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Structural Equation Modeling Analysis of Equity-Based Islamic Financing for Nigerian Small-Scale Enterprises Growth

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ABSTRACT

This study investigates within Covariance-based Structural Equation Modeling (CV-SEM) the potential causal relationships between Islamic equity-based financing and Nigerian Small Scale Enterprises (SSEs) expansion. A quantitative survey design was employed to collect questionnaire-based, cross-sectional primary data from 512 educated SSE owners and managers in eight business districts in the Abeokuta metropolis. STATA 12.1 software was utilized to estimate CV-SEM with the maximum likelihood method. Intuitively, the Principal Component Analysis (PCA) estimator was applied to derive continuous data scores for the latent variables. The fit indices tested (RMSEA, CFI and TLI) indicate that the study structural models fit the observed data. From the CV-SEM estimations, musharakah and mudharabah have potentially positive and significant impacts on the sales growth of SSEs in the study area. Findings reveal further that Islamic equity financing tools such as musharakah, diminishing musharakah, and mudharabah are more likely to enhance the development of SSEs in the Abeokuta metropolis significantly and indirectly through the Islamic finance legal framework. The study affirms that the expansion of small enterprises in the study area will be directly, positively, and significantly influenced by Islamic shared finance (Musharakah) and Islamic joint partnership (Mudharabah). However, the indirect positive and significant impact of Islamic equity finance through a legal framework (mediating factor) is stronger for the development of small firms than the direct impact. The study advocates that the federal government of Nigeria should institute a suitable legal framework for Islamic equity financing to enhance the operational capacity of small-scale businesses.

INTRODUCTION

Small and medium-scale enterprises (SMEs) serve as a framework through which the economic growth of a country can be achieved due to their potential to generate employment opportunities, create wealth and reduce poverty (Asian Development Bank [ADB], 2022; Sojoodi & Jalili, 2022; Shinkafi *et al.*, 2023; World Bank, 2023). This category of businesses section, SMEs, operates virtually in manufacturing and service sectors and thus provides employment opportunities for both skilled and unskilled people. Consequently, the industry contributes to developing economies where it receives necessary encouragement. However, the incentives for SMEs to operate efficiently depend on important factors including cognitive skills, non-cognitive skills, a friendly business environment, financial support from financial institutions and government through access to finance, inclusive institutional framework and others. Although financing problem still exists among SMEs in the Asian region improved SME access to finance has long been regarded as a major driver behind economic improvements and success of Indonesia, Thailand, Taiwan, and Singapore (ADB, 2022).

However, SMEs in developing economies including Nigeria often encounter acute credit financing problems from conventional banks which eventually limit their growth potential (Adedeji, 2021; Shinkafi *et al.*, 2023; Sonita, Miswardi and Nasfi, 2021; World Bank, 2023).

This incidence of funding gap from interest-based formal banks, in part, further dampens the development of SMEs in developing countries. In Nigeria, for instance, the share of SME loans and advances (represented by loans to trade and general commerce) to Deposit Money Banks total loans in 2023 is just a paltry 7.97% (Central Bank of Nigeria Statistical Bulletin, 2023). Such funding issues might have contributed to the sector's less impressive performance that year. Therefore, creating an alternative financing model mechanism for substantial advancement to improve access to capital for SMEs in developing countries (such as Nigeria) beyond traditional bank credit is essential. The relevance of Shariah-compliant financing models for higher performance of SMEs and the economy at large has been documented by researchers, policymakers, countries and international bodies (World Bank-Islamic Development Bank, 2015; Adedeji, 2021; Shinkafi *et al.*, 2023; United Nations Development Programme-Islamic Development Bank, 2023). However, innovative Islamic financing models like fully fledged equity-based Islamic financing which has been proven worthy elsewhere for ameliorating funding issues faced by SMEs are still limitedly unexplored in Nigeria (Fitch Ratings, 2023).

In Nigeria, armful studies by Adam (2020); Adedeji (2021), and Shinkafi *et al.* (2023) found that Islamic financing has a significant and positive effect on the performance of the country's SMEs. However, certain

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flaws are found with the analysis method used by these studies to arrive at such results. These include heteroscedasticity, non-disclosure of linearity, and normal distribution assumption, where least square methods are used. Furthermore, to our knowledge, we found that a robust technique (such as Structural Equation Modeling – SEM) that addresses all these estimation issues Islamic finance studies has not been applied in the context of Nigerian Small-Scale Enterprises (SSEs). More worryingly, previous studies worldwide have ignored the estimation of the indirect effects of the Islamic equity financing legal platform which provides the operational framework for the conduct of Islamic finance activities. Against this backdrop, the current study aims to extend existing finance literature by evaluating the reliability of Musharakah, Diminishing Musharakah and Mudharabah as equity-based Islamic finance approaches towards growth of Small Scale Enterprises (SSEs) in Nigeria with a specific focus on Abeokuta metropolis. With the Islamic equity financing legal framework serving as a mediating variable, a critical question is raised under Covariance-based Structural Equation Modeling (CV-SEM) on what indirect effect Islamic finance has on the growth of SSE firms in Abeokuta metropolis, Nigeria. From the analysis conducted, it was indicated that both Musharakah and Mudharabah financing initiatives have positive and significant impacts on stimulating the sales growth of SSEs in the study area. The observed empirical evidence shows further that such significant impacts would be stronger indirectly when the Islamic equity financing legal framework is developed and implemented. Thus, Islamic equity-based financing means (Musharakah and Mudharabah) can significantly help address the unmet financing needs of SSEs in Nigeria and aid them in growing and generating jobs. This paper is divided into five sections. The study starts with an introduction followed by a literature review. Section three discusses the methodology of the study. The data obtained were analysed, interpreted and discussed in section four while the conclusion and recommendations are contained in section five.

LITERATURE REVIEW

The literature has no convergence opinion regarding the most acceptable definition of micro and small-scale business (Elasrag, 2016). However, some key criteria are normally used to draw a line of demarcation between a micro, small, medium and large business. These include the number of employees, turnover, assets size, annual sales, annual production, investment and paid-up capital (Abdinur & Ondes, 2022; Adedeji, 2021; Al-Dabbas, 2023; Elasrag, 2016; European Commission, 2015; Small and Medium Enterprises Development Association of Nigeria, 2007; International Finance Corporation publication, 2020; 2024). International Finance Corporation publication (IFC, 2024) used employment, assets and sales value criteria to define a micro, small and medium enterprise (MSME); however, out of the three

criteria, an enterprise must meet two to be classified as either micro or small or medium venture. According to IFC, a micro-enterprise is defined as a business with some employees of not more than 10 or with an asset value of less than $100,000 (US dollar) or generates an annual sales value of not more than 100,000 US dollars. A small-scale enterprise is defined as an enterprise that employs between 10 and 50 workers or with total assets value between $100,000 to $3,000,000 or a business that realizes between $100,000 to $3,000,000 as annual sales. A medium enterprise in line with the IFC classification is categorised as an enterprise that recruits between 50 and 300 workers or a venture with a total asset value between $3,000,000 and $15,000,000 or makes between $3,000,000 and $15,000,000 as sales revenue in a year. The Apex Bank in Nigeria, Central Bank of Nigeria (CBN), in the year 2010 defined a micro enterprise as a one-man business that employs less than 10 workers and possess total assets (excluding land and building) that is not more than five million naira. The CBN further defines small and medium scale enterprises as businesses that employ between 11 and 200 workers and with total assets less than #500 million.

The peculiarities of MSEs or SMEs in developing countries like Nigeria are observed in the ownership structure as most are mainly sole proprietorships or partnerships with labour-intensive production methods. Commercial banks in particular often feel reluctant to lend to these categories of business and when they (commercial banks) do they charge higher interest rates as costs of borrowing. These conventional banks often request collateral security with the fear that MSEs or SMEs are too risky. In addition, stringent conditions like listing requirements further render MSEs incapacitated to access funds from capital markets like The Nigeria Stock Exchange. Furthermore, most of the sources of formal SME financing institutions in Nigeria ranging from traditional banks such as microfinance banks, universal (commercial) banks, merchant banks, and development banks to specialised financial institutions offer interest-based financing facilities to SMEs. Although interest-based borrowing provides quick access to finance the liability of SMEs increases with such financing means. The implication is that profit which serves as an incentive for entrepreneurs is affected through the reduction in value. In other words, finding alternative noninterest-based funding options such as Islamic financing product offerings will help encourage inclusive growth by MSEs and MSEs in the country.

Islamic financing is the provision of financial services that are based on the values, norms, laws and institutions found in, and derived from the sources of Islam such as Shari'ah to satisfy wealth material and social needs of all members of the community including SMEs (World Bank Group – Islamic Development Bank, 2015). According to Mohieldin *et al.* (2011) as revealed in WB-IDB (2015) the core principles of Islam underscore social justice, inclusion, and sharing of resources. Unlike conventional

finance, Islamic finance is a participatory finance (risk-sharing relationship) arrangement that is asset-based and equity-based. Leveraging asset-based and equity-based finance arrangements for SMEs and start-ups in developing countries and emerging economies such as Nigeria could prove crucial to uncovering entrepreneurial potential in these markets. The positive impacts of such arrangements include increased economic growth, youth empowerment and socioeconomic development.

In asset-based financing, real economic activity is promoted with financial assets as the core requirement of Islamic financial transactions (Askari *et al.*, 2014). The two commonly used variants of this model of financing are sale-based instruments (Murabahah) and leased-based instruments (Ijarah). A Murabahah is a contract between a bank or financier and a client where the bank or financier purchases an asset required by the client and then sells it to the client at a cost and profit margin which are disclosed to the client and is paid back usually by instalments (Abdinur & Ondes, 2022; WD-IDB, 2015; International Trade Centre, 2009). Unlike conventional asset-related agreements, Murabahah imposes a fixed financing rate during the financing term and ensures full transparency of price and mark-up. However, the pricing of some products offered under Murabahah closely parallels or sometimes exceeds the pricing of conventional products (WD-IDB, 2015). Ijarah is an Islamic-based leasing arrangement where money is exchanged for the use of an asset. Under this arrangement, the financier or bank first buys the asset from a supplier and then leases it to the client. The main criterion for eligibility for financing as differentiation from conventional leasing is the ability to generate cash flows to serve the lease agreement, rather than providing security (collateral) and credit history. As a result of this criterion factor, Ijarah is widely used to finance SMEs (Mohieldin *et al.*, 2011).

On the other hand, equity-based financing is a form of financing where the bank or financier has an equity stake or interest in the SME business. This arrangement makes a financial institution that provides investment capital to operate as a partner to the SME. In other words, it is a partnership-based contract with a return to the bank or financier depending on the actual business performance of the clients (International Trade Centre, 2009). There are two types of SME partnership financing, joint venture (Musharakah) and passive partnership (Mudarabah). The two differ based on what the partners contribute to the partnership. Musharakah in Arabian language refers to sharing between two more entities or businesses (partnership). Under this financing, more than two parties can be involved, and generally, each provides knowledge and skill in management and a share of the capital (Abdinur & Ondes, 2022). Meanwhile, it is possible for one partner only to provide capital, in which case he or she becomes a sleeping partner. The profits from operations are shared based on the pre-agreed profit ratio. In the same manner, losses are borne by the partners in proportion to the capital they have provided (International Trade Centre, 2009). This arrangement underscores the Islamic principle of sharing responsibility for Shari'ah-based financing products.

The Mudarabah, passive partnership, transaction is a partnership transaction in which only one partner named the capital-providing investor or Rab al Maal contributes capital, and the other partner known as the business manager or Mudarib contributes skill and expertise. According to ITC (2009), the relationship between the partners is founded upon trust, with the investor relying heavily on the business manager, and his or her ability to manage the business and be honest with profit share payments. In this financing arrangement, the client does the management work in the business while the financier or bank only provides capital. However, this increases the bank's exposure to business risks. With a diminishing Musharakah contract, one partner promises to acquire the equity share of another person's business by gradual payment until he makes the final payment to become the owner (Hussain *et al.*, 2015). This type of financing arrangement is mostly famous among Iranian business enterprises.

Theoretically, the model of discrete choice (DCM) provides a framework for justifying the potential use of Islamic finance in this study by SMEs. The utility-based model, DCM, explains a rational situation in which a decision maker selects the best alternative from a list of two or more choices. Selection of a preferred option is premised on the objective of maximal satisfaction derived from the best alternative. The proponents of Islamic finance have argued through empirical data that owners and managers of SMEs often prefer Islamic financing options to conventional funding models (Al Dabbas, 2023; Baloch & Chimenya, 2023; Shamsudheen, 2023). This preference is due to greater benefits offered by Islamic finance based on the principles of Islam and Shariah laws. For instance, Baloch and Chimenya (2023) opined that Islamic financing is presumed to be desired by SMEs and other users because of its ethical considerations (such as prohibition of interest-based transactions, gambling, and undue returns) that plague conventional options. In other words, this study hypothesizes that the sampled SMEs in the study area would prefer Islamic financing options to traditional alternatives.

Al Dabbas (2023) employed descriptive analysis to investigate how Islamic finance affects the development of 100 Jordan-based SMEs and found that Murabaha is an important and famous financing option among users of Islamic finance. This study asserts that Islamic finance is a critical driver of SME development in Jordan. Similarly, in 2022, a research study by Abdinur and Ondes shows via a bivariate regression analysis of 148 primary observations obtained from selected SMEs in Lasanod, Somalia that a higher level of Islamic finance promotes firms' business performance. At a macro level, Ledhem (2022) assessed the impact of Islamic finance for entrepreneurial business on the growth of the Malaysian economy based on quarterly data from 2014 to 2021. It

was discovered with bootstrap quantile regression that Islamic finance for SMEs promotes Malaysian economic growth. In Africa, scanty empirical evidence on the reliability of Islamic finance for enhancing SME business performance is available. Haruna *et al.* (2024) investigated how the Islamic financing approach affects the innovation capacity of small-to-medium businesses in Cameroon through a sample of 1358 SME owners and/or managers. A multivariate probit model estimation by the study reveals that Islamic financing significantly and positively promotes product, process, and marketing innovation. The study implies that greater Islamic financing enhances SMEs' innovation capacity in Cameroon.

In Nigeria, a few studies by Adam (2020), Adedeji (2021), and Shinkafi *et al.* (2023) found that Islamic financing has a significant and positive effect on the performance of the country's SMEs. However, the common use of sensitive assumptions-based Ordinary Least Square (OLS) method to analyze primary data limits the extent of acceptability of results obtained by these scanty studies in the field. Unless converted into continuous form, the assumption of linearity for categorical data distribution is often impractical via primary data. In other words, using OLS for non-linear relationships can produce biased and unreliable estimates (Gujarati, 2004; Wooldridge, 2010). Again, the heteroscedasticity in OLS with primary data can lead to incorrect inferences (Gujarati, 2004). Errors are likely to vary substantially across all levels of predictors with categorical data. Regrettably, identified issues with the OLS technique for primary data analysis were overlooked by previous studies. Additionally, past studies worldwide have ignored the estimation of the indirect effects of the Islamic equity financing legal platform which provides the operational framework. Meanwhile, successful stories of Islamic financing in Asian countries have been attributed to the efficient legal framework underpinned by Islamic principles (Hussain *et al.*, 2015; United Nations Development Programme and Islamic Development Bank, 2023). Therefore, a suitable method for handling primary data and a robust technique that accounts for heteroscedasticity is required. Consistent with the gap, this study employs the Structural Equation Modeling approach to estimate the reliability of Islamic financing towards the growth of SMEs in Nigeria with a specific focus on the Abeokuta metropolis. The potential use of the SEM technique is premised on the need to provide better efficient estimates and improve the precision of results on the relationship between Islamic finance and SME growth in the study area.

MATERIALS AND METHODS

The current study applies a quantitative survey research design. The use of the research strategy is informed by its ability to yield information about the study population via a sample. The study population are all Small Scale Enterprises (SSEs) in Abeokuta town, Ogun State, Nigeria. However, a specific focus was on SSE owners and/or managers with at least secondary or post-primary education. Unfortunately, due to poor (or lack) record keeping in developing countries like Nigeria (McKenzie and Sakho, 2010), it was not statistically easy to ascertain the precise population of educated SSE owners and/or managers in the study area. Consequently, the study utilizes Krejcie and Morgan's (1970) sample size for an unknown population to determine the required sample size.

The formula is specified as thus:

$$S = ((\text{Range} / 2)^2) / (((\text{Accuracy Level}) / (\text{Confidence Level}))^2 \qquad (1)$$

Where;

Range = Range of SSEs that have educated owners or managers (assumed to be between 10,000 firms and 100,000 firms) = 100,000 – 10,000 = 90,000 firms

Confidence level = 1.96 (2-tailed) at a 5% level of significance

From equation 1, a sample size of 384 SSEs is obtained. However, the derived sample size is adjusted to control for at least a 75% response rate. This is necessary because the empirical evaluation of a large-scale Islamic equity-based model requires a higher response for the eventual analysis outcome to be well accepted. Therefore, equation (1) is adjusted in equation (2) as thus:

$$S^* = (\text{Obtained sample size}) / (\text{desired response rate}) \qquad (2)$$

From equation (2), S is 512 SSEs. These SSEs are represented by firm owners or managers where appropriate and were administered well-structured questionnaires. Moreover, the study employs a systematic random sampling technique to select every 5th SSE approached during the field survey. Hitherto to the main analysis, a pilot study was conducted in eight business-populated areas in Abeokuta to determine the appropriateness of the data instrument (structured questionnaire) and suitable respondents (SSE owner/manager with at least secondary education) for main data administration. Four (4) business districts (BDs) were purposively selected from each of the two local government areas (LGAs) in the metropolitan city of Abeokuta – Abeokuta South LGA and Abeokuta North LGA. The business districts selected in Abeokuta South LGA include Sapon Itoku BD, Asero Adatan BD, Isabo Kuto BD, and Oke-Ilewo Onikolobo BD. In Abeokuta North, Saje Elega BD, Lafenwa Sabo BD, Olomore Ita-Oshin BD, and Sanni Rounder BD were surveyed. With the assistance of four Research Assistants (RA), the respondents were met physically for face-to-face questionnaire administration from 4th March to 4th December 2024.

Furthermore, the study develops a Covariance-based Structural Equation Modelling (CV-SEM) framework to ensure a better understanding of the reliability of Islamic financing toward SSE growth in Nigeria using Abeokuta town - a frontier study area. CV-SEM as a powerful technique helps to overcome measurement errors and specification issues in a complex study (Kline, 2011). Before the CV-SEM modelling procedure, Principal Component Analysis (PCA) analyses were performed

to estimate index scores for the study predictors. PCA is applied to derive a single value (index) for each of latent predictor through their respective observed variables. In the most recent time, studies in Finance have presented evidence that the PCA technique produces a thorough way of estimating index scores (Chon, 2020; Sun, Wang, Xu and Balezentis, 2022). Four correlated items were observed for each of the latent predictors. The PCA equation for each predictor is specified thus:

$$MUS_{score} = \sum_{i=1}^{n} F_i x_i \qquad (3)$$

Where, MUS_{score} = Musharakah Index score; F = absolute factor loadings; x= set of observed variables for MUS.
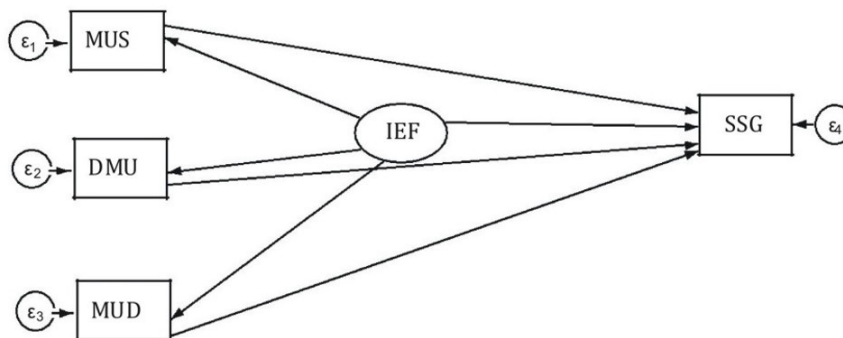
$$DMU_{score} = \sum_{i=1}^{n} F_i x_i \qquad (4)$$

Where, DMU_{score} = Diminishing Musharakah Index score; F = absolute factor loadings; x= set of observed variables for DMU.

$$MUD_{score} = \sum_{i=1}^{n} F_i x_i \qquad (5)$$

Where, MUD_{score} = Mudharabah Index score; F = absolute factor loadings; x= set of observed variables for MUD.
The study CV-SEM model is developed in Figure 1 as thus:

Source: STATA 12.1 Outputs (2023)

Note: MUS = Musharakah; DMU = Diminishing Musharakah; MUD = Mudharabah; IEF = Islamic Equity-based Finance; SSG = SSE Sales Growth

Figure 1: CV-SEM Islamic Equity-based Financing Model for Nigerian SSEs Growth

Figure 1 depicts hypothesised relationships between measures of Islamic finance and sales growth of SSE firms in the study area based on the assumptions of the DCM framework. From the diagram, IEF (Islamic equity finance legal platform) serves as an intervening variable which moderates the relationship between predictors of Islamic equity financing and firm growth. Consequently, two structural models are developed in equations (6) and (7) respectively. These are direct and indirect effects models. The equations are specified as thus.

$SSG_i = \alpha + \beta_1 MUS_i + \beta_2 DMU_i + \beta_3 MUD_i + \varepsilon_4 \qquad (6)$
(Direct Effects Model)
$SSG_i = \alpha + \beta_4 IEF_i + \varepsilon_4 \qquad (7)$ (Indirect Effects Model)
The main predictors (MUS, DMU and MUD) as latent variables are determined via the Principal Component Analysis (PCA).
The dependent variable, SSG, is measured by:

$SSG_i = ((s_t - S_{(t-1)}))/S_t$
Where,
S_t = current sales level (in 2024)
$S_{(t-1)}$ = sales three years ago (in 2021)
A prior Expectation
From the study structural models, $\beta_1, \ldots \beta_3$ and $\beta_4 > 0$
The study structural models were analyzed using the maximum likelihood method of SEM in STATA 12.1 statistical software at a 5% significance level.

RESULTS AND DISCUSSION
This sub-section presents the results from the maximum likelihood estimation of the CV-SEM-based relationship between Islamic equity financing (IEF) and turnover growth of SSE firms in the Abeokuta metropolis. The CV-SEM estimation was conducted using the STATA 12.1 SEM Modeling framework and commands.

Table 1: CV-SEM Estimated SSE Growth Impact of Islamic Equity Financing

(DV: SSG)					
Effect		**Coef.**	**Std. Err.**	**z-value**	**Prob. Value (p>.05)**
Direct effects Structural	MUS <- IEF	0.62	0.06	9.74	0.000
	DMU <- IEF	1.11	0.04	25.67	0.000
	MUD <- IEF	1.26	0.03	34.10	0.000

	MUS	0.03	0.01	2.94	0.003
SSG <-	DMU	-0.01	0.01	-0.65	0.513
	MUD	0.08	0.01	5.50	0.000
	IEF	1.42e-07			
Indirect effects	SSG <-IEF	0.10	0.01	6.35	0.000
No. of Obs.	449				
Method: Maximum Likelihood	1840.95				

Source: Authors' Computations from STATA 12.1 Outputs (2024)

Table 2: Post-Diagnostics Tests

Test	Statistic
Log likelihood	-1840.9498
LR test of model vs. saturated	14353.13 (Prob. > chi2 = 0.4330)
LR test of baseline vs. saturated	15502.31 (Prob. > chi2 = 0.7840)
RMSEA	0.03
COMPARATIVE Fit Index (CFI)	0.9750
Tucker-Lewis Index (TLI)	0.932

Source: Authors' Computations from STATA 12.1 Outputs (2024)

In the preliminary analysis, PCA analyses were performed to derive index scores for all the predictors. These continuous index scores have normal distribution (multivariate normality) properties, satisfying two important assumptions of CV-SEM analysis. The derivation of index scores for the latent variables obviates the need to estimate measurement models. A simple descriptive analysis (mean, maximum and minimum values not shown due to space issues) of PCA index scores depicts no incidence of extremely higher or lower values in the data distribution (that is, the absence of outliers). Hence, PCA provides plausible and parsimonious data scores for causal relationship estimations in SEM analysis. The results of CV-SEM estimations are presented in Table followed by Table 2 which showcases post-analysis diagnostic test statistics. From Table 1, it is revealed that 449 observations out of coded 476 entries into the software were used for the final analysis. Thus, this indicates a paltry 27 observations were dropped for the final analysis due to missing responses at random. The number of observations used for the analysis represents 87.7% of the study's total sample size (512).

However, for one reason or another, 56 administered questionnaires were not returned by the respondents when the data analysis took effect (December 4, 2024). The number of data (449) used illustrates that approximately 41 observations per 1 parameter are estimated in the SEM analysis. In Figure 1, 11 parameters were identified (7 regressions and 4 variances). The higher observations to parameters ratio shows the study sample adequacy (Schreiber *et al.*, 2006). More so, some fit indices (Chi-square test – X2 -; RMSEA; CFI and TLI) as reflected in the Table indicate better model fitness of the study PLS-SEM model developed in the methodology section. For instance, the result in Table 2 highlights that the null hypothesis via chi-square (X^2: p-value > 0.5) that there is a discrepancy between the baseline model and saturated model is accepted at a 5% significance level (Bentler & Bonett 1980; Fan *et al.*, 2016; Mulaik *et al.*, 1989; Hu & Bentler 1999; Schreiber *et al.*, 2006). Other fit indices in Table 2 such as RMSEA (0.03), CFI (0.9750) and TLI (0.932) are also above acceptable values (Fan *et al.*, 1999; Fan *et al.*, 2016; Browne & Cudeck, 1993; Hu & Bentler 1999; Schreiber *et al.*, 2006). For this reason, the researchers did not perform post-hoc model modification as the CV-SEM model developed in the method section has good fitness for the observed data. In other words, the study inferences drawn from the two structural models are considered consistent, reliable and efficient.

From Figure 1, it is indicated that Musharakah (MUS: coef. = 0.62; p-value = 0.000), Diminishing Musharakah (DMU: coef. = 1.11; p-value = 0.000) and Mudharabah (MUD: coef. = 1.26; p-value = 0.00) are significant predictors of Islamic equity financing at a 5% significance level. These results imply that these financing means are critical for designing, deploying and administrating Islamic equity-based financing among small-scale firms in Nigeria, particularly the Abeokuta metropolis. Mainly, direct effect estimation of equation (6) shows that musharakah (MUS: coef. = 0.03; p-value = 0.003) and mudharabah (MUD: coef. = 0.08; p-value = 0.00) have potentially positive and significant impacts on sales growth of SSEs in the study area. A unit increase in musharakah and mudharabah financing means sales / turnover of SSEs in the Abeokuta metropolis will grow by 0.03% and 0.08% respectively. The path coefficients of the four predictors have dispersion levels not higher than 0.01 per cent. In terms of indirect effect estimation, Table 1 reveals that Islamic equity financing tools like musharakah, diminishing musharakah and mudharabah can significantly enhance the growth of SSEs in the Abeokuta metropolis indirectly through Islamic finance legal framework (IEF: coef = 0.10; p-value = 0.000).

Interestingly, the positive and significant impact of musharakah obtained in this study is consistent with previous findings by Shinkafi *et al.* (2023) who asserted that musharakah and mudharabah as finance tools influence SMEs growth in Nigeria. Similarly, this study's finding that mudharabah will promote business growth is similar to results obtained by Shamsudheen *et al.* (2023), Baloch

and Chimenya (2023), and Abdinur and Ondes (2022). In contrast, when diminishing musharakah funding (DMU: coef. = 0.01; p-value = 0.513) increases by 1 unit, the sales level of SSEs falls by 0.01 per cent leading to a lack of business growth. However, the result further shows that the negative impact of diminishing musharakah (DMU: p-value >.05) is insignificant in slowing down the operations of the sampled firms. This insignificant negative impact of diminishing musharakah illustrates that a financing partnership arrangement that will fully transfer total equity interest to capital providers in future is less important to SSE's operational performance. As obtained, the indirect effects of Islamic equity financing will be more pronounced in Nigeria than the individual direct effect offered by the studied financing tools. This result highlights the importance of developing an efficient legal framework for operations of Islamic equity financing for enhancing the operational performance of SMEs particularly SSEs in Nigeria. Overall, it is learnt through the observed empirical evidence that reducing the financing gap faced by micro, small and medium enterprises in Nigeria particularly in the study area (Abeokuta metropolis) requires strategic interventions on Islamic equity financing alternatives. First, banks and other lending institutions in Nigeria need to design and directly offer SSE-targeted Islamic equity financing based on the principles of Musharakah or Mudharabah or both alternatives. Businesses need time to grow and using any of these equity finance alternatives can guarantee them the confidence to operate for longer periods as fear of running into debts or paying high-interest charges on bank loans is allayed. Finally, the result shows that strengthening Islamic equity-based finance in Nigeria through a legal framework is essential and provides greater benefit to help SSEs grow and generate more employment.

Implications of the Study
This study obtains empirical evidence that Islamic equity finance's indirect positive and significant impact through a legal framework (mediating factor) is stronger for developing small firms than the direct impact. Two implications of the study are provided. First, the study shows that analysis of both the direct and indirect effects of Islamic equity finance is particularly important for designing and deploying appropriate Islamic financial policies that benefit small business operations in Nigeria. This effort will enable stakeholders in the country's financial industry to understand the roles of risk-sharing financing initiatives that support small-scale businesses' operational capacity. Second, the use of the PCA technique to estimate data scores for latent variables (Musharakah, Diminishing Musharakah and Mudharabah) in the current study provides a methodological and analytical guide to experts and future studies and consider PCA as a plausible alternative to confirmatory factor analysis (CFA). However, an alternative SEM method that provides greater predictive ability and is less sensitive to the sample size issue (e.g. PLS-SEM) would have ensured

optimal prediction of Islamic equity-based financing reliability toward higher growth of small businesses in the study area. Therefore, future studies in this direction are encouraged to use large-scale data for CV-SEM evaluations or apply more efficient SEM methods. Notwithstanding, the results obtained in this study are valid and reliable, particularly with the use of PCA in place of measurement model estimation.

CONCLUSION
This study applies the maximum likelihood method of CV-SEM to estimate the causal relationship between Islamic equity-based financing and the growth of small businesses in Nigeria with a specific focus on the Abeokuta metropolis. The study affirms that the expansion of small enterprises in the study area will be directly, positively, and significantly influenced by Islamic shared finance (Musharakah) and Islamic joint partnership (Mudharabah). However, the indirect positive and significant impact of Islamic equity finance through a legal framework (mediating factor) is stronger for the development of small firms than the direct impact. On this account, the study recommends that the federal government of Nigeria should institute a suitable legal framework for Islamic equity financing to enhance the operational capacity of small-scale businesses. Again, private and institutional investors are encouraged to promote investments in Islamic banking. For administrators of Islamic finance in Nigeria, greater efforts are required to provide musharakah and mudharabah equity financing facilities. Finally, users of Islamic equity finance, particularly SSE owners and managers, should embrace these alternative finance models.

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