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Financial Inclusion and SMEs' Performance: Mediating Effect of Financial Literacy

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ABSTRACT

This study examines the mediating effect of financial literacy on the relationship between financial inclusion and SMEs' performance. Using a targeted sampling technique, we selected SMEs that have been in operation for 5 years and are duly registered with SMEDAN. Meanwhile, a simple random sample was used to select 250 SME operators or managers for the study. Data were analyzed using structural equation modeling (SEM). The results show that financial inclusion is positively and significantly associated with SME performance. There is also evidence that financial inclusion is directly related to financial literacy. Furthermore, the results show that financial literacy has a large positive impact on the performance of SMEs. Financial literacy has also been found to partially mediate financial inclusion and SME performance. The study then recommends that small business regulators work with accounting professional organizations to organize financial literacy workshops, seminars, and short courses for small business owners. This goes a long way in making funding more accessible for small business operators.

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1. INTRODUCTION

Financial inclusion in small and medium enterprises (SMEs) is a major concern for policy makers, academics and entrepreneurs around the world. Financial inclusion is about access to avoidable banking services for economically exclusive entrepreneurs (Odetayo, Sajuyigbe, Adeyemi, 2020a). The Center for Financial Inclusion (2015) states that financial inclusion is access to a wide range of quality economic services available to customers in a cost-effective, convenient and sophisticated manner. Recently, the rise of COVID-19 has complicated the financial process of SMEs (Anudu and Okojie, 2020).

Faced with this scenario, the Central Bank of Nigeria (CBN) has implemented a National Financial Inclusion Strategy to financially empower SMEs through affordable financial products and services. Start and grow your business. These include efforts to increase domestic bank penetration, an N50 billion credit line for SMEs, the Market Moni program of interest-free loans for SMEs, and the Youth Entrepreneurship with Innovation (YOUWIN) programme. This includes the launch of the Youth Entrepreneurship Assistance Program (YESP) by Industrial Bank (Onyekwena & Kekeruche, 2020).

Despite these superior systems and the availability of modern financial services such as bank cards, online banking applications and insurance, small businesses have been financially excluded. Apparently, the World Bank (2018) laments that over 1.7 billion SMEs are unbanked, especially in emerging markets. This scenario is due to the lack of financial literacy of SME operators (Odetayo, Sajuyigbe & Adeyemi, 2020b). Karadag (2015) argues that the low financial literacy of SME operators impacts the ability of SMEs to grow and achieve sustainable results. The OECD Report (2020) evident that over 70% of SMEs in Asian and African countries are facing distress syndrome due to financial exclusion syndrome.

Financial literacy is recognized by scholars as an important factor influencing the performance of SMEs around the world (Iriboe, Akinyede & Iriobe, 2017). According to Khadijah and Wan (2019), financial literacy is a set of financial skills that enable SME operators to implement financial management strategies. Although many studies have examined the impact of financial literacy and inclusion on SME performance in developed and developing countries, evidence that financial literacy mediates financial inclusion and overall SME performance is lacking. No studies have tested its effectiveness. This latest review aims to fill existing gaps in the literature through the growth of models that identify the mediating effect of financial literacy on the link between financial inclusion and SME performance.

1.1.Theoretical Framework and Development of Hypotheses

The financial Literacy Principles were first developed in 1997 by the Bounce$tart Coalition for Non-Public Financial Literacy. The principles of business literacy envision financial literacy as the ability to apply financial skills and talents to effectively manage financial resources and potentially remain financially secure at all times. For example, it is used to refer to financial product knowledge (bonds, stocks, and mortgages), the concept of financial knowledge (credit), and financial math skills for effective financial decisions (Sajuyigbe, Adeyemi, & Odebiyi, 2017). Empirical studies have linked the financial literacy theory to financial practices (Accounting information system, cash book maintenance, working capital management, financial reporting, inventory control, cash budget, savings behavior etc) (Rathnasiri, 2015; Gallery et al., 2011) . According to Odetayo et al. (2020b), financial literacy theory pave way for SMEs to acquire a spectrum of financial skills to enable them achieve their ivory tower amid financial challenges. Okpara (2011) and Lusardi and Oliver (2006) also argue that financial literacy theory is the driving force for SMEs to have a set of financial skills that help them access financial products and make effective decisions. Therefore, the theory presupposes that SMEs optimally choose to invest in financial knowledge and education in order to access higher-yielding investments.

1.2.Financial Inclusion

Financial inclusion dates back to the late 1990s and mid-2000s, when many associations began to move from managing microcredit to providing basic access to financial services. Financial inclusion is about access to avoidable banking services for economically exclusive entrepreneurs (Odetayo, Sajuyigbe, Adeyemi, 2020a). The Center for Financial Inclusion (2015) states that financial inclusion is access to a wide range of quality economic services available to customers in a cost-effective, convenient and sophisticated manner. In early 2014, the UK came into the limelight with its financial inclusion approach launched with pre-2014 price points to help SMEs gain financial energy (World Financial Institution, 2018). According to Aduda and Kalunda (2012), financial inclusion is a financial tool that enable SMEs to obtain loans from financial institutions. Financial Institutions Sector (2018), Financial Inclusion follows how people and authorities can access financial products and governments that address the challenges of financial inclusion. The African Development Bank (2013) also defines financial inclusion as an activity that makes financial services accessible, affordable, open and unobtrusive to entrepreneurs. Empirical evidence shows that financial inclusion is the lifeline of sustainability for SMEs around the world. For example, a study by Sajuyigbe et al. (2017) suggests that financial inclusion is important for SME sustainability in international settings in Africa. Also, the Banco relevant Do Brasil file (2010) confirms that financial inclusion is a financial strategy that makes SMEs involved and applicable in the financial industry. A study by Usama and Yusoff (2019) also confirms that financial inclusion has a direct link with the overall performance of SMEs. From the same perspective, Bruhn and Zia (2011) confirm that financial inclusion is linearly related to SME performance. Furthermore, Okoli (2011) confirms that financial inclusion is a key indicator of overall SME performance. Additionally, a study at Kenya's Wisdom to Execution (2014) shows that there can be an impressive correlation between economic inclusion and SME performance. Similarly, research conducted by Njoroge (2013) confirms previous research that financial inclusion is a predictor of SMEs' performance. Based on the above empirical results, the following hypothesis is proposed.

H_1: Financial inclusion is significantly associated with SMEs' performance

1.3.Financial Literacy as a Mediator

There is evidence that financial literacy at the individual and organizational levels is the key to sound financial management and financial breakthroughs (Usama & Yusoff, 2019). Financial literacy is the dissemination of financial skills in corporate practice through the optimal use of financial assets for corporate growth (Know-how, 2014). Many studies have linked economic education and financial inclusion. For example, Cheppekemoni (2017) repeatedly states that monetary literacy is a way of familiarizing people with economic practices including coin budgeting, coin management, savings behavior, ongoing capital management, inventory management, and financial accounting statistics. Research by Fernandes (2015) suggests that financial product know-how and economic literacy in using online banking applications are directly related to financial inclusion. Moreover, Khadijah and Wan (2019) argue that financial literacy is the main driver of financial inclusion. Gallery, Newton, and Palm (2011) also argue that economic inclusion is a financial approach that supports funding choices. Empirical evidence suggests that an individual's business literacy is highly relevant to business management (Mashizha, Sibanda & Maumbe, 2019). This indicates that the higher a person's financial literacy, the better they manage their money, and vice versa. Research confirms a linear association between financial literacy and SMEs' performance (Odetayo, Sajuyigbe & Adeyemi, 2020b; Usama & Yusoff, 2019; Consciousness, 2014). Also, Lusardi and Mitchell (2014) argue that financial literacy is positively associated with responsible financial behavior by SME operators and SMEs' performance. Sajuyigbe et al. (2017) assert that financial literacy is a tool for making strong financial decisions. Disney and Gathergood (2013) also conclude that economic statistics are a relevant platform for financial inclusion and overall performance of SMEs. Thus, it is predicted that financial literacy influences financial inclusion and SMEs performance. Therefore, the following hypotheses are formulated:

H_2: Financial literacy significantly influences SMEs' performance

H_3: Financial literacy is significantly associated with financial inclusion

H_4: Financial literacy mediates between financial inclusion and SMEs' performance

Conceptual Model

Independent variable **Mediator** **Dependent Variable**

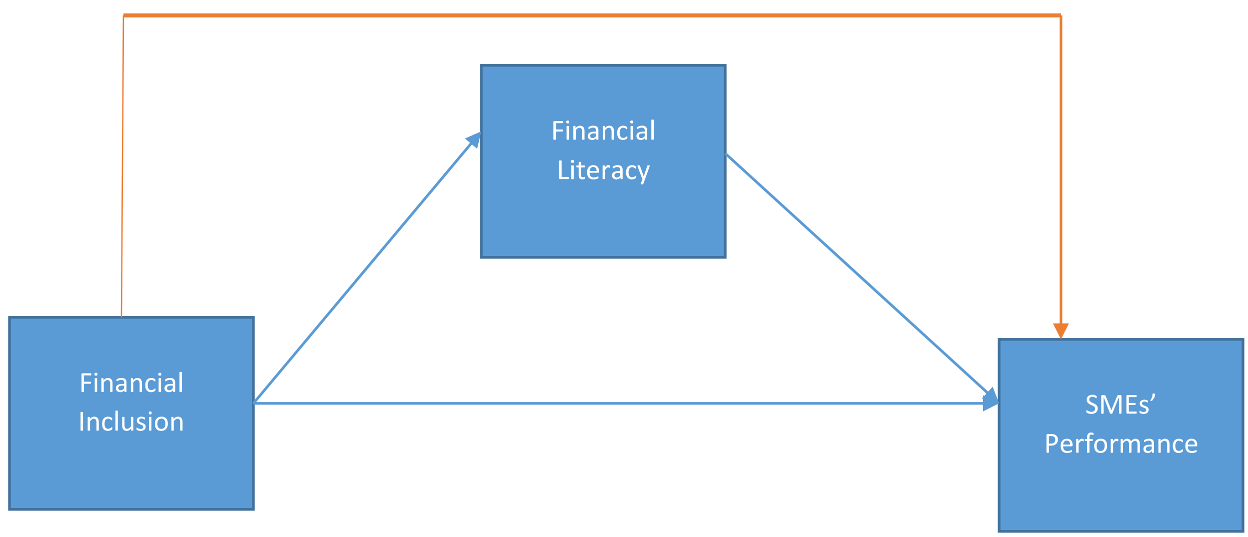

Figure 1: Conceptual Model

2. METHODOLOGY

2.1. Sampling Procedures

Using a targeted sampling technique, we selected SMEs that have been in operation for 5 years and are duly registered with SMEDAN. Meanwhile, a simple random sample was used to select 250 his SME operators or managers as the survey sample size. Sample size was determined by the formula proposed by Slovin (1963).

2.2. Survey Instrument

The instruments used for the study consists of pedagogical entrepreneurship scale, entrepreneurial intention scale, educators' role model scale. The scale was anchored on a five-point Likert scale for all the study instruments.

2.2.1. **Financial Inclusion Scale:** This scale was derived from the study of Odetayo, Sajuyigbe and Adeyemi (2020b). The survey comprises 6 items. The scale's internal consistency factor α was 0.82

2.2.2. **Financial Literacy Scale: T**he scale was developed and validated by Chepkemoni (2017) . The survey comprises 6 items. The scale's internal consistency factor α was 0.79.

2.2.3. **Performance Scale:** This scale was derived from the work of Fernandes (2015). The survey comprises 4 items. The scale's internal consistency factor α was 0.88.

Table 1: Summary of Results of the Measurement Instruments Validation

variable		**Cronbach's alpha**
Financial Inclusion – Cronbach Alpha –(FIS = 0.851)		
FIS 1	The company internally generated cash from savings Only.	0.795
FIS 2	The company generated cash from a co-operative loan.	0.748
FIS 3	This business is funded through a microfinance line of credit	0.822
FIS 4	The company has easy access to commercial bank loans.	0.764
FIS 5	The company uses only funds borrowed from relatives and friends.	0.798
FIS 6	The company has easy access to micro-insurance services	0.761
Financial Literacy- Cronbach Alpha – (FLS = 0.872)		
FLS 1	Every day we prepare the operating budget of the organization	0.789
FLS 2	The annual financial statements of our business account are always available	0.855
FLS 3	We make daily cash adjustments for our operation	0.797
FLS 4	Improved knowledge of general ledger balance.	0.872
FLS 5	Improved use of online banking application	0.696
FLS 6	Internal control of cash budget	0.748
Performance Scale - Cronbach Alpha – (PS = 0.879)		
PS 1	we have been experiencing high patronage	0.789

PS 2	Our sales are growing rapidly	0.798
PS 3	We were able to establish a leading position in the market.	0.818
PS 4	Our customers are satisfied with our high quality products and services.	0.809

Table 1 above shows that the factor weights for all indicators are greater than 0.5, indicating that the question explains the variability of those variables. This makes the measurement model suitable for analysis.

3. Data Analysis

Table 1: **Structure Equation Modelling without mediator (Direct Effects)**

Path	β-value	t-value	P-value	[95% Conf. Interval	
$FI \rightarrow P$	.6032	6.673	***	.4263834	.7815374
FL$\rightarrow P$	.1934	2.122	***	.0143429	.3717957
FI$\rightarrow FL$	.7565	11.743	***	.6301449	.8826756

Note: *** = significant at 5%, FI = Financial inclusion, FL = Financial literacy, P = SMEs' performance

Table 1 shows the direct paths for variables. Using standardized coefficients, a beta value of 0.6032 and a t-value of 6.673 indicate a positive association between financial inclusion (FI) and SME performance. Also, the P-value of 0.000 further indicates that SME performance is strongly influenced by financial inclusion. This means access to financial services is a platform for SME sustainability and growth. This study is consistent with Sajuyigbe et al. (2017) agree that FI is the hub of sustainability for SMEs in African countries. Another study conducted by Aduda and Kalunda (2012) shows that FI in Kenya is positively correlated with SMEs' performance. Similarly, a Banco Central Do Brasil report (2010) confirms that FI is a financial strategy that draws SMEs into the world of finance and makes them relevant. Another study by Usama and Yusoff (2019) reaffirms that FI has a significant impact on SME performance. From the same perspective, Bruhn and Zia (2011) confirm that FI is linearly related to SME performance. Similarly, Okoli (2011) reiterates that FI is a key indicator of SME performance. Similarly, research conducted in Kenya by Wisdom (2014) shows a positive association between FI and SMEs' performance. Thus, H_1 is confirmed.

The results also show that financial literacy (FL)($\beta = 0.1934$; $t = 2.122$; $p<0.05$) has a positive and significant impact on SMEs' performance. This means that financial skills pave the way for the SMEs' performance. This study supports Lusardi and Mitchell (2014)'s argument that FL is positively correlated with responsible financial behavior (FB) by SME owners and SME performance. Sajuyigbe et al (2017) also assert that financial skills are a tool for effective financial decisions and SMEs' performance. Disney and Gathergood (2013) also conclude that financial information is a relevant platform for SMEs' financial inclusion and performance. Hence, H_2 is confirmed

There is evidence that FI is positively associated with FL, with a beta value of 0.7565 and a t value of 11.743. This suggests that a range of financial skills is a true tool for SME FI. This study agrees with his Chepkemoni (2017) that FL is a tool for becoming familiar with financial practices such as cash budgeting, cash management, savings behavior, working capital management, inventory management, and financial accounting information. Research by Fernandes (2015) also shows that FL is directly related to FI in terms of knowledge of financial products and use of online banking applications. Similarly, Khadijah and Wan (2019) propose that FL is a driver of FI. Gallery, Newton, and Palm (2011) also argue that FI is a financial strategy that supports investment decisions. Therefore, H_3 is supported.

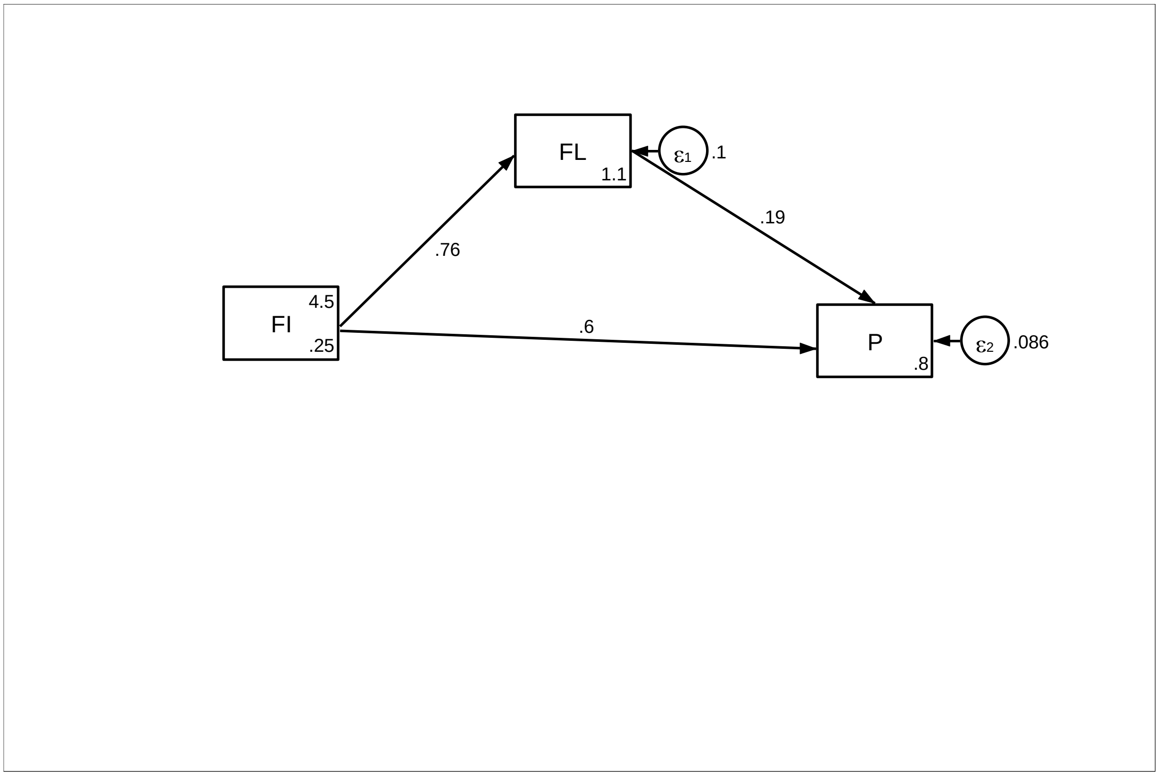

Figure 1 **Structural Equation Modelling**

Table 2: Structure Equation Modelling with mediator (Indirect Effects)

Path	β-value	t-value	P-value	95% Conf. Interval	
FL→ P	.1934	2.122	***	.0143429	.3717957
$FI \rightarrow P$	.6032	6.673	***	.4263834	.7815374
$FI \rightarrow FL \rightarrow P$	.146	2.08	***	.0086688	.2834104

Table 3 shows the FL intermediary between FI and SMEs' performance. Using standardized coefficients, a beta value of 0.1934 and a p-value of 0.000 indicate that FL is a predictor of SMEs' performance, while a beta value of 0.6032 and a p-value of 0.000 indicate that FI is also a predictor of SMEs' performance. Furthermore, an indirect beta value of 0.146 and a p-value of 0.000 suggest that FL is a mediator. According to the rules proposed by Baron and Kenny (2003), FL mediates partially between FI and SMEs' performance. This rule states that partial mediation occurs when the independent variable is a predictor of the dependent variable at the same time that the mediator is a predictor of the dependent variable. This result means that the higher the FL of SMEs, the higher the FI in the sector and the better the performance of SMEs.

4. CONCLUSION AND RECOMMENDATION

This study explores the mediating effect of financial knowledge on the link between financial inclusion and overall small business performance. Using a targeted sampling method, we selected SMEs that have been in operation for more than 5 years and are duly registered with SMEDAN. Meanwhile, a simple random sample was used to select 250 SME operators or managers as the survey sample size. Structural equation modeling (SEM) was used to explore information using the useful STATA model 15 resource. The results show that financial inclusion is impressively and fundamentally linked to the overall performance of SMEs. Evidence also shows that financial inclusion is directly related to financial literacy. Furthermore, the results suggest that financial literacy has a very large impact on the performance of SMEs. We also find that financial literacy partially mediates between financial inclusion and SME performance.

Finally, looking at small business regulators, are encouraged to contact accounting professionals on their boards to prepare quick releases on workshops, seminars, and economics training for small business owners. This will go a long way in providing access to funds for SME operators.

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