, G. Impact Of Financial Reforms On The Banking System In Ghana. Int. Bus. Econ. Res. J. 8, (2011).
37. Remund, D. L. Financial literacy explicated: The case for a clearer definition in an increasingly complex economy. J. Consum. Aff. 44, (2010).
38. Al-Thuneibat, A. A., Al-Angari, H. A. & Al-Saad, S. A. The effect of corporate governance mechanisms on earnings management: Evidence from Saudi Arabia. Rev. Int. Bus. Strateg. 26, (2016).
39. Siekei, J., Wagoki, J. & Kalio, A. An assessment of the role of financial literacy on performance of small and micro enterprises: Case of Equity Group Foundation training program on SMEs in Njoro District, Kenya. Bus. Appl. Sci. 1, (2013).
40. Hacini, I., Mohammedi, K. & Dahou, K. Determinants of the capital structure of small and medium enterprises: Empirical evidence in the public works and hydraulics sector from Algeria. Small Bus. Int. Rev. 6, (2022).
41. Hamilton, R. T. & Fox, M. A. The financing preferences of small firm owners. Int. J. Entrep. Behav. Res. 4, (1998).
42. Al-Smadi, M. O. A study of capital structure decisions by SMEs: Empirical evidence from Jordan. Acad. Account. Financ. Stud. J. 23, (2019).
43. Heng, D. & Tok, Y. W. Fintech: Financial Inclusion or Exclusion? IMF Work. Pap. 2022, 1 (2022).