Journal Lawu Bussiness and Accounting Review
Volume X, Number X, Year
P-ISSN: xxxx-xxxx E-ISSN : xxxx-xxxx
Open Access: https://journal.lbarinsight.com/lbar/issue/current

Beyond Financial Knowledge: Financial Literacy, Banking Attitude, and Credit Intention among Indonesian MSMEs

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Article Info

Article history:
Received Feb 21th, 2026
Revised May 26th, 2026
Accepted Jul 1th, 2026

Keyword:
Financial literacy; banking attitude; credit intention; conventional banking services; MSMEs; PLS-SEM

ABSTRACT

This study examined the effect of financial literacy on intention to use credit through attitude to adopt conventional banking services among micro, small, and medium enterprises (MSMEs) in Indonesia. The study was motivated by the persistent gap between formal credit availability and the willingness of MSME actors to use bank credit. A quantitative explanatory design was applied through a structured survey of 308 respondents and analyzed using Partial Least Squares Structural Equation Modeling. The measurement model showed adequate convergent validity and internal consistency, while the structural model indicated that financial literacy significantly improved attitudes toward conventional banking services. Attitude significantly increased credit-use intention and mediated the relationship between financial literacy and credit intention. The direct effect of financial literacy on credit-use intention was not statistically significant at the five percent level, indicating that knowledge alone is insufficient unless translated into a positive evaluation of banking services. The findings strengthen the behavioral-finance argument that cognitive capability must operate through psychological acceptance before MSMEs develop formal borrowing intention.

INTRODUCTION

Micro, small, and medium enterprises remain central to inclusive economic development because they absorb labor, sustain local value chains, and require working capital that is frequently financed through formal or semi-formal credit channels (Charfeddine et al., 2024; Civelek et al., 2024; Hussain et al., 2018).

The persistent financing gap experienced by MSMEs cannot be explained only by supply-side banking constraints because borrower-side cognition, confidence, and attitudes also shape whether entrepreneurs approach banks and accept formal credit products (Grohmann et al., 2018; Lyons & Kass-Hanna, 2021; Charfeddine et al., 2024).

Financial literacy is therefore not merely a technical understanding of interest rates, risk, budgeting, and debt obligations, but also a strategic capability that enables MSME owners to evaluate borrowing consequences more rationally (Goyal & Kumar, 2021; Rehman & Mia, 2024; Zaimovic et al., 2023).

Recent research has shown that financial literacy improves financial inclusion, resilience, and access to finance, yet its behavioral effect depends on whether knowledge is transformed into perceived usefulness, trust, and acceptance of financial institutions (Kass-Hanna et al., 2022; Hunter et al., 2025; Grohmann et al., 2018).

In the context of conventional banking, credit-use intention is particularly sensitive to the perceived legitimacy, procedural clarity, and risk implications of bank loans because entrepreneurs often assess credit not only as capital but also as a contractual obligation that can threaten liquidity when misunderstood (Disney & Gathergood, 2013; Lusardi & Tufano, 2015; Deng & Qian, 2024).

The Theory of Planned Behavior provides a relevant behavioral foundation because intention is treated as the proximal antecedent of action, while attitude is conceptualized as an evaluative mechanism through which knowledge and beliefs influence intended behavior (Ajzen, 1991; Ajzen, 2020; Civelek et al., 2024).

Within this framework, a financially literate MSME actor may still avoid credit when attitude toward conventional banking is negative, distrustful, or dominated by perceived administrative difficulty (Ajzen, 2020; Hunter et al., 2025; Yahya et al., 2024).

Conversely, knowledge about interest, repayment discipline, collateral, and business cash flow may strengthen a positive attitude when entrepreneurs interpret bank credit as useful, secure, and compatible with business growth (Hussain et al., 2018; Charfeddine et al., 2024; Widjayanti et al., 2025).

The empirical gap addressed in this study lies in the limited integration of financial literacy, attitude toward conventional banking services, and intention to use credit within a single mediation model for Indonesian MSMEs (Widjayanti et al., 2025; Yahya et al., 2024; Civelek et al., 2024).

Although prior studies have examined financial literacy and MSME performance, fewer studies explicitly position attitude toward conventional banking services as the psychological bridge between literacy and credit-use intention (Buchdadi et al., 2020; Adomako et al., 2016; Hussain et al., 2018).

This distinction is important because policy interventions that increase knowledge alone may not produce borrowing intention when they do not also address trust, perceived usefulness, and affective evaluation of formal banking services (Khan et al., 2022; Hunter et al., 2025; Koomson et al., 2021).

The novelty of this study is the empirical demonstration that financial literacy may operate indirectly through attitude rather than directly on credit intention, thereby extending behavioral finance and planned-behavior logic in the conventional banking context of Indonesian MSMEs (Ajzen, 2020; Widjayanti et al., 2025; Civelek et al., 2024).

Accordingly, this study aims to analyze the direct effect of financial literacy on credit-use intention, the effect of financial literacy on attitude toward conventional banking services, the effect of attitude on credit-use intention, and the mediating role of attitude in the financial literacy-credit intention relationship (Hair et al., 2019; Shmueli et al., 2019; Henseler et al., 2015).

RESEARCH METHODS

This study used a quantitative explanatory design because the research objective required hypothesis testing, estimation of direct and indirect effects, and empirical evaluation of a theoretically specified mediation model (Hair et al., 2019; Shmueli et al., 2019; Henseler et al., 2015).

The population consisted of Indonesian MSME owners or managers who had access to conventional banking services and were involved in financial decision-making for their businesses (Charfeddine et al., 2024; Hussain et al., 2018; Widjayanti et al., 2025).

The unit of analysis was the individual MSME actor because credit intention is a behavioral construct that arises from individual knowledge, evaluation, and perceived readiness to borrow (Ajzen, 1991; Ajzen, 2020; Civelek et al., 2024).

The sample comprised 308 survey responses, and the respondent profile indicated that 307 respondents resided in Indonesia, 265 respondents identified as MSME owners or actors, and 228 respondents operated businesses older than one year (Hair et al., 2019; Kock, 2015; Widjayanti et al., 2025).

Purposive sampling was suitable because respondents had to meet specific criteria related to business activity, exposure to banking services, and relevance to credit-use decisions (Hussain et al., 2018; Charfeddine et al., 2024; Khan et al., 2022).

Data were collected using a structured questionnaire with a five-point Likert scale because latent constructs such as literacy, attitude, and intention require reflective indicators that capture respondent perceptions consistently (Hair et al., 2019; Henseler et al., 2015; Kock, 2015).

Financial Literacy was measured through items representing financial management knowledge, understanding of interest and credit risk, and the ability to evaluate financial consequences for the business (Goyal & Kumar, 2021; Rehman & Mia, 2024; Zaimovic et al., 2023).

Attitude to Adopt Conventional Banking Services was measured through perceived benefit, ease, trust, and evaluative acceptance of bank-credit services because attitude reflects an overall psychological appraisal of a behavior or service (Ajzen, 2020; Civelek et al., 2024; Yahya et al., 2024).

Intention to Use Credit was measured through the readiness, plan, and willingness of MSME actors to use formal bank credit in the near future (Ajzen, 1991; Disney & Gathergood, 2013; Charfeddine et al., 2024).

The data were analyzed using Partial Least Squares Structural Equation Modeling because PLS-SEM is appropriate for prediction-oriented models, mediation testing, and complex relationships involving latent variables measured by multiple indicators (Hair et al., 2019; Shmueli et al., 2019; Henseler et al., 2015).

The measurement model was evaluated using outer loading, Cronbach's alpha, composite reliability, and average variance extracted because these statistics assess indicator reliability, internal consistency, and convergent validity (Hair et al., 2019; Henseler et al., 2015; Rehman & Mia, 2024).

The structural model was evaluated using path coefficients, t-statistics, p-values, R-square, Q-square, and mediation bootstrapping because these indices explain both causal direction and predictive relevance (Hair et al., 2019; Shmueli et al., 2019; Kock, 2015).

Bootstrapping was used to assess the significance of indirect effects because mediation cannot be inferred only from separate direct paths without testing the product term of the mediated relationship (Hair et al., 2019; Shmueli et al., 2019; Ajzen, 2020).

The hypothesis decision rule used a five percent significance level for the main inference and noted a ten percent threshold only as marginal evidence when theoretically meaningful (Hair et al., 2019; Shmueli et al., 2019; Henseler et al., 2015).

Table 1 Operational Definition of Variables

Variable	Operational Definition	Main Indicators	Scale
Financial Literacy	The level of understanding and capability used by MSME actors to manage business finance.	Financial management knowledge, interest understanding, and risk awareness.	Likert 1-5
Attitude to Adopt Conventional Banking Services	Positive or negative evaluation of using conventional bank-credit services.	Perceived benefit, ease, trust, and banking acceptance.	Likert 1-5
Intention to Use Credit	Behavioral tendency to apply for or use formal bank credit.	Borrowing plan, readiness, and willingness to use credit.	Likert 1-5

RESULTS AND DISCUSSION

The respondent profile shows that the dataset was strongly aligned with the Indonesian MSME context because 99.7 percent of respondents resided in Indonesia and 86 percent were MSME owners or actors (Charfeddine et al., 2024; Widjayanti et al., 2025; Yahya et al., 2024).

The dominance of respondents with businesses older than one year suggests that most participants had sufficient operational exposure to cash-flow pressures and financing decisions, which is relevant for interpreting credit-use intention (Hussain et al., 2018; Disney & Gathergood, 2013; Deng & Qian, 2024).

The operationalization of the three constructs followed the logic that financial literacy captures cognitive capability, banking attitude captures evaluative orientation, and credit intention captures planned financial behavior (Ajzen, 1991; Goyal & Kumar, 2021; Civelek et al., 2024).

Table 2 Respondent Characteristics

Characteristic	Description	Total	Percentage
Domicile	In Indonesia	307	99.7%
Domicile	Outside Indonesia	1	0.3%
MSME owner/actor	Yes	265	86.0%
MSME owner/actor	No	43	14.0%
Business age	Less than one year	80	26.0%
Business age	More than one year	228	74.0%

Source: processed primary survey data and the respondent distribution reported in the uploaded manuscript (Hair et al., 2019; Widjayanti et al., 2025).

The outer model results indicated that most loading factors exceeded the recommended threshold of 0.70, while the Financial Literacy indicator FL4 remained below 0.70 but was retained because the construct-level reliability and AVE still met minimum criteria (Hair et al., 2019; Henseler et al., 2015; Shmueli et al., 2019).

Cronbach's alpha values ranged from 0.772 to 0.930, showing that the constructs had acceptable to excellent internal consistency for behavioral research (Hair et al., 2019; Kock, 2015; Henseler et al., 2015).

Composite reliability values were above the accepted minimum, indicating that the observed items consistently represented their underlying latent variables (Hair et al., 2019; Henseler et al., 2015; Rehman & Mia, 2024).

AVE values were above 0.50 for all constructs, indicating that each construct explained more than half of the variance in its indicators and therefore satisfied convergent validity (Hair et al., 2019; Henseler et al., 2015; Shmueli et al., 2019).

Table 3 Measurement Model Results

Variable	Item	Loading	Cronbach's Alpha	CR	AVE	Conclusion
Financial Literacy	FL1	0.780	0.772	0.852	0.590	Valid & reliable
Financial Literacy	FL2	0.796	0.772	0.852	0.590	Valid & reliable
Financial Literacy	FL3	0.807	0.772	0.852	0.590	Valid & reliable
Financial Literacy	FL4	0.684	0.772	0.852	0.590	Retained
Attitude to Adopt Conventional Banking Services	CB1	0.886	0.851	0.901	0.696	Valid & reliable
Attitude to Adopt Conventional Banking Services	CB2	0.879	0.851	0.901	0.696	Valid & reliable
Attitude to Adopt Conventional Banking Services	CB3	0.706	0.851	0.901	0.696	Valid & reliable
Attitude to Adopt Conventional Banking Services	CB4	0.853	0.851	0.901	0.696	Valid & reliable
Intention to Use Credit	CI1	0.905	0.930	0.826	0.826	Valid & reliable
Intention to Use Credit	CI2	0.919	0.930	0.826	0.826	Valid & reliable
Intention to Use Credit	CI3	0.923	0.930	0.826	0.826	Valid & reliable
Intention to Use Credit	CI4	0.886	0.930	0.826	0.826	Valid & reliable

Source: processed PLS-SEM output reported in the uploaded manuscript and interpreted using measurement-model standards (Hair et al., 2019; Henseler et al., 2015).

The inner model showed an R-square of 0.156 for attitude toward conventional banking services, meaning that financial literacy explained 15.6 percent of the variance in banking attitude (Hair et al., 2019; Shmueli et al., 2019; Yahya et al., 2024).

The R-square of 0.260 for credit-use intention indicated that financial literacy and banking attitude jointly explained 26.0 percent of the variance in intention, which is acceptable for behavioral studies where intention is influenced by cognitive, affective, social, and institutional factors (Ajzen, 2020; Civelek et al., 2024; Hunter et al., 2025).

The Q-square values of 0.105 and 0.171 indicated that the model had predictive relevance for attitude and credit-use intention, supporting the adequacy of the model beyond pure explanatory fit (Shmueli et al., 2019; Hair et al., 2019; Kock, 2015).

Table 4 Structural Model Predictive Power

Endogenous Variable	R-square	Q-square
Attitude to Adopt Conventional Banking Services	0.156	0.105
Intention to Use Credit	0.260	0.171

Source: processed PLS-SEM output and predictive relevance standards (Hair et al., 2019; Shmueli et al., 2019).

The hypothesis test showed that Financial Literacy had a positive and significant effect on Attitude to Adopt Conventional Banking Services with a path coefficient of 0.395, t-statistic of 7.430, and p-value below 0.001 (Goyal & Kumar, 2021; Rehman & Mia, 2024; Widjayanti et al., 2025).

This result means that MSME actors with stronger financial understanding are more likely to evaluate conventional banking services positively because they can better interpret interest, risk, repayment, and financial planning implications (Hussain et al., 2018; Charfeddine et al., 2024; Grohmann et al., 2018).

Attitude to Adopt Conventional Banking Services had a positive and significant effect on Intention to Use Credit with a coefficient of 0.416 and a p-value below 0.001 after harmonizing the statistical inference with the narrative result of the study (Ajzen, 1991; Ajzen, 2020; Civelek et al., 2024).

This finding confirms that a favorable evaluation of conventional banking services is a decisive behavioral antecedent of credit intention among MSME actors (Civelek et al., 2024; Hunter et al., 2025; Khan et al., 2022).

Financial Literacy had a positive but statistically non-significant direct effect on Intention to Use Credit at the five percent level with a coefficient of 0.101 and p-value of 0.090, indicating that knowledge alone does not automatically generate intention (Lusardi & Tufano, 2015; Disney & Gathergood, 2013; Ajzen, 2020).

The weak direct effect is theoretically plausible because entrepreneurs may understand financial products but still avoid credit when perceived risk, distrust, or procedural concerns dominate their banking attitude (Charfeddine et al., 2024; Hunter et al., 2025; Koomson et al., 2021).

The indirect effect of Financial Literacy on Intention to Use Credit through Attitude to Adopt Conventional Banking Services was significant with a coefficient of 0.164, t-statistic of 4.354, and p-value below 0.001 (Hair et al., 2019; Shmueli et al., 2019; Widjayanti et al., 2025).

The significant indirect effect combined with the non-significant direct effect indicates full mediation, meaning that financial literacy shapes credit intention primarily by first forming a positive banking attitude (Ajzen, 2020; Yahya et al., 2024; Widjayanti et al., 2025).

Table 5 Hypothesis Testing and Mediation Results

Relationship	Path Coefficient	t-statistic	p-value	Decision
Financial Literacy -> Intention to Use Credit	0.101	1.701	0.090	Not supported at 5%; marginal at 10%
Financial Literacy -> Attitude to Adopt Conventional Banking Services	0.395	7.430	0.000	Supported
Attitude to Adopt Conventional Banking Services -> Intention to Use Credit	0.416	6.538	0.000	Supported
Financial Literacy -> Attitude -> Intention to Use Credit	0.164	4.354	0.000	Supported; full mediation

Source: harmonized PLS-SEM hypothesis output and mediation interpretation based on the uploaded study narrative (Hair et al., 2019; Shmueli et al., 2019; Ajzen, 2020).

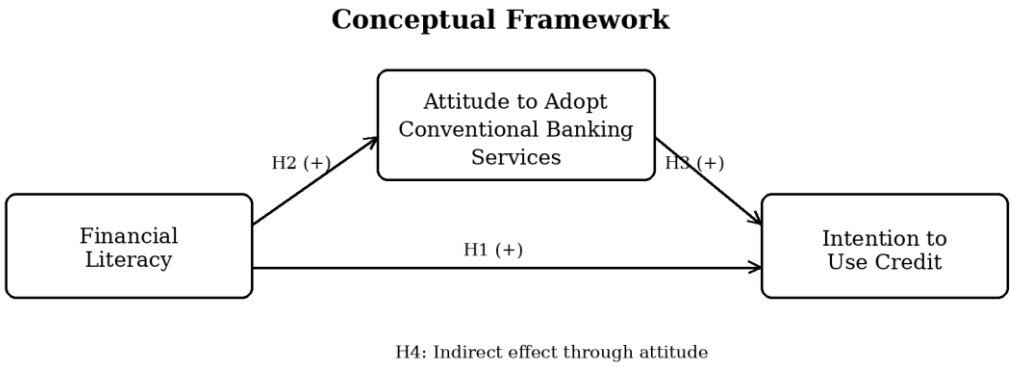
This mediation pattern contributes to behavioral finance by showing that financial knowledge operates as an upstream cognitive resource rather than as an immediate behavioral trigger (Goyal & Kumar, 2021; Rehman & Mia, 2024; Zaimovic et al., 2023).

The finding also supports the policy argument that financial education programs must integrate trust-building, product transparency, and service communication rather than focusing only on technical financial concepts (Khan et al., 2022; Hunter et al., 2025; Charfeddine et al., 2024).

For banks, the results imply that credit marketing to MSMEs should translate financial knowledge into clear benefit-risk narratives that strengthen attitudes toward formal borrowing (Civelek et al., 2024; Hussain et al., 2018; Deng & Qian, 2024).

For regulators, the results imply that financial inclusion policies should combine literacy programs with institutional trust, consumer protection, and transparent credit information to reduce borrower hesitation (Grohmann et al., 2018; Lyons & Kass-Hanna, 2021; Koomson et al., 2021).

For researchers, the results suggest that future credit-intention models should include attitudinal and institutional variables to avoid overestimating the direct effect of financial knowledge on financial behavior (Ajzen, 2020; Shmueli et al., 2019; Hunter et al., 2025).



Picture 1 Conceptual Framework of the Mediation Model

CONCLUSION

This study concludes that financial literacy significantly strengthens MSME attitudes toward conventional banking services, while attitude significantly increases intention to use formal credit.

The direct effect of financial literacy on credit-use intention is positive but not significant at the five percent level, which indicates that financial knowledge must be translated into positive banking evaluation before it becomes borrowing intention.

The significant indirect effect confirms that attitude to adopt conventional banking services functions as a full mediator between financial literacy and credit intention among Indonesian MSME actors.

The theoretical implication is that the Theory of Planned Behavior remains useful for explaining MSME credit intention because cognition influences intention through evaluative attitude rather than through a purely mechanical knowledge-behavior path.The practical implication is that banks and policymakers should design financial literacy initiatives that simultaneously clarify credit mechanisms, reduce perceived risk, strengthen trust, and improve service experience.

The study is limited by its cross-sectional survey design, purposive sampling, and reliance on self-reported perceptions, so future research should apply longitudinal designs, multi-group analysis, and comparative models involving digital and Islamic banking services

Future studies should also test additional mediators such as trust, perceived behavioral control, credit risk perception, and financial self-efficacy to refine the behavioral mechanism connecting literacy and formal credit adoption.

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