

Financial Literacy Moderation of Fintech and Small and Medium Sized Enterprises Financial Performance in Cameroon's Mfoundi Division

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Abstract

This study investigates the moderating effect of financial literacy on the relationship between fintech adoption and financial performance of Small and Medium-Sized Enterprises (SMEs) in Cameroon's Mfoundi Division. Using a quantitative research approach, data was collected from 300 respondents through a questionnaire, selected via purposive sampling. The analysis revealed a positive moderation effect of financial literacy on the relationship between fintech adoption and SME financial performance, with a coefficient of 0.122, t-statistic of 2.075, and p-value of 0.038. The findings suggest that SMEs with higher financial literacy levels can leverage fintech adoption to improve their financial performance. These results align with the Theory of Planned Behavior and the Theory of Financial Innovation. The higher the financial literacy of SME owners, the more effectively they utilize fintech to enhance financial performance. The study's insights have implications for SMEs, policymakers, and fintech providers, highlighting the importance of financial literacy in enhancing the benefits of fintech adoption. The results contribute to the growing body of literature on fintech and SME performance, with a focus on the critical role of financial literacy in moderating this relationship.

Keywords: fintech, SMEs financial performance, financial literacy, moderation, Cameroon's Mfoundi division

1. Introduction

Financial performance refers to a company's ability to generate revenues, manage expenses, and utilize resources effectively to achieve its financial objectives (Brigham & Houston, 2020). It encompasses various aspects, including profitability, liquidity, efficiency, solvency and growth (Ross et al., 2022). Financial performance also refers to the degree of effectiveness and efficiency in the management and utilizing of financial resources in order to achieve desired goals (Kamukama et al., 2017). In the context of small and medium sized enterprises (SMEs), financial performance is a critical area of study due to its implications for fiscal health and business resilience (Orobio et al., 2020). SMEs serve as the backbone of the Cameroonian's economy contributing 36% of GDP and 30% of local taxes, making them crucial for job creation and economic stability (Enhancing SME development in Cameroon, 2023). Small and Medium-Sized Enterprises (SMEs) significantly contribute to Cameroon's economy, accounting for over 90% of all businesses and over 70% of the employment force (Enhancing SME Development in Cameroon, 2023). SMEs also contribute to economic diversification, productivity, and poverty reduction, especially in developing countries (World Bank, 2023). They provide labor-intensive production processes, generating employment opportunities and driving sustainable growth (Kumar, n.d.). However, economic challenges, particularly in the digital era and the Industry 4.0 revolution, continue to test SME resilience. To maintain competitiveness, SMEs require strong competencies in data literacy, technological literacy, and financial literacy (Widyakto et al., 2022).

The COVID-19 pandemic has demonstrated the remarkable resilience of SMEs, despite widespread revenue declines, operational disruptions, and financial difficulties. These challenges highlight the urgent need for enhanced support in human resource management, marketing strategies, financial management, and technology adoption. Strengthening these areas is essential to ensure that SMEs can sustain their operations and adapt to an increasingly digital economic landscape.

Innovation in the financial sector, particularly financial technology (fintech), plays a crucial role in the financial performance and development of SMEs. Fintech enhances financial inclusion and improves efficiency by providing access to various services such as peer-to-peer (P2P) lending, e-wallets, crowdfunding, and personal finance management (Suryanto et al., 2020). According to Financial Innovation Theory (Silber, 1983), fintech adoption can enhance business competitiveness and operational efficiency. Several studies have shown that fintech positively contributes to SME financial performance by expanding access to financing and improving transaction efficiency (Abbasi et al., 2021; Leong & Sung, 2018). However, without adequate financial literacy, fintech adoption may increase financial risks, potentially reducing business performance (Almulla & Aljughaiman, 2021; Sudaryanti et al., 2018).

Financial literacy plays a crucial role in strengthening the relationship between fintech adoption and SME financial performance. This capability enables business owners to manage their finances wisely, mitigate financial risks, and optimize fintech benefits. Financial literacy comprises three key aspects: financial knowledge, financial behavior, and financial attitude, which collectively contribute to the financial performance of SMEs (Sanistasya et al., 2019). According to the Theory of Planned Behavior (Ajzen, 1985), financial decision-making is influenced by attitudes, subjective norms, and perceived behavioral control. Empirical studies indicate that financial literacy not only enhances the effectiveness and efficiency of SME financial management but also facilitates fintech adoption and minimizes the potential negative impacts of financial technology (Mogaji & Nguyen, 2022; Octavina & Rita, 2021).

As a moderating variable, financial literacy strengthens the relationship between fintech adoption and SME financial performance. A strong understanding of financial concepts enables business owners to utilize fintech features optimally, thereby enhancing financial management efficiency and reducing financial risks. Research by Lema et al. (2021) suggests that financial literacy expands access to fintech services and accelerates the adoption of technological innovations among SMEs. Thus, financial literacy serves as a key factor in optimizing fintech benefits to improve SME financial performance.

Mfoundi Division, as a center of Cameroon's administrative headquarter and part of Cameroon's creative economy and tourism industry, has a diverse and dynamic SME ecosystem. However, many SMEs in Manyu Division continue to face challenges in accessing financing and adopting financial technology. Therefore, this study examines the effect of fintech adoption on the financial performance of SMEs in Mfoundi Division, with financial literacy as a moderating variable. The findings are expected to provide both theoretical and practical contributions, supporting SME development and assisting the government and other stakeholders in formulating more effective policies. Also, the study will contribute to the growing literature on Fintech and financial literacy in developing economies, offering insights for policymakers and SME owners seeking to enhance financial inclusion and SME financial performance.

2. Methodology

This study investigates the effect of fintech adoption on financial performance, with financial literacy as a moderating variable. The research was conducted in Mfoundi Division in Cameroon, involving 300 SMEs selected through purposive sampling. Purposive sampling was used to select SMEs in Cameroon's Mfoundi Division who have experience with fintech adoption financial literacy, enabling the researcher to gather targeted, relevant data to address the research question. A quantitative approach was employed and a cross-sectional survey design, utilizing primary data collected via structured questionnaire. Partial Least Squares-Structural Equation Modeling (PLS-SEM) was applied for hypothesis testing and data analysis.

The research framework comprises fintech adoption as the independent variable, financial performance as the dependent variable, and financial literacy as the moderating variable. It is hypothesized that financial literacy strengthens the relationship between fintech adoption and financial performance, implying that SMEs with higher financial literacy can leverage fintech services more effectively to enhance their financial outcomes.

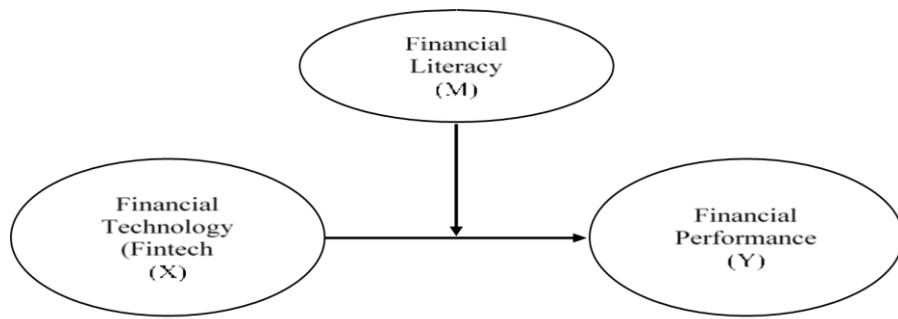


Figure 1.

3. Conceptual Framework

The target population consists of SMEs operating in Mfoundi Division, Cameroon. The sample selection was based on the following criteria: SMEs that have been operating in Mfoundi Division for at least two years, actively using fintech services such as P2P lending, e-wallets, or crowdfunding, and maintaining financial records to assess performance. The indicators used to measure each variable are detailed in Table 1.

Table 1. Research Variable/ Indicators

Variable	Indicator	Source
Financial performance	Achievements in product sales; Increase in net profit or gross profit; Net income growth rate	Oktavina & Rita (2021)
Fintech	Easy to used; platform view; Information access; Digital adoption rate; Cost efficiency; Time efficiency; Effectiveness; Data privacy compliance; User experience; Good idea; Success rate; Fraud rate; Can be trusted; Personal information; Fraud and piracy	Safira et al. (2020)
Financial Literacy	Knowledge of the time value of money; Knowledge of saving; Knowledge of risks and return; Understanding budgeting; Understanding the definition of inflation; Understand the concept of diversification; Awareness of debt management; Supervise financial affairs; Planning long term goals; Choose a product before making a transaction; and Considering the needs of tomorrow	Safira et al. (2020)

Source: Safira et al. (2020).

4. Result and Discussion

Table 2 presents the distribution of the research sample, showing that 214 respondents belong to small businesses, and 86 to medium businesses. This is based on data collected from the Divisional Delegation for Small and Medium Sized Enterprises for Mfoundi Division. The majority of respondents are small-business owners, accounting for 71 percent of the sample, followed by medium businesses at 29 percent.

Table 2. Data Analysis

Intervals	Frequency	Percentage
0–2 Billion (Small)	214	71
> 2 Billion–15 Billion (Medium)	86	26
Amount	300	100

Source: Field work (2025).

Table 3 displays the results of the validity test. All indicators demonstrate their ability to represent the corresponding latent variables, as evidenced by factor loadings exceeding 0.50. These results confirm that all measurement indicators meet the validity requirements.

Table 3. Convergent Validity Test Results

Variable	Indicator	Loading Factor
Fintech (X)	X1	0.672
	X2	0.793
	X3	0.832
	X4	0.640
	X5	0.788
	X6	0.774
	X7	0.859
	X8	0.806
	X9	0.761
	X10	0.712
	X11	0.771
	X12	0.770
	X13	0.658
	X14	0.644
	X15	0.706
Financial Performance (Y)	Y1	0.943
	Y2	0.936
	Y3	0.898
Financial Literacy M)	M1	0.862
	M2	0.776
	M3	0.881
	M4	0.814
	M5	0.826
	M6	0.856
	M7	0.830
	M8	0.869
	M9	0.880
	M10	0.863

Source: Field work (2025).

Table 4 presents a valid model, as indicated by the Average Variance Extracted (AVE) values for each variable exceeding 0.50. The reliability test results in Table 5 confirm that all variables are reliable, as demonstrated by composite reliability and Cronbach's alpha values exceeding 0.50. The composite reliability value for the fintech variable is 0.955, with a Cronbach's alpha of 0.945. The financial performance variable has a composite reliability value of 0.958 and a Cronbach's alpha of 0.916. Meanwhile, the financial literacy variable records a composite reliability of 0.965 and a Cronbach's alpha of 0.876.

Table 4. Average Variance Extracted (AVE) Value

Research variable	AVE
Fintech (X)	0.655
Financial Performance (Y)	0.831
Financial Literacy (M)	0.712

Source: field work (2025).

Table 5. Reliability Test Results

Variable	Composite Reliability	Cronbach's Alpha
Fintech (X)	0.955	0.945
Financial Performance (Y)	0.958	0.916
Financial Literacy (M)	0.965	0.876

Source: Field work (2025).

Table 6 shows that financial technology positively influences financial performance, with a coefficient of 0.784, a t-statistic of 10.342, and a p-value of 0.000. The p-value, which is below 0.05, confirms the statistical significance of this relationship.

Table 6. Path Coefficients Test Results

Direct Effects	Original Sample (O)	Direct Effects	Original Sample (O)	Direct Effects	Original Sample (O)
Fintech -> Financial Performance	0.784	0.796	0.077	10.342	0.000
Fintech_Financial Literacy > Financial Performance	0.122	0.107	0.061	2.075	0.038

Source: Field work (2025).

The research findings confirm that fintech positively influences financial performance, supporting the proposed hypothesis. This suggests that SMEs that effectively understand and utilize fintech experience improved financial outcomes. These results align with financial innovation theory, which posits that innovation enhances a company's competitive advantage by improving revenue generation and financial efficiency. This principle applies to SMEs in Mfoundi Division that have successfully integrated fintech into their business operations. The majority of respondents in this study reported increased income and greater transaction convenience after adopting fintech solutions. These findings are in- agreement with previous study such as Wulan (2017), Leong & Sung (2018), Luckandi (2019), and Hamidah et al., (2020) which also indicated that financial technology contributes positively to SMEs' financial performance. Additionally, access to fintech-based financing enables SMEs to expand their market reach and address funding constraints (Suryanto et al., 2020).

Beyond its direct effect, fintech enhances financial performance through financial literacy as a moderating variable. The analysis results indicate a positive moderation effect, with a coefficient of 0.122, a t-statistic of 2.075, and a p-value of 0.038, confirming that financial literacy strengthens the relationship between fintech adoption and financial performance. This finding supports the hypothesis that financial literacy enhances the positive impact of fintech on financial outcomes. SMEs with higher financial literacy levels can optimize fintech use, mitigate financial risks, and improve financial decision-making, ultimately leading to stronger financial performance.

From the perspective of the Theory of Planned Behavior, financial literacy consists of three key components: attitude, subjective norms, and behavioral control. A positive attitude towards financial management, supportive social norms, and strong behavioral control contribute to SMEs' ability to leverage fintech effectively. SMEs with higher financial literacy levels are better equipped to recognize and adapt to financial changes facilitated by fintech adoption. The ability to utilize fintech optimally depends on SME owners' awareness, knowledge, and skills in financial management. This finding is consistent with Widyaningsih et al. (2021), who emphasize that financial literacy plays a crucial role in maximizing the benefits of fintech innovations. Furthermore, studies by Anisah & Crisnata (2021) and Octavina & Rita (2021) reinforce this conclusion, demonstrating that financial literacy amplifies the positive effects of fintech on SMEs' financial performance.

5. Conclusions

The findings of this research revealed that fintech adoption positively affect the financial performance of SMEs and financial literacy positively moderate the relationship between fintech adoption and small and medium sized enterprises financial performance in Cameroon's Mfoundi Division. Therefore, SMEs with higher financial literacy are better able to utilize fintech services effectively, leading to improved financial management,

increased revenue, and enhanced business sustainability. These results highlight the importance of financial literacy in maximizing the benefits of fintech adoption among SMEs.

This research contributes to Financial Innovation Theory by demonstrating that fintech adoption enhances financial performance through increased financial accessibility, efficiency, and competitiveness. The study also supports Planned Behavior Theory, as financial literacy influences SME owners' attitudes, subjective norms, and behavioral control, leading to more informed financial decision-making and effective fintech utilization. The interaction between fintech and financial literacy strengthens their impact on financial performance, reinforcing the notion that financial knowledge is essential in leveraging technological advancements.

The practical implications of this study emphasize the need to enhance financial literacy among SMEs to ensure the effective adoption of fintech solutions. SME owners with strong financial literacy can better manage their finances, mitigate financial risks, and optimize fintech services to improve business performance. Policymakers, financial institutions, and fintech providers should collaborate to implement targeted financial education programs, develop accessible fintech solutions, and facilitate greater financial inclusion for SMEs. Strengthening financial literacy will enable SMEs to maximize fintech adoption, contributing to broader economic growth and business resilience.

6. Limitations and Future Research Directions

This study is limited to examining fintech adoption and financial literacy as determinants of financial performance. Future research should consider additional factors such as education level, industry type, innovation capability, business size, ownership structure, and government policies that may also affect SME financial performance. Expanding the research scope to different regions or industries and incorporating qualitative insights could provide a more comprehensive understanding of the dynamics influencing Fintech adoption and SME financial performance in the digital era.

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