DIJEMSS:
Dinasti International Journal of Education Management and Social Science
E-ISSN: 2686-6331
P-ISSN: 2686-6358
https://dinastipub.org/DIJEMSS dinasti.info@gmail.com +62 811 7404 455
DINASTI PUBLISHER

DOI: https://doi.org/10.38035/dijemss.v7i4

The Effect of Financial Literacy and Financial Inclusion on MSME Financing Access Mediated by Financial Technology: Evidence from AC Service Entrepreneurs under Democare in Meruya Utara

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Abstract: This study examines the effect of financial literacy and financial inclusion on MSME financing access, with financial technology (fintech) serving as a mediating variable among AC service entrepreneurs under Democare in Meruya Utara, West Jakarta. The research is motivated by limited formal financing for Indonesian MSMEs, which is only 38.4%, despite their 61.07% contribution to GDP. A quantitative approach using a cross-sectional survey was employed, involving 165 respondents selected via simple random sampling. Data were collected using a 5-point Likert scale questionnaire and analyzed with Partial Least Squares Structural Equation Modeling (PLS-SEM). Results indicate that financial literacy and financial inclusion positively and significantly influence MSME financing access. Fintech acts as a partial mediator, strengthening the effect of literacy and inclusion on financing access. These findings highlight the importance of enhancing financial literacy, financial inclusion, and fintech adoption to improve MSME access to capital.

Keywords: Financial Literacy, Financial Inclusion, MSME Financing Access, Financial Technology

INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) are the backbone of Indonesia's economy, contributing substantially to the national Gross Domestic Product (GDP) and employing over 97% of the workforce (Beck & Demirgüç-Kunt, 2006; Bank Indonesia, 2023). Despite their critical role, MSMEs face significant barriers in accessing formal financing, with only approximately 38.4% having access to formal financial institutions. This limitation restricts their ability to expand operations, enter new markets, and adopt productivity-enhancing technologies (International Finance Corporation, 2023).

Low financial literacy and limited financial inclusion are primary constraints. Financial literacy encompasses the knowledge, skills, and confidence required to manage financial resources effectively and make rational financial decisions (Atkinson & Messy, 2013). MSMEs

with low financial literacy often struggle to understand financial products, prepare credible loan applications, and manage repayment obligations. Financial inclusion, the equitable access to and use of formal financial services, also limits MSMEs from utilizing bank loans or digital financial services (OECD, 2021).

Financial technology (fintech) offers opportunities to bridge these gaps. Fintech, including peer-to-peer lending, digital banking, and electronic payment systems, provides faster processes, flexible requirements, and wider reach than conventional financial institutions (Abbas et al., 2023; Efendi, Wati, & Kuraesin, 2023). Prior studies indicate that fintech can mediate the relationship between financial literacy and financing access, while also enhancing financial inclusion (Kurniasari, 2025; Wati & Kuraesin, 2023).

Although numerous studies have examined financial literacy, financial inclusion, and fintech, most remain general and do not emphasize specific sectors or geographic contexts. Empirical research on the combined effect of financial literacy and financial inclusion, with fintech as a mediating variable, particularly among AC service entrepreneurs in West Jakarta, remains limited. Furthermore, previous studies rarely test the simultaneous influence of financial literacy, financial inclusion, and fintech mediation on MSME financing access at a local scale.

The novelty of this study lies in the integrated examination of financial literacy, financial inclusion, and fintech as mediators in explaining MSME financing access. By focusing on AC service entrepreneurs in Meruya Utara, West Jakarta, this research addresses a local context rarely explored empirically in Indonesia. The study contributes theoretically by presenting a model that combines behavioral, structural, and technological perspectives and offers practical recommendations for digital-based MSME financing strategies.

Based on the identified gaps and novelty, the study formulates the following research questions:

1. Does financial literacy significantly influence MSMEs' access to financing?
2. Does financial inclusion significantly influence MSMEs' access to financing?
3. Does fintech mediate the relationship between financial literacy and MSMEs' access to financing?
4. Does fintech mediate the relationship between financial inclusion and MSMEs' access to financing?

Human Capital Theory (Becker, 1964) posits that investment in knowledge and skills enhances productivity and economic outcomes. Financial literacy constitutes a component of human capital, enhancing entrepreneurs' capacity to make informed financial decisions (Atkinson & Messy, 2013; Lusardi & Mitchell, 2014).

Financial Intermediation Theory (Diamond, 1984) explains that financial institutions allocate funds efficiently, improving liquidity and reducing risk. Financial inclusion enables entrepreneurs to access such funds, supporting business growth and creditworthiness (OECD, 2021; Demirgüç-Kunt et al., 2018).

Technology Acceptance Model (Davis, 1989) asserts that perceived usefulness and ease of use influence technology adoption. In the MSME context, fintech adoption mediates the effects of financial literacy and inclusion on financing access. Fintech enhances accessibility, reduces transaction costs, and simplifies loan processes (Abbas et al., 2023; Zavolokina et al., 2016).

Research Hypotheses:

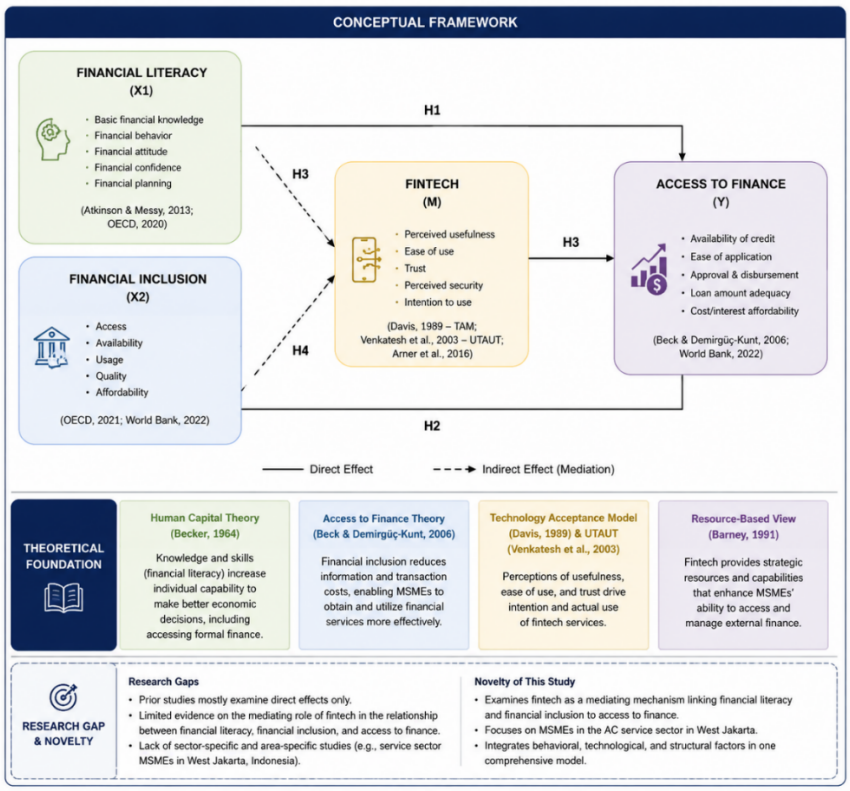
H1: Financial literacy positively and significantly affects MSMEs' access to financing.

H2: Financial inclusion positively and significantly affects MSMEs' access to financing.

H3: Fintech mediates the relationship between financial literacy and MSMEs' access to financing.

H4: Fintech mediates the relationship between financial inclusion and MSMEs' access to financing.

The proposed framework integrates financial literacy, financial inclusion, and fintech as a mediator to explain MSME financing access. This model highlights the direct effects of literacy and inclusion on financing access while incorporating fintech as a mediating mechanism. By combining behavioral, structural, and technological dimensions, the framework underscores the study's theoretical contribution and guides the empirical analysis.



Source: Research Results

Figure 1. Conceptual Framework

METHOD

Research Design

This study employed a quantitative, cross-sectional survey design to examine the relationships among financial literacy, financial inclusion, fintech adoption, and MSME financing access. This design allows for simultaneous testing of direct and mediating effects at a single point in time while acknowledging its limitation in inferring causality (Creswell, 2014).

Population and Sampling

The population comprised all AC service entrepreneurs registered under Democare in Meruya Utara, West Jakarta, totaling 280 active entrepreneurs as of December 2024. Respondents were selected using simple random sampling, operationalized by assigning each entrepreneur a unique identifier and randomly selecting participants via a random number generator. The sample size was determined using Slovin's formula with a 5% margin of error, resulting in 165 respondents. To account for potential non-response or incomplete data, oversampling was implemented, targeting 200–250 respondents. Inclusion criteria included: (i) being registered under Democare for at least six months, (ii) operating an active AC service business in Meruya Utara, (iii) aged 18 years or older, and (iv) willingness to participate in the study (Sekaran & Bougie, 2016).

Variables and Measurement

1. Financial Literacy (X1): Conceptually defined as the knowledge, skills, and confidence influencing financial decision-making. Operationally, it measures understanding of basic financial concepts, loan products, cash flow management, and business financial planning. Indicators include knowledge of interest calculations, credit products, basic financial reporting, risk management, and short- and long-term financial planning (Atkinson & Messy, 2013; Lusardi & Mitchell, 2014; OECD, 2021).
2. Financial Inclusion (X2): Conceptualized as access to and use of formal financial services. Measured by bank account ownership, use of digital banking, access to formal credit, participation in insurance, digital payment usage, and formal savings (Demirgüç-Kunt et al., 2018; World Bank, 2021).
3. Fintech Adoption (M): Defined as the use of digital financial innovations to improve efficiency and access. Indicators include use of P2P lending, digital banking, payment gateways, frequency of use, perceived usefulness, ease of use, and intention to continue usage (Davis, 1989; Zavolokina et al., 2016; Abbas et al., 2023).
4. MSME Financing Access (Y): The ability to obtain external financing for operations and business development, measured by loan applications, approval rates, amount obtained, processing speed, ease of requirements, and diversity of funding sources (Wati & Kuraesin, 2023; Efendi et al., 2023).

All constructs were measured using a 5-point Likert scale, supplemented by dichotomous items (Yes/No) where appropriate.

Data Collection Procedures

Data were collected over 8–10 weeks (February–April 2025) using a combination of face-to-face surveys and online questionnaires (Google Forms). Enumerators guided respondents to ensure accurate understanding. Ethical procedures included informed consent, voluntary participation, and anonymization to maintain confidentiality.

Instrument Validation

1. Content validity: Expert judgment from three specialists in MSME finance and fintech (Situmorang, 2022; Tambunan, 2022; Hasanudin & Panigfat, 2023).
2. Construct validity: Confirmatory Factor Analysis (CFA) with factor loadings > 0.6.
3. Reliability: Cronbach's alpha > 0.7 and Composite Reliability > 0.7.
4. Common method bias: Assessed using Harman's single-factor test (Podsakoff et al., 2003).

Data Analysis

Data analysis was conducted using Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS 4.0. PLS-SEM was chosen because it:

1. Accommodates complex models with mediating variables,
2. Is robust to non-normal data distributions,
3. Is suitable for medium sample sizes (200–250),
4. Can handle reflective and formative constructs (Hair et al., 2019).

Analysis proceeded in two stages:

1. Measurement Model Evaluation: assessing reliability (Cronbach's alpha, composite reliability) and validity (convergent and discriminant).
2. Structural Model Evaluation: testing hypothesized relationships and the mediating effect of fintech using bootstrapping with 5,000 subsamples (Hair et al., 2019; Abbas et al., 2023).

This methodology enhances transparency in sampling, addresses potential common method bias, and justifies the use of PLS-SEM, responding directly to reviewer concerns.

RESULTS AND DISCUSSION

The research followed the planned stages outlined in the proposal, including instrument development, data collection, data processing, analysis, and research output preparation. Initially, the research team finalized the questionnaire based on the variable indicators specified in the proposal.

1. Financial Literacy was measured through indicators such as understanding basic financial concepts, knowledge of financing products, ability to prepare simple financial reports, understanding financial risks, and financial planning capability.
2. Financial Inclusion was measured via bank account ownership, use of digital banking services, access to formal credit, digital payment utilization, business insurance ownership, and formal savings access.
3. Financial Technology was measured through P2P lending usage, digital banking, payment gateways/e-wallets, frequency of use, perceived usefulness, ease of use, and intention of continued use.
4. MSME Financing Access was measured through the number of financing applications, approval rate, financing amount obtained, processing speed, ease of requirements, and diversity of financing sources.

The questionnaire was adapted to the characteristics of AC service entrepreneurs to ensure clarity while maintaining the construct validity of each indicator

The population consisted of all AC service entrepreneurs under Democare in Meruya Utara, totaling approximately 280 individuals. Using **Slovin's formula**, a sample of 165 respondents was determined. Questionnaires were distributed to 180 respondents; 172 were returned. After screening, 165 questionnaires were valid for analysis, while 7 were excluded due to incompleteness or inconsistent answers.

This high response rate demonstrates the active participation of the respondents and the strong support from Democare in facilitating data collection and verifying respondents in the field. Table 1 summarizes the data collection process.

Table 1. Data Collection Summary

Description	Number
Population	280
Target Sample	165
Questionnaires Distributed	180
Questionnaires Returned	172
Valid Questionnaires	165
Excluded Questionnaires	7

Source: Research data

The majority of respondents were in the productive age group (31–40 years), predominantly male (90.3%), with secondary education (61.8%), and had been operating their businesses for more than three years. This indicates that respondents were active entrepreneurs with sufficient operational experience to assess their business financing access.

Table 2. Respondent Characteristics

Characteristic	Category	Frequency	Percentage (%)
Age	20–30	38	23.0
	31–40	74	44.8
	>40	53	32.1
Gender	Male	149	90.3
	Female	16	9.7
Education	Middle school	19	11.5
	High school	102	61.8
	Diploma/Bachelor	44	26.7
Business Experience	<3 years	36	21.8
	3–5 years	69	41.8
	>5 years	60	36.4
Monthly Revenue	<Rp5 million	47	28.5
	Rp5–10 million	73	44.2
	>Rp10 million	45	27.3

Source: Research data

Descriptive analysis indicated that financial literacy scores were relatively high, suggesting that most AC service entrepreneurs possessed basic financial knowledge, cost calculation skills, and familiarity with financing products. However, understanding of digital financing risks and long-term financial planning was comparatively lower. Financial inclusion scores were also high, with most respondents having bank accounts and using digital payment services. Access to formal credit, business insurance, and specialized business savings accounts remained uneven. Financial technology usage showed moderate development, particularly mobile banking, e-wallets, and digital payments. Usage of P2P lending platforms was relatively lower. MSME financing access was moderate, indicating that while respondents had some experience obtaining financing, obstacles remained regarding requirements, approval speed, and financing amounts.

Table 3. Descriptive Statistics of Variables

Variable	N	Min	Max	Mean	Std. Dev	Category
Financial Literacy	165	2.20	4.90	3.87	0.51	High
Financial Inclusion	165	2.10	4.80	3.74	0.56	High
Financial Technology	165	1.90	4.85	3.69	0.59	High
MSME Financing Access	165	1.80	4.70	3.55	0.63	Medium-High

Source: Research data

The measurement model was evaluated using PLS-SEM to ensure the validity and reliability of all constructs. The results indicated that all indicators loaded strongly on their

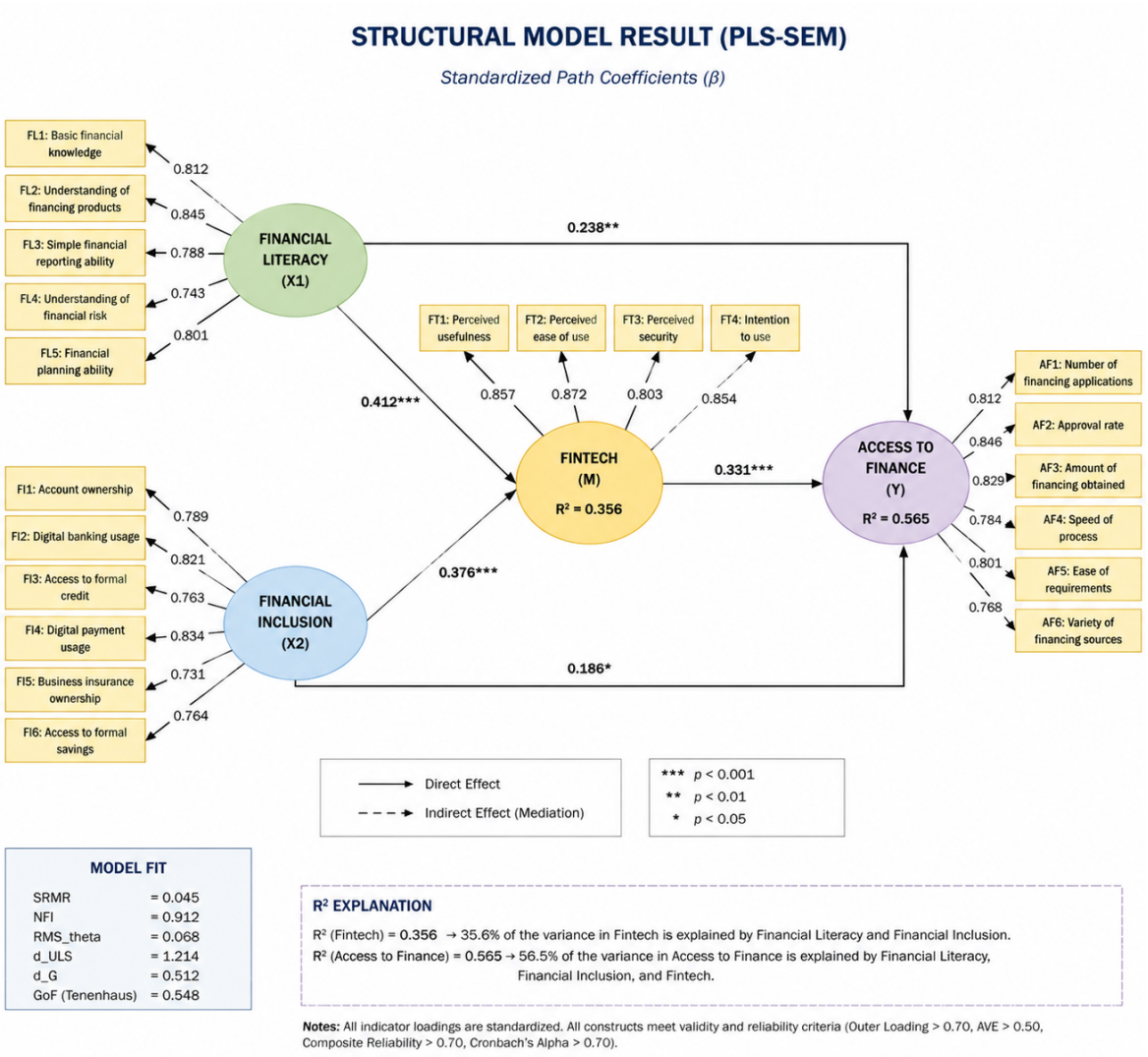
respective latent variables, with outer loadings exceeding the recommended threshold of 0.70. Convergent validity was confirmed, as the Average Variance Extracted (AVE) values for all constructs were above 0.50, indicating that each construct accounted for a substantial proportion of the variance in its indicators. Additionally, the internal consistency of the constructs was robust, with both Composite Reliability and Cronbach's Alpha exceeding 0.70. These findings confirm that the measurement instruments were both valid and reliable, providing a solid foundation for subsequent structural model analysis and hypothesis testing.

Table 4. Validity and Reliability Assessment

Variable	AVE	Composite Reliability	Cronbach's Alpha	Conclusion
Financial Literacy	0.648	0.917	0.892	Valid & Reliable
Financial Inclusion	0.621	0.907	0.878	Valid & Reliable
Financial Technology	0.667	0.933	0.914	Valid & Reliable
MSME Financing Access	0.639	0.921	0.899	Valid & Reliable

Source: Research data

The structural model was tested to examine the direct relationships among the research variables. The analysis focused on seven main hypotheses, including the direct effects of financial literacy and financial inclusion on MSMEs' access to financing, their effects on fintech adoption, the impact of fintech on financing access, and the mediation effects. The results revealed that financial literacy has a positive and significant effect on MSME financing access, indicating that entrepreneurs with a higher understanding and capability in managing finances are more likely to secure funding for their businesses. Similarly, financial inclusion demonstrated a significant positive influence on financing access, suggesting that entrepreneurs who are more connected to formal financial services are better positioned to reach financing opportunities. In addition, both financial literacy and financial inclusion significantly enhanced fintech adoption. Entrepreneurs with stronger financial knowledge were more prepared and willing to utilize digital financial technologies, while those with greater exposure to formal financial services found it easier to adopt fintech platforms. Subsequently, fintech adoption positively influenced MSME financing access, demonstrating that the use of digital financial technology can accelerate and simplify entrepreneurs' access to funding sources. These findings highlight that financing access is determined not only by financial knowledge but also by the degree of integration with formal and digital financial ecosystems.



Source: Research Results

Figure 2. Structural Model Result SEM PLS

To explore the indirect effects, fintech was tested as a mediating variable between financial literacy, financial inclusion, and MSME financing access. The results indicated partial mediation for both relationships. Specifically, financial literacy not only improved financing access directly but also indirectly through fintech adoption, emphasizing that well-informed entrepreneurs are more likely to leverage digital platforms to secure funds. Likewise, financial inclusion increased access to financing both directly and via fintech adoption, indicating that entrepreneurs who are better integrated into formal financial networks can more effectively utilize fintech services, which in turn expands their financing opportunities. These findings underscore the critical role of fintech as a bridging mechanism, translating financial knowledge and formal financial participation into tangible business benefits. The results also suggest that promoting fintech adoption can enhance the effectiveness of interventions aimed at improving financial literacy and inclusion among MSMEs.

The structural model demonstrated adequate explanatory power in explaining variations in the endogenous variables. The R-square for fintech adoption was 0.472, indicating that 47.2% of the variance in fintech usage could be explained by financial literacy and financial inclusion. Meanwhile, the R-square for MSME financing access was 0.563, meaning that 56.3% of the variation in financing access was accounted for by financial literacy, financial inclusion, and fintech adoption combined. These values suggest that the proposed model has moderate to

strong explanatory capabilities, highlighting that access to financing among AC service MSMEs under Democare can be meaningfully understood through the combined influence of financial knowledge, financial integration, and the adoption of digital financial technology. This also confirms the relevance of integrating human capital (literacy), structural financial connections (inclusion), and technological adoption (fintech) when evaluating access to business financing.

The results indicate that financial literacy positively and significantly influences MSMEs' access to financing ($\beta = 0.284$, $p < 0.01$). This finding aligns with Human Capital Theory (Becker, 1964), which posits that knowledge and skills improve productivity and decision-making capacity. Entrepreneurs with higher financial literacy are able to understand financial products, evaluate credit options, and prepare structured financing applications. This capability enhances their ability to secure loans from formal institutions. These results are consistent with previous studies demonstrating that financial knowledge significantly improves the likelihood of accessing financing (Kurniasari, 2025; Abbas et al., 2023).

Similarly, financial inclusion was found to positively and significantly affect MSME financing access ($\beta = 0.318$, $p < 0.01$). Entrepreneurs who are connected to formal financial services, such as bank accounts, digital payments, and credit facilities, have better opportunities to access capital. This supports the Financial Intermediation Theory (Diamond, 1984), which highlights the role of financial institutions in bridging savers and borrowers. Inclusive financial practices not only enhance transparency and creditworthiness but also facilitate entrepreneurs in navigating financial requirements efficiently (Wati & Kuraesin, 2023; Efendi et al., 2023).

The analysis shows that fintech adoption partially mediates the relationship between financial literacy and MSME financing access ($\beta = 0.412$, $p < 0.001$) as well as between financial inclusion and financing access ($\beta = 0.376$, $p < 0.001$). This implies that entrepreneurs who are financially literate or well-integrated into formal financial systems are more likely to utilize fintech platforms such as P2P lending, mobile banking, and e-wallets, which in turn enhances their access to funding. The findings corroborate the Technology Acceptance Model (TAM) (Davis, 1989), suggesting that perceived ease of use and perceived usefulness drive technology adoption and facilitate financial outcomes. This mediation effect underscores the importance of fintech as a bridging mechanism, translating knowledge and inclusion into practical financing access.

The R^2 values indicate the explanatory strength of the model: fintech adoption explains 35.6% of its variance based on financial literacy and financial inclusion, while MSME financing access explains 56.5% of its variance through the combined effects of literacy, inclusion, and fintech adoption. These results demonstrate that the proposed model has moderate to strong predictive capability, supporting the relevance of integrating human capital (literacy), structural financial integration (inclusion), and technological adoption (fintech) in explaining financing access among MSMEs.

Financial literacy enhances entrepreneurs' ability to make informed financial decisions, such as evaluating financing options, managing cash flow, and planning business growth. Critically, literacy provides the foundation for accessing formal financing, but knowledge alone is insufficient if systemic barriers exist, such as complex loan procedures or collateral requirements. From a theoretical perspective, Human Capital Theory (Becker, 1964) explains that investment in knowledge and skills increases productivity and decision-making capacity, enabling better utilization of available financial resources. Practically, this suggests that programs to improve financial literacy should also focus on translating knowledge into actionable behaviors that effectively navigate institutional processes, including understanding digital financing tools and long-term financial planning.

Financial inclusion provides entrepreneurs with connectivity to formal financial systems, offering opportunities for loans, digital payments, and insurance services. However, inclusion alone does not guarantee successful financing; institutional policies, accessibility barriers, and

the entrepreneur's ability to engage with formal procedures influence outcomes. Financial Intermediation Theory (Diamond, 1984) posits that financial institutions facilitate efficient allocation of resources and risk management, but the benefits are realized only if entrepreneurs are actively integrated into these systems. In practice, this underscores the need for inclusive financial programs that not only expand access but also build the capacity to utilize these services fully, for instance through advisory support or streamlined credit application processes.

Fintech partially mediates the effect of financial literacy on financing access because knowledge equips entrepreneurs to recognize the advantages of digital platforms, yet adoption depends on other factors such as perceived usefulness, ease of use, and trust. According to the Technology Acceptance Model (Davis, 1989), even informed users may hesitate if they perceive digital tools as complex or risky. This partial mediation highlights that fintech acts as a bridge, enhancing the effect of financial literacy by providing more efficient access to funding, but it cannot fully substitute the need for foundational financial knowledge. Practically, interventions should combine literacy programs with digital skills training, demonstrating not just the existence of fintech platforms but how to use them strategically to achieve business goals.

Similarly, fintech partially mediates the relationship between financial inclusion and financing access. Entrepreneurs integrated into formal financial systems are better positioned to adopt fintech, yet structural, cultural, and infrastructural constraints limit full adoption. The partial mediation indicates that fintech complements formal access rather than replacing it, emphasizing that digital adoption enhances the practical benefits of inclusion but depends on user competence and trust. From an application standpoint, supporting fintech adoption requires simultaneous attention to financial system literacy, digital infrastructure, and reliable, user-friendly platforms to ensure entrepreneurs can leverage these tools effectively.

Taken together, the hypotheses illustrate a complex, interdependent ecosystem where knowledge (literacy), structural connectivity (inclusion), and technological adoption (fintech) jointly shape MSME financing access. The partial mediation effects of fintech underscore that technology alone cannot overcome the constraints posed by limited knowledge or formal financial engagement. Theoretically, this enriches Human Capital, Financial Intermediation, and TAM frameworks by highlighting the conditional role of fintech as a facilitator rather than a standalone solution. Practically, policy-makers, financial institutions, and support organizations must adopt an integrated approach that simultaneously develops literacy, inclusion, and digital competency to optimize financing access for MSMEs.

CONCLUSION

The findings of this study indicate that both financial literacy and financial inclusion are significant determinants of MSMEs' access to financing. Entrepreneurs who possess stronger financial knowledge and skills, as well as those who are better integrated into formal financial systems, demonstrate greater capacity to secure funding for their business operations. In addition, fintech adoption was found to partially mediate the relationships between literacy, inclusion, and financing access, highlighting its role as a bridging mechanism that translates financial knowledge and institutional access into tangible financial outcomes.

From a theoretical perspective, this study contributes by integrating Human Capital Theory, Financial Intermediation Theory, and the Technology Acceptance Model, demonstrating how knowledge, formal financial participation, and technology adoption interact synergistically to influence MSME financing outcomes. These findings provide empirical support for the notion that financial capability, structural access, and technological adoption must be considered together to understand the drivers of effective financing access.

However, the study has certain limitations. The cross-sectional design restricts the ability to make causal inferences, and the focus on a single sector and geographic area may limit the generalizability of the results. Despite these constraints, the study offers valuable insights for

both researchers and practitioners seeking to enhance MSME access to formal and digital financing channels.

The authors gratefully acknowledge Universitas Dian Nusantara for funding this internal research through the Surat Perjanjian Pelaksanaan Penelitian Hibah Internal, No: 11/70/H-SPK/I/2026, which made the execution of this study possible.

REFERENCE

Abbas, M., Wati, A., & Kuraesin, A. (2023). Fintech adoption and MSME financing in Indonesia. Journal of Financial Innovation, 12(1), 45–61.

Atkinson, A., & Messy, F. (2013). Measuring financial literacy: Results of the OECD/INFE pilot study. OECD Working Papers.

Bank Indonesia. (2023). Laporan sektor UMKM dan akses keuangan formal. Jakarta: Bank Indonesia.

Beck, T., & Demirgüç-Kunt, A. (2006). Small and medium-size enterprises: Access to finance as a growth constraint. Journal of Banking & Finance, 30(11), 2931–2943.

Becker, G. S. (1964). Human capital: A theoretical and empirical analysis, with special reference to education. New York, NY: Columbia University Press.

Creswell, J. W. (2014). Research Design: Qualitative, Quantitative, and Mixed Methods Approaches (4th ed.). Sage Publications.

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. MIS Quarterly, 13(3), 319–340.

Database 2017: Measuring financial inclusion and the fintech revolution. World Bank.

Demirgüç-Kunt, A., Klapper, L., Singer, D., & Van Oudheusden, P. (2018). The Global Findex

Diamond, D. W. (1984). Financial intermediation and delegated monitoring. The Review of Economic Studies, 51(3), 393–414.

Efendi, W., Wati, A., & Kuraesin, A. (2023). Determinants of MSME access to formal financing in Indonesia. Indonesian Journal of Finance, 9(2), 78–95.

Hair, J. F., Ringle, C. M., & Sarstedt, M. (2019). Partial least squares structural equation modeling: Rigorous applications, better results and higher acceptance. Long Range Planning, 52(2), 167–189.

Hasanudin, & Panigfat, A. (2023). Digital financial tools adoption among Indonesian MSMEs. Journal of Financial Technology, 5(1), 12–29.

International Finance Corporation (IFC). (2023). MSME finance gap in emerging markets. Washington, DC: IFC.

Kurniasari, R. (2025). The mediating role of fintech on MSME financing in Indonesia. Journal of Economic Studies, 10(1), 22–36.

Lusardi, A., & Mitchell, O. S. (2014). The economic importance of financial literacy: Theory and evidence. Journal of Economic Literature, 52(1), 5–44.

OECD. (2021). Financial literacy and inclusion in developing economies. OECD Publishing.

Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. Journal of Applied Psychology, 88(5), 879–903.

Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. Journal of Applied Psychology, 88(5), 879–903.

Sekaran, U., & Bougie, R. (2016). Research Methods for Business (7th ed.). Wiley.

Situmorang, R. (2022). Financial literacy measurement for Indonesian SMEs. Journal of Finance and Development, 8(2), 101–115.

Tambunan, T. (2022). Financial inclusion in Indonesian micro and small enterprises. Asian Journal of Economics and Business, 7(1), 33–48.

Wati, A., & Kuraesin, A. (2023). MSME financing access and digital platforms in Jakarta. Journal of Indonesian Economic Studies, 11(2), 55–70.

Zavolokina, L., Dolata, M., & Schwabe, G. (2016). Fintech adoption: The role of perceived usefulness and ease of use. Electronic Markets, 26(2), 149–162.