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# Unlocking Sustainability in Informal Micro Enterprises: Capital Access in The Fintech Era

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## ABSTRACT

**Research Originality:** This study offers a unique exploration of how capital access mediates the impact of financial literacy and fintech peer-to-peer (P2P) lending on the sustainability of micro and small enterprises (MSEs) in traditional markets, utilizing SDG-based indicators.

**Research Object:** This study examines the effects of financial literacy and fintech P2P lending on capital access and sustainability of MSEs in traditional markets.

**Research Methods:** The study employed a quantitative approach, utilizing Structural Equation Modeling analysis, using 232 MSEs in Jakarta.

**Empirical Results:** The findings indicate that financial literacy and fintech P2P lending have a positive impact on both capital access and the sustainability of MSEs. However, capital access did not significantly affect the sustainability of MSE or mediate either factor.

**Implications:** The Financial Services Authority (OJK) must enhance legislation protecting MSEs from fintech risks and promote financial literacy. The OJK must coordinate P2P platforms, cooperatives, and MSE offices. Creating an inclusive fintech ecosystem for traditional market MSEs, with microloans and mentorship, is essential for viable financing.

**Keywords:**

financial literacy; financial technology; access to finance; SMEs sustainability; sustainable development goals (SDGs)

**How to Cite:**

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## INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) in Indonesia represent a significant market opportunity for the financial services sector, especially formal financial institutions, to facilitate financing. Nevertheless, most MSMEs face challenges in obtaining funding from traditional financial institutions such as banks. A significant number of MSMEs are unbanked and lack essential documents, such as financial statements, business licenses, and adequate collateral, which are necessary prerequisites for accessing bank loans. Consequently, numerous MSMEs were ensnared by predatory lenders or turned to exorbitant Internet loans for business expansion (Candraningrat et al., 2021). The Indonesian Financial Services Authority (OJK) reported that outstanding online finance, specifically fintech peer-to-peer (P2P) lending, reached IDR 51.46 trillion in 2023, indicating a year-on-year growth of 28.11 percent. Of this total, 38.39 percent was allocated to micro, small, and medium enterprises (MSMEs), with disbursements amounting to IDR 15.63 trillion for individual MSMEs and IDR 4.13 trillion for business organizations. The significant increase in fintech financing illustrates the persistent intermediation role and the substantial demand from the public and MSMEs for more accessible and expedited financial services compared to traditional banks and finance companies (OJK Press Release, 2023).

Numerous micro and small enterprises (MSEs) in traditional markets exhibit low financial literacy. They lack an understanding of fundamental concepts such as cash flow management, loan interest, and working capital budgeting. Inadequate literacy levels hinder entrepreneurs from effectively leveraging financing opportunities, rendering micro and small enterprises in traditional markets susceptible to financial risks and causing them to continue encountering challenges in accessing financial resources due to a lack of comprehension of financial management (Kurniasari et al., 2023). A considerable number of MSMEs with limited financial literacy engage with financial products and services through online loans (Nugraha et al., 2022). However, some MSMEs use these loans for consumption rather than constructive business development. This problem stems from a lack of understanding of the importance of financial management in entrepreneurship. Access to digital financial products, such as online loans, can substantially enhance the financial inclusion of MSMEs if utilized correctly (Nugraha et al., 2022). The integration and collaboration between P2P lending and banks foster favorable trends in business cycle growth, especially in the small business sector (Alshater et al., 2022). The swift expansion of digital financial services, particularly during the COVID-19 pandemic, is a significant factor propelling the adoption of fintech apps, necessitating an understanding of digital finance (Uthaileang & Kiattisin, 2023).

Siddik et al. (2023) demonstrated that fintech and financial literacy are crucial determinants of corporate sustainability success in Bangladesh. Moreover, access to finance has a significant mediating influence on the relationship between fintech adoption and sustainability performance, as well as between financial literacy and sustainability performance. The data indicate that access to finance enhances sustainability performance. Charfeddine et al. (2024), Frimpong et al. (2022), Lontchi et al. (2023), and Masdupi et al. (2024) suggest that financial literacy has a positive influence on financial access


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and enhances the performance of MSMEs. Alharbi et al. (2022) and Kurniasari et al. (2023) demonstrate that financial literacy has a positive influence on financial accessibility, a finding corroborated by Jun and Ran (2024). Digital finance can mitigate financial limitations. According to Meressa (2023), entrepreneurial financial literacy enhances the sustainability of small enterprises in Ethiopia.

Abbasi et al. (2021) investigated the impact of peer-to-peer (P2P) lending on the access to financing of small and medium-sized enterprises. Utilizing a sample of OECD nations from 2011 to 2018, they found that P2P lending enhances the financial accessibility of MSEs. Small and medium-sized enterprise owners or managers can fulfill their liquidity requirements through peer-to-peer lending. Conversely, Doumi et al. (2024) found contrasting results, suggesting that P2P lending does not directly influence financial access. Lontchi et al. (2023) found that fintech has a positive impact on the performance of MSEs in Cameroon. Efendi et al. (2023) indicated that P2P lending has a positive influence on capital access, although it does not significantly affect the sustainability performance of MSEs in Indonesia.

The accessibility of working capital allows MSMEs to enhance their production capacity, create goods, and endure market challenges. Frimpong et al. (2022) and Khan et al. (2021) propose that access to digital finance enhances the performance of MSMEs. Nohong et al. (2021) discovered that funding strategies for working capital and firm investment can enhance entrepreneurial success, as evidenced by periodic increases in sales and profits. Research (Meressa, 2023) demonstrates that access to formal credit funding mediates the relationship between entrepreneurial financial literacy and the sustainability of MSMEs. Alharbi et al. (2022) substantiate the mediating role of capital access, illustrating its favorable influence on the relationship between financial literacy and MSME performance in Saudi Arabia. Masdupi et al. (2024) found that financial access is not a critical determinant of the sustainability of MSEs. However, that capital access may mediate the impact of fintech adoption on the sustainability performance of MSEs (Siddik et al., 2023).

This study examines the role of capital access in mediating the impact of financial literacy and P2P lending on the sustainability of micro and small enterprises in traditional marketplaces, addressing the identified flaws and deficiencies in prior studies. The primary objective of this research is to ensure that micro and small enterprises have the potential for growth and development, particularly in securing funding. Capital access plays a crucial role in the development of SMEs in Indonesia; however, the majority of SMEs face challenges in obtaining financing from conventional financial institutions such as banks. As a result, several micro and small enterprises are ensnared by Internet loans that offer little in terms of conditions yet entail exorbitant interest rates. Consequently, our research aims to provide answers to the challenges faced by MSEs, specifically by developing a model for MSE sustainability that examines the impact of financial literacy and fintech P2P lending on capital accessibility and its effect on MSE sustainability in Jakarta.

This study addresses a deficiency in the current literature (Babajide et al., 2023; Charfeddine et al., 2024; Endris & Kassegn, 2022; Frimpong et al., 2022; Kurniasari et al., 2023; Lontchi et al., 2023; Meressa, 2023; Rizki & Hendarman, 2024) by investigating the impact of financial literacy, fintech P2P lending, and capital accessibility on the performance and sustainability of MSMEs using a novel framework. This study employs distinct indicators compared to other research, using measures that align with the Sustainable Development Goals (SDGs) within the framework of online lending to MSMEs in informal, socially relational, conventional marketplaces. Consequently, this study can be characterized as distinct and novel.

This study is expected to provide theoretical insights that enhance the understanding of the impact of financial literacy and fintech peer-to-peer lending on capital accessibility and the sustainability of micro and small enterprises, particularly within the traditional market sector. The findings of this study are anticipated to establish a basis for MSEs to enhance financial literacy and effectively leverage FinTech. These findings are anticipated to assist fintech service providers in creating products designed for MSE requirements and aid the government in developing more effective financial inclusion and digitalization policies for micro and small enterprises in traditional markets.

## METHODS

This study used a quantitative methodology with a causal framework to achieve its aims. The sample comprised micro and small enterprises in traditional markets in Jakarta, Indonesia. The sample approach employed the calculation formula of Hair et al., which multiplied the number of indicators by a factor of five to ten (Wati, 2021): the minimum sample size was 140, given the 28 questions. This study had a sample size of 232 MSEs in Jakarta that had applied for online loans, distributed among Central, South, West, East, and North Jakarta. The research data were gathered through a survey that employed a questionnaire utilizing a Likert scale, which ranged from "strongly disagree" to "strongly agree," with a scoring system of 1 to 5 (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree).

The research variables are the sustainability of MSE (dependent variable), financial literacy and fintech P2P lending (independent variables), and capital access (intervening variable). Indicators employed to assess the sustainability of MSE include production, sales, and revenue growth, product innovation, consumer happiness, market expansion, and workforce expansion (Babajide et al., 2023; Kurniasari et al., 2023; Masdupi et al., 2024; Meressa, 2023). Financial literacy is assessed using indicators such as general financial knowledge, financial management, asset comprehension, transaction documentation, routine financial reporting, comprehensive financial reporting, and business facilitation (Alharbi et al., 2022; Babajide et al., 2023; Charfeddine et al., 2024; Frimpong et al., 2022; Masdupi et al., 2024). Fintech P2P lending is assessed using metrics such as fund selection, innovation in financial planning, effective fund utilization, comprehension of lending institution technology, fund application, and loan agreements (Lontchi et al., 2023; Masdupi et al., 2024; Wati et al., 2020). Capital access is assessed using measures such as capital magnitude, financing origin, simplicity of fund acquisition, repayment


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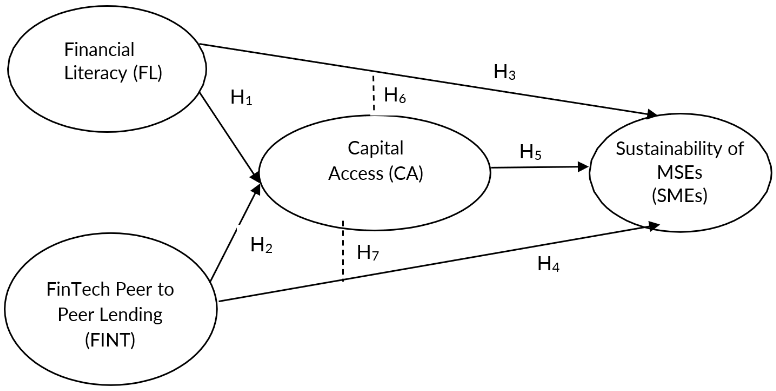
duration, and the ratio of loans to capital (Alharbi et al., 2022; Charfeddine et al., 2024; Masdupi et al., 2024).

Drawing on prior theories and studies, the author developed a conceptual framework as a problem-solving methodology, as illustrated in Figure 1.

**Figure 1. Conceptual Framework**




Source: Author's elaboration (2025)

Figure 1 illustrates the correlation between financial literacy and Fintech P2P lending characteristics, specifically capital access, and their direct and indirect impact on the sustainability of micro and small enterprises. This study examines micro and small enterprises within traditional markets, comprising five direct and two indirect hypotheses for the research model.

Data analysis employed a Structural Equation Model with Smart PLS version 4.1.1.4 software. Data analysis with Smart PLS uses outer and inner model measurements. The outer model was used to test the validity and reliability of the constructs. The inner model was used to test the goodness-of-fit model and perform hypothesis testing. The framework for evaluating this hypothesis is as follows.

Model 1 is used to test hypotheses 1-2

$$CA = \beta_1 FL + \beta_2 FINT + \varepsilon_1 \ldots (Model\ 1)$$

Model 2 is used to test the direct hypotheses (3-5) and indirect hypotheses (6-7)

$$SMEs = \beta_3 FL + \beta_4 FINT + \beta_5 AC + \beta_6 FL\_CA + \beta_7 FINT\_CA + \beta_8 Size + \varepsilon_2 \ldots (Model\ 2)$$

This study employed a control variable, represented by the size of the MSE, which was proxied by the number of employees in the MSE, to assess the robustness of the model. The robustness test was performed by evaluating the model using the MSE size as a control variable (main model) and a model excluding the MSE size (robust model). If the analysis results are consistent, the research model is deemed robust; conversely, if the models are inconsistent, they are considered to be sensitive.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## RESULTS AND DISCUSSION

The research participants were proprietors or managers of micro and small enterprises in traditional markets located in five administrative cities in Jakarta, Indonesia. According to Table 1, the business location group with the highest number of respondents was North Jakarta, with 66 respondents, or 28% of the total 232 respondents. Conversely, the category with the fewest respondents was West Jakarta, with 19 respondents (8% of the total 232 respondents). The predominant respondents in this survey were women, comprising 57% of the 232 participants surveyed. The predominant age group among responders was 20-30 years, with 128 individuals (55%), while those over 30 years of age constituted 41%. The predominant educational attainment among respondents was high school, vocational high school, or Islamic high school (SMA/MA), comprising 153 individuals (66%) of the total respondents.

**Table 1. Respondent Characteristics**

| Characteristics | Amount | Percentage | Characteristics | Amount | Percentage |
|---|---|---|---|---|---|
| **Business Location** | | | **Gender** | | |
| North Jakarta | 66 | 28% | Woman | 132 | 57% |
| West Jakarta | 19 | 8% | Man | 100 | 43% |
| Central Jakarta | 64 | 28% | | 232 | 100% |
| East Jakarta | 35 | 15% | **Education** | | |
| South Jakarta | 48 | 21% | SD/MI | 11 | 5% |
| | 232 | 100% | Junior High School | 26 | 11% |
| **Participant Age** | | | Senior High School | 153 | 66% |
| < 20 years | 9 | 4% | Diploma | 17 | 7% |
| 20-30 years | 128 | 55% | S1 | 25 | 11% |
| > 30 years | 95 | 41% | | 232 | 100% |
| | 232 | 100% | **Business fields** | | |
| Marital | | | Culinary | 163 | 70% |
| Bachelor | 111 | 48% | Fashion | 40 | 17% |
| Marry | 121 | 52% | Souvenir | 7 | 3% |
| | 232 | 100% | Automotive | 14 | 6% |
| **Business Age** | | | Agribusiness | 8 | 3% |
| < 1 year | 37 | 16% | | 232 | 100% |
| 1-3 years | 72 | 31% | **Number of employees** | | |
| 3-5 years | 57 | 25% | Have no employees | 148 | 64% |
| > 5 years | 66 | 28% | 1-2 officers | 45 | 19% |
| | 232 | 100% | 3-5 officers | 25 | 11% |
| | | | > 5 officers | 14 | 6% |
| | | | | 232 | 100% |

Source: Author's calculation (2025)


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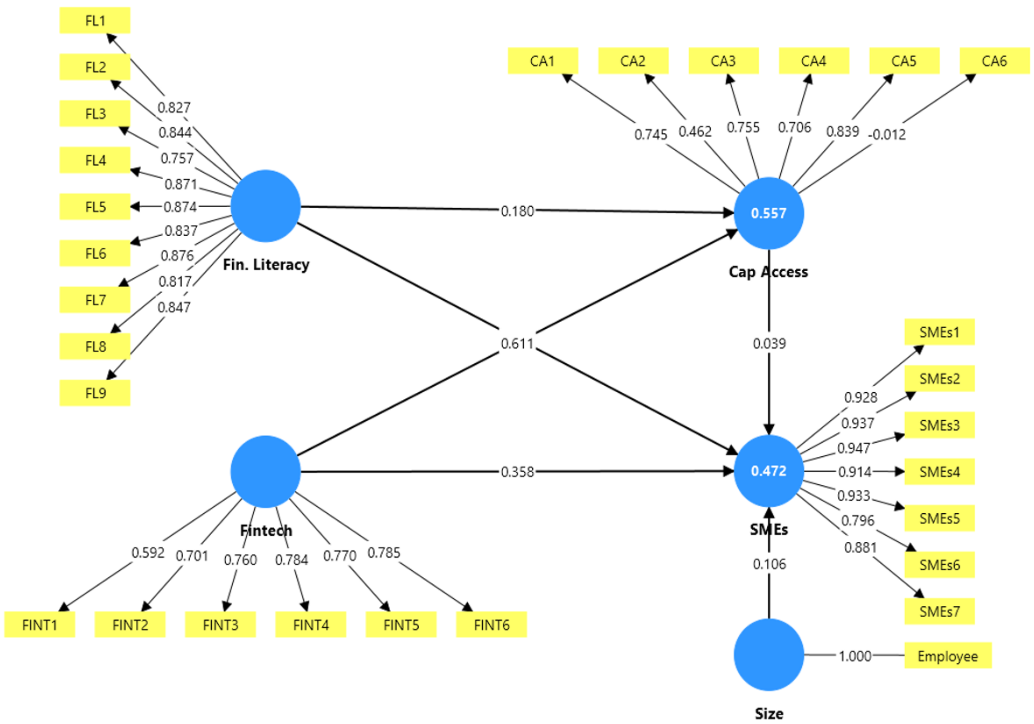
According to Table 1, 111 (48 %) business owners were single, while 121 (52%) were married. The predominant business sector among respondents was the culinary industry, with 163 individuals, or 70% of the total respondents. Conversely, the industry with the fewest participants was agribusiness, including only eight respondents, or 3% of the total. The majority of respondents have operated their firm for 1-3 years, comprising 72 individuals, or 31% of the total respondents. Simultaneously, 37 respondents, nearly 16% of the total, had operated their businesses for less than a year. The majority of respondents, comprising 148 individuals or 64% of the total, do not employ any staff, while a minority, consisting of 14 respondents or 6% of the total, have more than five employees.

External model evaluation in this study employed validity and reliability assessments. An indication is deemed valid if its outer loading value exceeds 0.7. Hair et al. (2019) indicated that outer loading levels ranging from 0.50 to 0.60 remain appropriate during the scale development phase of the research. Variable dependability was assessed using composite reliability and Cronbach's alpha. The subsequent graph illustrates the external loading values in the study model.

**Figure 2. Outer Loading Test Results**




Source: Output Smart PLS 4.1.1.4 (2025)

According to the outer loading assessment (Figure 2), two indicators, CA2 and CA6, were deemed invalid because their outer loading values were below 0.5. Consequently, these two indicators were eliminated from the research model. Table 2 shows the outer loading that excluded markers CA2 and CA6, adhering to an outer loading threshold of 0.5.

According to Table 2, the outer loading values for all indicators related to financial literacy, fintech P2P lending, capital access, and the sustainability of micro and small enterprises in traditional markets exceeded 0.5. This indicates that all indicators are valid and exhibit strong convergent validity, as evidenced by the Average Variance Extracted (AVE) values, which also surpass 0.5, as demonstrated in Table 3.

**Table 2. Outer Loading of Research Indicators**

| Variables | Indicator | Outer Loading | Result |
|---|---|---|---|
| **Financial Literacy (FL)** | FL1 | 0.827 | Valid |
| | FL2 | 0.844 | Valid |
| | FL3 | 0.757 | Valid |
| | FL4 | 0.871 | Valid |
| | FL5 | 0.874 | Valid |
| | FL6 | 0.837 | Valid |
| | FL7 | 0.876 | Valid |
| | FL8 | 0.817 | Valid |
| | FL9 | 0.847 | Valid |
| **Fintech Peer to Peer Lending (FINT)** | FINT1 | 0.586 | Valid |
| | FINT2 | 0.695 | Valid |
| | FINT3 | 0.763 | Valid |
| | FINT4 | 0.787 | Valid |
| | FINT5 | 0.771 | Valid |
| | FINT6 | 0.787 | Valid |
| **Capital Access (CA)** | CA1 | 0.74 | Valid |
| | CA3 | 0.743 | Valid |
| | CA4 | 0.74 | Valid |
| | CA5 | 0.86 | Valid |
| **Sustainability of Micro and Small Enterprises (SMEs)** | SMEs1 | 0.928 | Valid |
| | SMEs2 | 0.937 | Valid |
| | SMEs3 | 0.947 | Valid |
| | SMEs4 | 0.914 | Valid |
| | SMEs5 | 0.933 | Valid |
| | SMEs6 | 0.796 | Valid |
| | SMEs7 | 0.881 | Valid |

Source: Author's calculation (2025)


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**Table 3. Composite Reliability, Cronbach Alpha, and AVE**

| Variable | Cronbach's alpha | Composite reliability (rho_a) | Composite reliability (rho_c) | Average variance extracted (AVE) |
|---|---|---|---|---|
| **Financial Literacy** | 0.947 | 0.949 | 0.956 | 0.705 |
| **Fintech P2P lending** | 0.829 | 0.843 | 0.875 | 0.541 |
| **Capital Access** | 0.774 | 0.789 | 0.855 | 0.597 |
| **Sustainability of MSEs** | 0.963 | 0.969 | 0.97 | 0.822 |

Source: Author's calculation (2025)

The study's dependability was assessed by analyzing the composite reliability and Cronbach's alpha values. A build is deemed dependable if its composite reliability value exceeds 0.70 (Wati, 2021). The composite reliability and Cronbach's alpha values for the independent variables of financial literacy and fintech P2P lending, the mediating variable of capital access, and the dependent variable of MSE sustainability exceeded 0.7 (refer to Table 4), demonstrating that all variables possessed adequate reliability, fulfilling the criteria for Cronbach's alpha and composite reliability.

The inner model test, also known as the structural model test, aims to assess the relationships between the constructs within the study framework. Model determination necessitates evaluation strategies prior to hypothesis testing (Goodness of Fit). The Stone-Geisser Q-square test is used in model determination assessment to evaluate the R-squared value. The dependent variables and the magnitude of the structural route coefficients were also considered in this study. According to Wati (2021), the intended result for endogenous latent variables in a structural model is an R-squared value. A correlation coefficient of ≥ 0.67 indicated strong results, whereas coefficients ranging from 0.19 to 0.33 were deemed weak, and those between 0.33 and 0.67 were classified as moderate. The goodness-of-fit test evaluates the model fit by considering all the coefficients of determination ($R^2$) from the two equations. The initial equation had an $R^2$ value of 0.544, whereas the subsequent equation had an $R^2$ value of 0.717.

The results of the Q-squares calculations are as follows:

$Q^2 = 1 – (1-R_1^2)\ (1-R_2^2)$

$Q^2 = 1 – (1 – 0.552)\ (1 – 0.472)$

$Q^2 = 1 – (0.448)\ (0.528)$

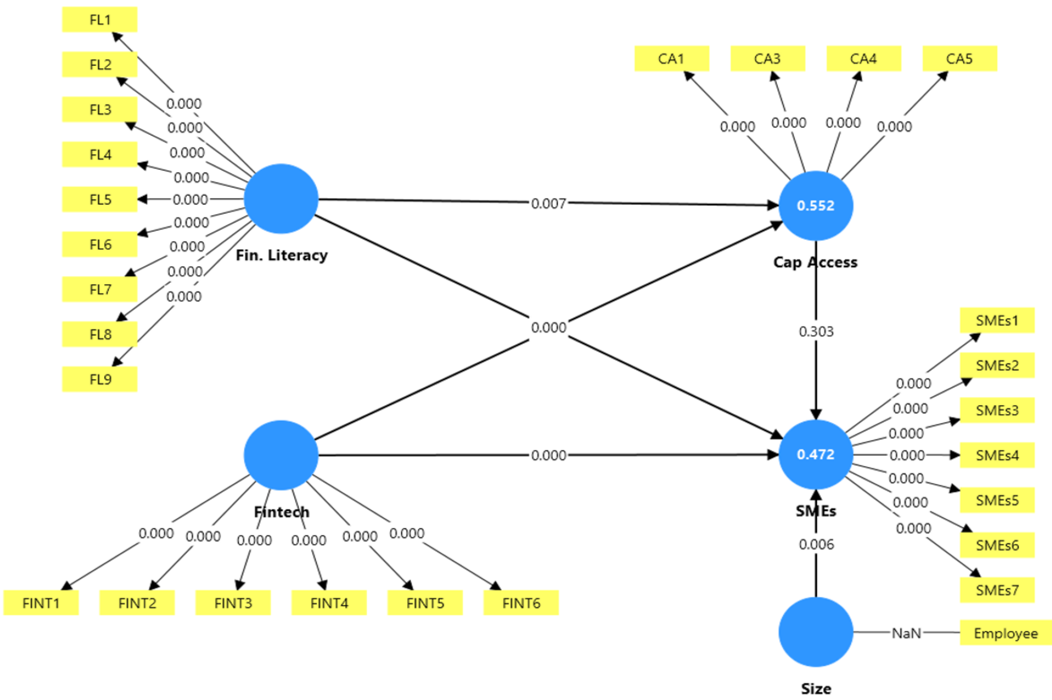
$Q^2 = 1 – (0.2365)$

$Q^2 = 0.763$

The predictive relevance (Q2) was 0.763, indicating that the model explained 76.3% of the total variance in the structural relationships among the four variables examined, with the remaining variance being attributed to other factors. This research model possesses significant strength because of its Q value of above 0.67.

The research model demonstrated substantial predictive validity. The predictive relevance rating of 76.3% indicates that the models account for 76.3% of the variability in the data, meaning that the model explains 76.3% of the information in the data. The remaining 23.7% is attributed to variables external to the research model and errors. The results demonstrate that the PLS model is highly effective, accounting for 76.3% of the total information.

**Figure 3. Outer loading test results**




Source: Output Smart PLS 4.1.1.4 (2025)

This study employs T-statistics and P-values to evaluate the hypothesis. If the P-values are below 0.05, the study hypothesis may be accepted. The outcomes of the research hypothesis test performed using the inner model are shown in Figure 3.

The following is the research model equation based on the results of hypothesis testing:

$$CA = 0.211\ FL + 0.583\ FINT + \varepsilon_1 \ldots (Model\ 1)$$

$$SMEs = 0.329\ FL + 0.358\ FINT + 0.04\ CA + 0.008\ FL_{THAT} + 0.023\ ENDT_{THAT} + 0.108 Size + \varepsilon_2 \ldots (Model\ 2)$$

The results in Table 4 demonstrate that financial literacy and fintech P2P lending significantly enhance MSEs' capital access in traditional markets at the 1% level of significance. Financial literacy and fintech peer-to-peer lending significantly enhance the sustainability of traditional micro and small enterprises at the 1% significance level. Conversely, Capital access does not substantially affect the sustainability of MSEs in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traditional markets. Capital access did not significantly moderate the relationship between financial literacy and fintech P2P lending on the sustainability of micro and small enterprises in traditional markets in Jakarta, Indonesia.

The research model test, based on the R-squared value, yielded a value of 0.552 for the capital access model, indicating that the model exhibits substantial variation. The MSEs' capital access in traditional markets is affected by financial literacy and fintech P2P lending by 55.2%, with the remaining 44.8% influenced by characteristics not included in the research model. The model test for MSE sustainability reveals an R-squared value of 0.472, indicating that the MSE sustainability model accounts for a substantial 47.2% of the variance, which is influenced by financial literacy, fintech P2P lending, and capital access, both directly and indirectly. The remaining 52.8% was attributed to factors beyond the scope of this study's research model. The outcomes of the sensitivity analysis of the research model demonstrate robustness, as evidenced by the consistency of the hypothesis test findings, which remain unchanged upon excluding the control variable of MSE size from the model (robust model).

**Table 4. Hypothesis Testing & Robust Test Results**

| Hypothesis | | Main Model | | | Robust Model | | |
|---|---|---|---|---|---|---|---|
| | | Coeff | T-stat | P value | Coeff | T-stat | P value |
| **Capital Access Model** | | | | | | | |
| H1 | Financial literacy (FL) | 0.211 | 2.439 | 0.007*** | 0.211 | 2.439 | 0.007*** |
| H2 | Fintech P2P lending (FINT) | 0.583 | 7.221 | 0.000*** | 0.583 | 7.221 | 0.000*** |
| $R^2$ | | 0.552 (55.2%) | | | 0.552 (55.2%) | | |
| Adjusted $R^2$ | | 0.548 (54.8%) | | | 0.548 (54.8%) | | |
| **MSE Sustainability Model** | | | | | | | |
| H3 | Financial literacy (FL) | 0.329 | 3.364 | 0.000*** | 0.336 | 3.379 | 0.000*** |
| H4 | Fintech P2P lending (FINT) | 0.358 | 3.689 | 0.000*** | 0.365 | 3.679 | 0.000*** |
| H5 | Capital access (CA) | 0.04 | 0.515 | 0.303 | 0.047 | 0.612 | 0.27 |
| H6 | FL ⟶ CA | 0.008 | 0.473 | 0.318 | 0.01 | 0.561 | 0.287 |
| H7 | FINT ⟶ CA | 0.023 | 0.499 | 0.309 | 0.028 | 0.589 | 0.278 |
| Size (Control variable) | | 0.108 | 2.493 | 0.000*** | - | - | - |
| $R^2$ | | 0.472 (47.2%) | | | 0.461 (46.1%) | | |
| Adjusted $R^2$ | | 0.463 (46.3%) | | | 0.454 (45.4%) | | |
| Predictive relevant ($Q^2$) | | 0.763 (76.3%) | | | 0.759 (75.9%) | | |

Source: Author's calculation (2025)


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**Table 5. Results of f-Square Testing**

| Hypothesis | | Main Model | | Robust Model | |
|---|---|---|---|---|---|
| | | $F^2$ | Results | $F^2$ | Results |
| **Capital Access Model** | | | | | |
| H1 | Financial literacy (FL) | 0.053 | Small | 0.053 | Small |
| H2 | Fintech P2P lending (FINT) | 0.404 | Big | 0.404 | Big |
| **MSE Sustainability Model** | | | | | |
| H3 | Financial literacy (FL) | 0.103 | Small | 0.106 | Small |
| H4 | Fintech P2P lending (FINT) | 0.092 | Small | 0.093 | Small |
| H5 | Capital access (CA) | 0.001 | Weak | 0.002 | Weak |
| Size (Control variable) | | 0.021 | Small | | |

Source: Author's calculation (2025)

The F-square test quantifies the extent to which the exogenous latent variable affects the endogenous latent variables. The f-square serves as a measure of the strength of influence: it is considered weak if the result is <0.02, moderate if >0.02, medium if >0.15, and large if >0.35. According to Table 5, the F-statistic value indicating the impact of financial literacy on capital access and the sustainability of micro and small enterprises (MSEs) is minimal, whereas the f-square value representing the effect of fintech peer-to-peer (P2P) lending on capital access is substantial; however, its influence on the sustainability of MSEs in traditional markets is negligible. Concurrently, the impact of capital accessibility on the sustainability of micro and small enterprises is minimal. The F-square test results indicate that fintech P2P lending plays a pivotal role in facilitating capital access for MSEs in traditional markets in Jakarta.

The results of the hypothesis testing indicate that financial literacy has a significant impact on capital access for micro and small enterprises (MSEs) in traditional markets. This study supports both Financial Literacy Theory (Lusardi & Mitchell, 2011) and Capital Accessibility Theory (Beck & Demirguc-Kunt, 2006). The empirical research demonstrates that financial literacy is not just theoretical knowledge; it is also a strategic asset (Barney, 1991) that can enhance the connection between MSEs and both official and informal sources of finance. Key indicators of financial literacy, such as the ability to generate financial reports, understand the benefits of those reports, and effectively manage financial information, play a crucial role in reducing information asymmetry. This, in turn, increases financial institutions' confidence in MSEs.

These findings contribute to the microfinance literature by clarifying how applied financial literacy catalyzes improving capital access in the informal sector, including traditional markets.

The findings of this study corroborate those of previous studies (Efendi et al., 2023; Frimpong et al., 2022; Kurniasari et al., 2023), indicating that financial literacy has a positive influence on financial accessibility. Micro and small enterprises with strong


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financial literacy can prepare basic financial reports, calculate their capital needs, and identify suitable funding sources, thereby facilitating access to formal credit. The findings of this study corroborate those of previous studies (Efendi et al., 2023; Frimpong et al., 2022; Kurniasari et al., 2023), indicating that financial literacy has a positive influence on financial accessibility. Micro and small enterprises with strong financial literacy can prepare basic financial reports, calculate their capital needs, and identify suitable funding sources, thereby facilitating access to formal credit. This finding was corroborated by Alharbi et al. (2022), Frimpong et al. (2022), and Jun and Ran (2024), who demonstrated that financial literacy has a positive influence on MSMEs' access to finance. The findings of this study highlight the importance of financial education initiatives targeting MSMEs, particularly in traditional markets, in enhancing their access to suitable financing. In light of this empirical evidence, local governments, the Financial Services Authority, cooperatives, and fintech platforms must establish organized and context-specific financial literacy training programs that emphasize both the fundamental concepts and practical aspects of preparing financial reports, recording transactions, and evaluating capital structures. These findings indicate that financial institutions and fintech companies should consider financial literacy as a criterion for creditworthiness that may partially substitute for collateral requirements, especially for non-bankable MSMEs. This could promote a more inclusive and sustainable financial framework within the traditional MSME sector.

The results of the hypothesis testing demonstrate that fintech P2P lending significantly enhances MSEs' access to capital in traditional markets. This study corroborates the Financial Intermediation Theory (Allen & Santomero, 1997), which posits that financial institutions facilitate the connection between capital providers and capital recipients. Fintech P2P lending serves as an efficient digital middleman, particularly for MSMEs that official financial institutions, such as banks, inadequately support. These findings further corroborate the Technology Acceptance Model (Davis, 1989), indicating that usability and perceived advantages propel the adoption of fintech for capital access requirements. MSEs have widely accepted P2P lending in the traditional market. The use of technology, including fintech, is expected to rise if it offers concrete advantages, such as enhanced convenience and expedited access to funding for micro and small enterprises that previously struggled to secure credit from traditional banks.

The findings of this study corroborate those of Abbasi et al. (2021) and Efendi et al. (2023). This study demonstrates that fintech peer-to-peer lending has a positive influence on capital accessibility for small and medium-sized firms. The emergence of financial technology (Fintech), particularly peer-to-peer (P2P) lending, signals a shift toward increased capital accessibility, suggesting that banks must innovate their funding mechanisms to maintain competitiveness, especially in providing adaptable solutions for restructuring and high-risk situations (Palmieri & Ferilli, 2024). Fintech P2P lending facilitates effortless access to unsecured loans through digital verification, thereby enhancing access to finance for micro and small enterprises. Owners and managers can fulfill their company's liquidity requirements by utilizing P2P lending fintechs (Abbasi et al., 2021). However, this study contradicts the findings of Doumi et al. (2024), who indicated that Fintech P2P lending does not directly influence financial access.

The findings of this study suggest that fintech P2P lending can serve as a strategic remedy for micro and small enterprises in traditional markets, helping them overcome capital limitations that frequently impede business growth. Micro and small enterprises have more adaptable and accessible funding options through the use of digital technologies. This discovery presents fintech firms with an opportunity to expand their market reach by targeting micro and small enterprises that the traditional financial system currently under-supports. The Indonesian Financial Services Authority (OJK) must enhance regulations to safeguard MSEs against the risks associated with unlawful fintech and encourage digital financial literacy to enable MSEs to adopt fintech judiciously. Additionally, local governments and MSME offices should form strategic alliances with licensed fintech firms to enhance access to technology-driven financing in the traditional market. Consequently, fintech P2P lending functions as both an alternative financial tool and a catalyst for financial inclusion and sustainable economic empowerment in Indonesia.

The results of the hypothesis testing demonstrate that financial literacy has a significant impact on the sustainability of micro and small enterprises in traditional markets. This study supports the Resource-Based View hypothesis (Barney, 1991), highlighting that internal competencies, such as financial literacy, are vital resources that can provide a durable competitive advantage for MSMEs. Financial literacy empowers business professionals to make informed decisions regarding financial management, capital allocation, cash flow oversight, and risk assessment, thereby enhancing firm resilience to market fluctuations. This study corroborates the findings of Lusardi and Mitchell (2014), indicating that financial literacy is significantly associated with improved financial management practices and enhanced long-term financial resilience.

The findings of this study corroborate those of previous studies (Meressa, 2023; Masdupi et al., 2024; Siddik et al., 2023), indicating that financial literacy is a crucial determinant of the sustainability of small and medium firms. These results suggest that enhancing financial literacy among traditional market MSMEs is crucial for ensuring the long-term sustainability of their businesses. Entrepreneurs with strong financial literacy are more adept at systematically planning their enterprises, transparently recording and managing their finances, and circumventing destructive debt habits. This corroborates Huston's (2010) viewpoint that financial literacy is an essential skill for the success of small enterprises, especially in informal economic settings such as traditional marketplaces. Consequently, enhancing practical and contextual financial training and mentorship, particularly through partnerships with financial institutions, cooperatives, trade offices, and MSMEs, is imperative. Central and regional governments must develop a financial literacy curriculum tailored to the needs of micro and small enterprises in traditional markets and establish a monitoring and evaluation framework to assess the progress of financial


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literacy and its impact on sustainability. Moreover, collaboration between microfinance institutions and micro and small enterprises is crucial to delivering accessible financial products and ensuring continuous financial literacy.

The results of the hypothesis testing demonstrate that fintech P2P lending exerts a favorable and significant influence on the sustainability of MSEs in the traditional market. This study corroborates the Financial Intermediation theory (Allen & Santomero, 1997), which posits that financial institutions, including innovations in financial technology, mitigate asymmetric information and enhance capital access, particularly for sectors inadequately served by traditional financial institutions. Fintech P2P lending serves as a more inclusive funding option for MSMEs, which frequently encounter obstacles related to collateral, formal documentation, and bank creditworthiness issues. This study corroborates the findings of previous studies (Lontchi et al., 2023), which showed that fintech has a positive and considerable impact on the sustainability of SMEs in Cameroon (Chen et al., 2019). Gozman et al. (2018) highlighted that fintech platforms can facilitate financial access and enhance the growth and resilience of small enterprises through rapid, adaptable, and technology-driven funding.

The findings of this study suggest that fintech P2P lending can serve as a vital tool for enhancing the sustainability of MSEs in Jakarta, especially regarding working capital financing, investment in production equipment, and company expansion. Expedited and streamlined financing via fintech P2P lending facilitates business continuity, innovation, and resilience amid fluctuating market conditions. Moreover, the technology employed by fintech promotes MSEs to adopt digital systems for financial transactions, an essential step towards technology-driven company transformation. These findings underscore the need for rules and oversight to safeguard MSEs against potential fintech risks, including exorbitant interest rates and a lack of transparency. The government, specifically the Financial Services Authority, must enhance fintech literacy instruction for MSEs in traditional markets and promote coordination among P2P lending platforms, cooperatives, MSE offices, and supporting institutions. Moreover, it is essential to promote the establishment of an alternative credit score system utilizing MSE digital data, enabling MSEs without formal credit records to obtain funding with quantifiable risk.

The hypothesis testing results demonstrate that capital access does not exert a significant positive impact on the sustainability of MSEs in traditional markets. This discovery undermines the traditional perspective of the Capital Constraint Theory (Beck & Demirguc-Kunt, 2006), which posits that restricted capital access is a significant barrier to the growth and sustainability of MSMEs. In traditional markets, these findings suggest that MSME sustainability is not exclusively reliant on capital. This corroborates the conclusions of Atmadja et al. (2016), who indicated that access to money, in the absence of sufficient financial management skills, does not positively influence firm sustainability. The findings of this study contrast with those of previous studies (Frimpong et al., 2022; Khan et al., 2021; Mang'ana et al., 2024; Siddik et al., 2023), indicating that capital access enhances the sustainability of small and medium firms by boosting sales and profitability. Nonetheless, the findings of this study corroborate those of Masdupi et al. (2024), who concluded that capital access is not a pivotal component of SMEs' sustainability.

This empirical research demonstrates that several micro and small enterprises in traditional markets have failed to optimize the capital acquired from official and informal institutions. Issues such as inadequate financial literacy, the absence of business planning, and limited innovation in capital utilization prevent existing capital from fostering sustained improvements in productivity and business competitiveness. In traditional markets, which primarily rely on experience and social interactions, business sustainability is bolstered more by social networks, customer loyalty, and operational efficiency than by access to funding. The findings underscore the need for a comprehensive strategy to enhance the sustainability of MSEs, particularly in traditional markets. The government and financial institutions should prioritize not only the expansion of capital access but also the enhancement of business mentorship programs, financial management training, and the incorporation of relevant simple technologies tailored to the needs of micro and small enterprises in traditional markets. Financing programs that incorporate financial literacy and business performance assessments must be established to ensure that accessible capital effectively enhances firm sustainability. Moreover, formulating policies that address local requirements while considering the socioeconomic attributes of traditional markets is essential for developing more relevant and effective intervention programs.

The hypothesis testing results demonstrate that capital access does not moderate the impact of financial literacy on the sustainability of MSEs in traditional markets. This study enhances the comprehension of the Resource-Based View theory (Barney, 1991), which posits that sustained competitive advantage arises not solely from resource availability, such as capital, but also from intrinsic capabilities, including knowledge, skills, and managerial competencies. In this context, financial literacy, as an intrinsic capability, significantly influences firm sustainability, independent of access to funds. This suggests that in a traditional market setting characterized by informal and experiential business systems, financial acumen is a vital asset that directly impacts business management and sustainability. This study's findings contradict those of previous research (Alharbi et al., 2022; Charfeddine et al., 2024; Frimpong et al., 2022; Lontchi et al., 2023; Masdupi et al., 2024; Meressa, 2023; Siddik et al., 2023; Yuliani et al., 2025), indicating that capital access may mediate the relationship between financial literacy and the sustainability of MSEs. The findings of this study demonstrate that while capital access is crucial, its effectiveness in fostering MSE sustainability is significantly contingent on the capacity of business actors to manage and utilize it effectively. When financial literacy is sufficient, MSE participants can make informed financial decisions, including efficient spending, effective cash flow management, and prudent risk management, without excessive dependence on external financing. The inadequacy of capital access as a mediating variable may stem from the preference of numerous MSE participants in traditional markets for more flexible and less complex informal financing options, such as familial loans or social savings, despite their sound financial knowledge.


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This empirical study highlights the importance of enhancing financial literacy through instruction on effective and responsible capital management. The government and financial institutions must not only facilitate access to funding but also ensure that MSEs possess the actual financial skills to prevent the misuse or underutilization of available funds. Moreover, it is essential to create financing models that reflect the unique attributes of traditional markets, which are adaptable, readily accessible, and synchronized with daily business operations, to guarantee that available capital is effectively linked to the managerial competencies of financially literate micro and small enterprises.

The results of hypothesis testing demonstrate that capital access does not mitigate the impact of fintech P2P lending on the sustainability of MSEs in traditional markets. This study challenges the fundamental premise of Financial Intermediation Theory (Allen & Santomero, 1997), which posits that financial intermediaries, including fintech peer-to-peer (P2P) lenders, mitigate restricted capital access by utilizing efficient and inclusive technology. On the other hand, the emergence of fintech has not completely enhanced capital access, which directly affects the sustainability of micro and small enterprises in traditional markets. This may result from several impediments, including inadequate digital and financial literacy, the misalignment of fintech offerings with the requirements of traditional enterprises, or the incapacity of MSMEs to access, comprehend, and effectively manage financing from fintech sources (Zetzsche et al., 2020).

This empirical research indicates that while Fintech P2P lending is accessible and potentially expands funding alternatives, MSEs in traditional markets have not effectively leveraged it to enhance the sustainability of their businesses. Numerous traditional market entrepreneurs continue to depend on informal finance sources that are more socially and culturally accessible, such as family support and local cooperatives. This further substantiates the conclusions of Gozman et al. (2018). The adoption of fintech in the informal sector necessitates not only the availability of platforms but also the social, economic, and technological preparedness of the users. In light of this empirical evidence, the government must enhance the promotion of digital financial literacy and tailor its initiatives to the characteristics of micro and small enterprises in traditional markets, encompassing practical training in the use of fintech applications and understanding the risks associated with digital financing. Moreover, establishing an inclusive fintech ecosystem tailored to the requirements of micro and small enterprises in traditional markets, incorporating microloan programs, mentorship, and an assessment framework grounded in informal business history, is essential to ensure that fintech serves as a sustainable solution for capital accessibility. Cooperation among regulators, fintech providers, and local support institutions is crucial for connecting fintech with grassroots microenterprises to achieve shared objectives.

## CONCLUSION

The research findings show that while financial literacy and peer-to-peer (P2P) lending via fintech enhance capital access for micro and small enterprises (MSEs) in traditional marketplaces, they do not significantly improve business sustainability. Access to capital fails to mediate the relationship between financial literacy, fintech, and MSE sustainability in DKI Jakarta, Indonesia. This suggests that financial interventions alone are insufficient; to foster long-term growth, MSEs, particularly those in informal sectors such as traditional markets, need improvements in managerial competencies and financial literacy.

These results challenge the notion that increased capital access is essential for firm sustainability, highlighting the need for policies that focus on enhancing capabilities rather than just capital access. Local governments, the Financial Services Authority, cooperatives, and fintech platforms should implement targeted financial literacy training that includes practical skills like financial reporting and transaction recording. Improving digital financial literacy tailored to the needs of MSEs is also critical, with a focus on fintech applications and associated risks. Moreover, establishing an inclusive fintech ecosystem that includes microloan programs, mentorship, and assessments based on informal business history is essential for making fintech a viable financing option for MSEs. Cooperation among regulators, fintech providers, and local institutions is necessary to connect financial technology with grassroots microenterprises.

This study has limitations, as it focuses solely on MSEs in Jakarta, making its conclusions less applicable to other regions in Indonesia with different socio-economic conditions. It also overlooks contextual factors such as entrepreneurial motivation and local culture. Future research should expand its scope to include MSEs from diverse regions and investigate the factors affecting the impact of capital access and the use of fintech by MSE operators.

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