



**EFFECT OF BOOTSTRAPPING DIMENSIONS MODERATED  
BY INNOVATION AND COST OF DOING BUSINESS ON  
SMALL AND MEDIUM SCALE ENTERPRISES  
PERFORMANCE IN SOUTH-WEST, NIGERIA**

**Ologunagba Oluwakemi**

Research Fellow, Department of Business Administration,  
Babcock University Ilishan Remo, Nigeria

**Adekunle Olusegun A.** 

Department of Business Administration,  
Gateway Polytechnic Saapade Ogun State, Nigeria  
adekunleolusegun077@gmail.com

**Oseni Ezekiel**

Adjunct Lecturer, Department of Finance, University of Lagos, Nigeria

**Adekunle Stephen K.**

Research Fellow, Department of Management and Accounting,  
Lead City University, Ibadan, Oyo State, Nigeria

**Abstract**

*Bootstrapping is a financial approach of implementation of a variety of methods to fund a business and stresses internal financing methods, with minimal amounts of debt and equity financing, or from non-traditional sources in which the use of it allows an entrepreneur to continue operations at a time when obtaining capital from banks is not realistic. Knowledge associated with bootstrapping finance can play a vital role in protecting small businesses. Thus, this study investigated the effect of bootstrapping dimension moderated by cost of doing business and innovation on small and*

*medium enterprises performance in South-West, Nigeria. The study adopted survey research design and the population of the study comprised 14, 527 owner/managers of small and medium scale enterprises (SMEs) in Lagos and Oyo States. The study utilized stratified simple random sampling technique. A sample size of 750 owner/managers of SMEs was enumerated using Cochran's (1977) formula. Adapted questionnaire was used and 86.4% response rate was achieved. The Cronbach's Alpha reliability coefficients for various constructs ranged from 0.736 to 0.949. Data were analyzed using regression method. The findings revealed that the effect of bootstrapping dimensions (owner's financing, subsidy financing, delayed payment, joint utilization, and social capital) on selected small and medium scale enterprises (SMEs) performance in South-West, Nigeria was not significantly moderated by innovation and cost of doing business ( $\beta = 1.825E-7$ ,  $\Delta R^2 = 0.000$ ,  $\Delta F = 0.123$ ,  $p > 0.05$ ). The study concluded that bootstrapping improved performance of SMEs in South-West, Nigeria. It was recommended that management of small and medium scale enterprises in South-West, Nigeria should pay more attention on subsidy financing, delayed payment, social capital with less attention on joint utilization in order to improve their performance.*

*Keywords: Bootstrapping, Cost of Doing Business, Innovation, Small and Medium Enterprise, Performance*

## INTRODUCTION

Bootstrapping has been identified as a panacea for entrepreneurs to remedy the constant struggle to find a capital strategy that will support their growth objective (Kamrul, 2019). Bootstrapping is a key dynamic capability that allows entrepreneurs to boost the value of their resources by extending and integrating these strategies together, for instance, improve cash flow by curbing expenses or curbing the necessity to pay while raising money internally (Tahir & Inuwa, 2019). However, innovation has become a necessity for all contemporary enterprises that want to survive in a world characterized by competition, technological change, and recurring crises. The concept of innovation refers to the use of new technology or new management practices in an organization to achieve a targeted improvement in its operations. From a SME perspective, innovation commonly indicates new products or processes that address customer needs more competitively and profitably than existing ones. Innovation in the context of this study is effective implementation of new solutions to challenges faced by SMEs, which include effective implementation of new ideas in relation to the organization's product, services, or processes; new marketing mechanisms; or new administrative practices for work amelioration and upgraded performance .Afolabi (2013)

Understanding the cost of doing business is essential to running a business properly. This cost depends on many factors, including the costs of services and goods, compliance with regulations, inflation and interest rates for taxes and borrowed funds. The lower a business's overall cost, the easier it will be for it to operate, pay taxes, and hire employees, if necessary (Xia & Gan, 2020). Against this backdrop, this study examines the moderating effect of innovation and cost of doing business and bootstrapping dimension on SME performance.

## Research Problem

Economic factors such as fiscal and monetary policies of the government, inflation, interest rates and foreign exchange rates have a direct impact on the potential attractiveness of various strategies and consumption patterns in the economy and have significant and unequal effects on organization in different industries and in different locations. These variables influence the demand for goods and services and hence the growth of new SMEs (Nnabuiife et al., 2018). Business expenses are the economic costs a business must incur in order to operate and, hopefully, make revenue. Common business expenses include: payments to suppliers, factory leases, equipment depreciation, and employee wages (Entezar, Adibpour, & Ghavidel, 2016).

The business innovations–survival relationship has been illustrated in numerous studies. Innovation is critical to the continuity of any enterprise (Ortiz-Villajos, 2014). According to Gaynor (2002), innovation is the core factor behind the survival and continuity of enterprises; it supports the company's expansion and growth and enhances the enterprise's future success. Several studies have been examined on bootstrapping and small and medium enterprises performance on the mediating role of innovation; management of knowledge, innovation and performance in SMEs across the globe (Agyapong, Agyapong, & Poku, 2017; Chipeta & Muthinja, 2018; Dato-on, 2017; Pal, Sethi, Jena, Patra, & Pal, 2020; Valdez-Juárez, García-Pérez de Lema, & Maldonado-Guzmán, 2016), however, study that shows the moderating effect of cost of doing business on bootstrapping dimensions and SME's performance in Nigeria are limited.

Valdez-Juárez et al. (2016); Agyapong et al. (2017); Pal et al. (2020); Dato-on et al (2017) examined the impact of innovations in firm's growth, effects of bootstrapping on firm performance, contributions of innovative strategies on SMEs performance and several financing decisions of SMEs and implications on performance. Despite the significant studies conducted on social capital and innovation, and their individual effect on the performance (Hernández-Carrión, Camarero-Izquierdo, & Gutiérrez-Cillán, 2016; Monteiro, da Palma, & Lopes, 2012; Rhee & Ji, 2011), very little attention has been accorded to how innovation and cost of doing

business could play a significant role in the relationship between bootstrapping dimensions and the performance of small and medium scale businesses. Moreover, most studies on bootstrapping, innovation and cost of doing business on performance have focused on developed economies such as North America and Europe (Arregle et al., 2007; Hoffman et al., 2006; Lima et al., 2005). However, there has been little or no focus on the development of cost of doing business and innovative activities of small and medium enterprises in South-West, Nigeria. Hence, the need to fill this gap.

The objective of this study is to examine how bootstrapping dimensions has effect on performance of the selected Small and Medium Scale Enterprises (SMEs) in South-West, Nigeria as moderated by innovation and cost of doing business. The study hypothesized that bootstrapping dimensions has no significant effect on performance of the selected small and medium scale enterprises (SMEs) in South-West, Nigeria as moderated by Innovation and cost of doing business.

### **Scope and Significance of the Study**

This study is of immense importance to different stakeholders in the country. The study would benefit business owners/managers, government and policy makers, the society, researchers and academic scholars. This study provides important insight for the government and policy makers with regards to making policies and taking the appropriate measures towards designing strategies for improving efficiency and effectiveness of SMEs in Nigeria through support and financing. This research deepens the understanding of the effect of Bootstrapping on entrepreneurship and how this financing method impacts the activities of small and medium scale enterprises in South West as well as in Nigeria as a whole.

The study is limited to Oyo and Lagos States in South West Nigeria being the two states with highest number of SMEs in Nigeria (SMEDAN, 2017) with owners / managers of SME as participants for the study

## **LITERATURE REVIEW**

### **Concept of Bootstrapping**

Bootstrapping is the set of cash management techniques or practices that affect the way businesses manage their assets as well as their relationship with stakeholders (Horváth, 2016). Rita (2019) defined bootstrapping as an alternative resource management approach directed at avoiding market-based resource transactions. A study by Miao, Rutherford, and Pollack (2017) viewed bootstrapping as the pursuit of creative ways of acquiring resources in non-traditional ways by focusing on internal resources instead of external source. Bootstrapping is defined as

the set of methods or practices used by businesses to optimize cash management by reducing operating costs and improving cash flow management (Alvarado & Mora-Esquivel, 2020). Horváth and Szerb (2018) concluded that financial bootstrapping techniques are commonly used by SMEs, regardless of their market experience. According to Al Issa (2020), bootstrapping enables meeting the need for resources without relying on long-term external finance from debt holders and/or new owners.

Bhide (1992) saw the relevance of bootstrapping in “launching ventures with modest personal funds” that enables starting a business with limited financial resources. Later, in line with Freear, Sohl, and Wetzel (1995), Winborg and Landström (2001) extended the applicability to small businesses in general. Based on their contribution, the new bootstrapping definition covered the use of methods for meeting the need for resources without relying on long-term external finance from debt holders and/or new owners. Winborg (2009) also defined bootstrapping as methods for securing the use of resources at relatively low or no cost.

### **Concept of Innovation**

Innovation is perceived as a corresponding word for process made by study and experimentation. Known to be utilized etymologically well after the term 'creation', as indicated by the Process Innovation Management Association, the demonstration of innovation incorporates innovation and additionally the work required to bring a thought or idea into definite frame (Rashiti, Ramadani, Abazi, Dana, & Ratten, 2017). As indicated by Salim and Ellingstad (2016), innovation is more than basically concocting smart thoughts; it is the way toward developing them into reasonable utilize. As per Etzkowitz and Ranga (2015), innovations increment the financial action by enacting different trailblazers by Schumpeter's definition, 'business people'. This financial action achieves a develop state and mitigates itself and economy comes back to the condition of balance. In this manner, Schumpeter trusts that innovations prompt the improvement and development of the economy, and in the long run to thriving and riches (Salim & Ellingstad, 2016). Process innovation is the implementation of a new or significantly improved production or delivery method, including significant changes in techniques, equipment and/or software (OECD, 2009) while market innovations target at addressing customer needs better, opening up new markets, or newly positioning a firm's product on the market with the intention of increasing firm's sales (Barney & Clark, 2017).

As an advantage, innovation improves productivity, reduce costs, increase competitiveness, improves brand recognition and value, new partnerships and relationships, increases turnover and improved profitability (Stefan & Bengtsson, 2017). In contrast, innovation

can be very costly and time consuming, businesses can run out of money if they invest too much and do not get products to market quickly enough, and innovation may end up wasting resources by developing something that does not sell or not considered relevant by consumers (Salim & Ellingstad, 2016).

Thus, the study defines innovation as the formation and/or modification of organisational products or services as well as production/service delivery techniques in order to achieve organisational goals and objectives.

### **Concept of Cost of Doing Business**

The cost of doing business is any expense a business incurs while in the process of conducting business (Doing Business, 2020). A cost of doing business could be a direct cost, like raw materials, or an indirect cost, like building security (Nnabuife, Okeke, & Purity, 2018). Cost of doing business means all costs incurred in the purchase, processing, sale and other related activities relevant to the item in question and must include without limitation the following items of expense: labor (including salaries of executives or officers), rent, interest on borrowed capital, depreciation, inflation, cost of selling, maintenance of equipment, delivery costs, credit losses, cost of all licenses, taxes, insurance, and advertising (Doing Business, 2019). Regardless of type, such costs must be considered carefully by managers, business owners, and anyone involved in running a company, since the amount of such costs will play a pivotal role in determining if a company is profitable or not (Saha & Banerjee, 2015).

Understanding the cost of doing business is essential to running a business properly. This cost depends on many factors, including the costs of services and goods, compliance with regulations, inflation and interest rates for taxes and borrowed funds. The lower a business's overall cost, the easier it will be for it to operate, pay taxes, and hire employees, if necessary (Xia & Gan, 2020). Business expenses may be divided into two broad categories, which are product expenses and period expenses. Product expenses relate to the cost of production, which may either be the direct or indirect costs associated with manufacturing a product and getting it ready for sale. Such costs consist of labor, materials, and overhead, and these can further be divided into two groups: conversion costs and prime costs. Conversion costs relate to converting raw materials into a final product, while prime costs are the materials themselves plus labor. The sum of all such costs is the total cost of producing a product. Period expenses are the other category of business expenses, and they are any costs unrelated to production costs, which may include advertising, salaries, and office supplies

## Empirical Review

The results of Zampa and Bojnec (2017) revealed a positive impact of subsidies on financial indicators, and only limited effect on innovation. Also, a positive correlation between exports and investments in innovation in exporting countries was found by Bojnec and Ferto (2011) and Bojnec and Ferto (2014). Likewise, Zhang and Mohnen (2013) showed that innovation reduces the risk of bankruptcy, but in the long term, there is an inverse U relationship between innovation and the probability of firm survival. Jiang, Zhang, Bu, and Liu (2018) revealed that government subsidies have a significantly positive impact on research and development intensity in assembly enterprises but are insignificant in supporting enterprises. Similarly, the results of Zampa and Bojnec (2017) revealed a positive impact of subsidies on financial indicators, and only limited effect on innovation. Also, a positive correlation between exports and investments in innovation in exporting countries was found by Bojnec and Ferto (2011) and Bojnec and Ferto (2014).

In contrast, Bawuah, Yakubu, and Alhassan (2014) showed that small and medium scale enterprises resort to owner's financing in order to avoid the high interest rate of banks which also conforms with the position of Badri (2016). These negative effects also complement the findings of Afolabi (2013), who found an indirect relationship between interest rate and SMEs performance in Nigeria. In a similar perspective, Bebczuk (2004) also found a negative impact on the cost of doing business and performance of SMEs in a study conducted on determinants of access to credit by SMEs in Argentina

Jiang, Zhang, Bu, and Liu (2018) revealed that government subsidies have a significantly positive impact on R&D intensity in assembly enterprises but are insignificant in supporting enterprises. Similarly, the results of Zampa and Bojnec (2017) revealed a positive impact of subsidies on financial indicators, and only limited effect on innovation. Also, a positive correlation between exports and investments in innovation in exporting countries was found by Bojnec and Ferto (2011) and Bojnec and Ferto (2014). Likewise, Zhang and Mohnen (2013) showed that innovation reduces the risk of bankruptcy, but in the long term, there is an inverse U relationship between innovation and the probability of firm survival. Further, Agyapong et al. (2017) investigated the mediating role of innovation on the relationship between social capital and micro and small businesses (MSBs) performance. Findings showed that innovation mediates the relationship between social capital and micro and small businesses performance.

Badri (2016) adopted the descriptive statistics in a symposium on interest rate, growth and development of small and medium scale enterprises revealed that 73% of small firms in Libya depend on informal financial sources and only 11% of the firms are applying for term bank loans. The imposed interests on loans by banks limit the application for formal loans by small

and medium enterprises and this adversely affects their performance. This finding is in corroboration with the finding of Imoughelu and Ismaila (2014), Afolabi (2013), Onyeiwu (2013), and Dada (2014) that also reported that interest rate has adverse effect on small and medium scale enterprises output. Also, Bello and Mohammed (2015) revealed that financial intermediation, bank loans and advances, to small and medium scale enterprises, bank lending rate to small and medium scale enterprises, exchange rate and monetary policy have positive and significant effect on small and medium scale enterprises performance in Nigeria.

Bawuah, Yakubu, and Alhassan (2014) showed that small and medium scale enterprises resort to owner's financing in order to avoid the high interest rate of banks which also conforms with the position of Badri (2016). These negative effects also complement the findings of Afolabi (2013), who found an indirect relationship between interest rate and SMEs performance in Nigeria. In a similar perspective, Bebczuk (2004) also found a negative impact on the cost of doing business and performance of SMEs in a study conducted on determinants of access to credit by SMEs in Argentina.

## METHODOLOGY

This study adopted Survey research design. This design was adopted as a result of the need to generate primary data through the use of structured questionnaire to achieve the research objective. The population of this study comprised fourteen thousand five hundred and twenty-seven (14,527) small and medium scale enterprises in Lagos and Oyo States (SMEDAN, 2017). Lagos and Oyo States were selected because the two States have the highest number of SMEs in Nigeria.

The sample size for this study was determined using the Cochran's sample size formula (1977). Cochran's formula was considered especially appropriate in situations with large populations (Glen, 2020). The formula is shown below:

$$n = \frac{NZ^2pq}{d^2(N-1) + Z^2pq}$$

Where: n = Sample size, N = Population size, Z = Standardized normal variable and its value that corresponds to 95 % confidence interval equals 1.96. P = Degree of variability (0.5), q = 1-p  
d = Degree of accuracy (0.05) α = level of significance (5%)

Applying the formula;

$$n = 14527 \times (1.96)^2 \times 0.5 \times (1-0.5) / (0.04)^2 \times (14527-1) + (1.96)^2 \times 0.5 \times (1-0.5)$$

$$n = 13951.7308 / 24.202 = 576.47 = 577 \text{ respondents}$$

However, to compensate for non-response probability; 30% of the sample will have to be added to it to increase the sample base as suggested by (Israel, 2009).



30% non-response =  $0.3 \times 577 = 173.1$

$173 + 577 = 750$  respondents

Primary data was collected the questionnaire administered to 750 owner/managers of selected SMEs in Lagos and Oyo States, Nigeria and the questionnaire used was a self-designed. Inferential statistics was applied for the analysis of the data because it allowed generalizing result obtained from a sample on a population. Inferential statistics was used to measure the aspects of the effect of bootstrapping dimensions on performance of selected small and medium scale enterprises in South-West, Nigeria. Hierarchical regression was used to determine the effect of the moderators (innovation and cost of doing business) on the relationship between bootstrapping dimensions and performance of selected small and medium enterprises in South-West, Nigeria. Analysis was carried out using Statistical Package for Social Science (SPSS) version 25 software.

The variables for this study were operationalized with the use of different statistical denotations and values.

$$Y = f(XZ)$$

Where: Y = Dependent Variable (SME Performance), X = Independent Variable (Bootstrapping),

Z = Moderating Variable

$$Y = (y_1, y_2, y_3, y_4, y_5)$$

Where:  $y_1$  = Sales Growth (SG),  $y_2$  = Employee Turnover (ET),  $y_3$  = Market Share Growth (MSG),  $y_4$  = Profitability (PT),  $y_5$  = Productivity Growth (PG)

$$X = (x_1, x_2, x_3, x_4, x_5)$$

Where:

$x_1$  = Owner's Financing (OF),  $x_2$  = Subsidy Financing (SF),  $x_3$  = Delayed Payment (DP),  $x_4$  = Joint Utilisation (JU),  $x_5$  = Social Capital (SC),  $Z = (z_1, z_2)$

Where:  $SP_i$  = SME Performance

$z_1$  = Innovation (INV)  $z_2$  = Cost of doing business (CDB)

Equations to test the hypotheses formulated are:

$$SP_i = \beta_0 + \beta_1 BT_i + \beta_{iz1} INV_i + \beta_{iz2} CBD_i + \beta_{iz} BT^*(INV_i, CBD_i)$$

In line with the hypotheses formulated, it was the expectation of this study that bootstrapping dimensions moderated by innovation and cost of doing business will positively influence performance level of SMEs as contained in the specific objectives of this study

$SP_i = \beta_0 + \beta_1 BT_i + \beta_{iz1} INV_i + \beta_{iz2} CBD_i + \beta_{iz} BT^*(INV_i, CBD_i) + e_{i..}$ eq. (ix)	$\beta_{iz1-z2} \neq 0; P \leq 0.05$ ; will be rejected
--	---

## ANALYSIS

### Response Rate Analysis

A total number of 750 copies of questionnaire were administered to the respondents and 648 which represent approximately (86.4%) were returned and found usable for the analysis. One hundred and two (102) where represents 13.6% of the copies administered were not returned and some were incompletely filled hence judged as invalid and unusable for the analysis. The response rate was adequate for the research and this indicated that the analysis could be done using the above questionnaires.

### Hypothesis Testing

Table 1: Goodness of Fit for Regression Bootstrapping and performance of the selected Small and Medium Scale Enterprises (SMEs) in South-West, Nigeria as moderated by innovation and cost of doing business

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				Sig. F Change
					R Square Change	F Change	df1	df2	
1	.292 <sup>a</sup>	.085	.084	11.693	.085	59.783	1	643	.000
2	.328 <sup>b</sup>	.108	.104	11.564	.023	8.188	2	641	.000
3	.329 <sup>c</sup>	.108	.102	11.572	.000	.123	1	640	.726

a. Predictors: (Constant), Bootstrapping

b. Predictors: (Constant), Bootstrapping, Innovation, Cost of Doing Business

c. Predictors: (Constant), Bootstrapping, Innovation, Cost of Doing Business, Bootstrapping\*Cost of Doing Business\*Innovation

Table 1 presents the summary of hierarchical regression analysis which was used to test how innovation and cost of doing business moderates the effect of bootstrapping and performance of Small and Medium Scale Enterprises (SMEs) in South-West, Nigeria. The predictors are bootstrapping, innovation, cost of doing business and interaction of bootstrapping, innovation and cost of doing business aggregated while the dependent variable is SME performance aggregated. The results in Table 1 above shows that  $R^2 = 0.108$  and adjusted  $R^2 = 0.084$  for Model I. This indicates that bootstrapping explained 8.4% variation in the performance of Small and Medium Scale Enterprises (SMEs) in South-West, Nigeria. With the inclusion of innovation and cost of doing business in Model II as an independent variable, there

was an increase ( $R^2$  change) of 0.023 from 0.085 to 0.108. Thus, bootstrapping, innovation and cost of doing business explains 10.8% of the systematic changes in performance of Small and Medium Scale Enterprises (SMEs) in South-West, Nigeria.

In the model III, when the interaction term/variable was introduced in the model,  $R^2$  is 0.108 while adjusted  $R^2$  is 0.102 while introducing the interaction variable, the  $R^2$  change is 0.000. This signifies does not signify an improvement in the explanatory power of the model. That is, it has no additional contribution to the variation in SMEs performance in the model. The interaction of the moderators (innovation and cost of doing business) and bootstrapping does not magnify the change in SME performance.

Table 2: Summary of multiple regression analysis for effect of Bootstrapping on Performance of Small and Medium Scale Enterprises (SMEs) in South-West, Nigeria as moderated by Innovation and cost of doing business

ANOVA <sup>a</sup>						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	8173.973	1	8173.973	59.783	.000 <sup>b</sup>
	Residual	87915.804	643	136.728		
	Total	96089.777	644			
2	Regression	10363.954	3	3454.651	25.832	.000 <sup>c</sup>
	Residual	85725.823	641	133.738		
	Total	96089.777	644			
3	Regression	10380.396	4	2595.099	19.378	.000 <sup>d</sup>
	Residual	85709.380	640	133.921		
	Total	96089.777	644			

a. Dependent Variable: SME Performance

b. Predictors: (Constant), Bootstrapping

c. Predictors: (Constant), Bootstrapping, Innovation, Cost of Doing Business

d. Predictors: (Constant), Bootstrapping, Innovation, Cost of Doing Business, Bootstrapping\*Cost of Doing Business\*Innovation

Table above shows an F statistic of  $F(1,643)$  is 59.783,  $p < 0.05$  for Model 1, where bootstrapping aggregated is the independent variables. This implies that bootstrapping has significant effect on performance of Small and Medium Scale Enterprises (SMEs) in South-West, Nigeria.

Model II which included bootstrapping, innovation and cost of doing business as a moderating variable shows an F statistic of  $F(3,641)$  is 25.832,  $p < 0.05$ . This implies that the

fitted model of bootstrapping with the inclusion of innovation and cost of doing business (moderating variable) as an additional variable has a significant effect on performance of Small and Medium Scale Enterprises (SMEs) in South-West, Nigeria.

Model III which introduces the interaction term with the independent variable show an  $F$  statistic of  $F(4,640) = 19.378$ ,  $p < 0.05$ . This implies that the fitted model of bootstrapping, innovation and cost of doing business with the interaction term (moderating variable) has a significant effect on performance of Small and Medium Scale Enterprises (SMEs) in South-West, Nigeria.

Table 3: Summary of the Regression Analysis on the Effect of bootstrapping on performance of the selected Small and Medium Scale Enterprises (SMEs) in South-West, Nigeria as moderated by Innovation and Cost of Doing Business

Coefficients		Unstandardized		Standardized		
		Coefficients		Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	77.111	4.817		16.010	.000
	Bootstrapping	.316	.041	.292	7.732	.000
2	(Constant)	74.345	4.900		15.172	.000
	Bootstrapping	.316	.041	.292	7.786	.000
	Innovation	.419	.105	.217	4.011	.000
	Cost of Doing Business	-.292	.089	-.177	-3.269	.001
3	(Constant)	77.414	10.039		7.711	.000
	Bootstrapping	.296	.071	.273	4.201	.000
	Innovation	.371	.173	.192	2.143	.033
	Cost of Doing Business	-.334	.151	-.203	-2.211	.027
	Bootstrapping*Cost of Doing Business*Innovation	1.825E-7	.000	.054	.350	.726

a. Dependent Variable: SME Performance

Table 3 shows the regression coefficient results with three models. In Model I, the dependent variable (performance of Small and Medium Scale Enterprises (SMEs)) was regressed on the independent variable (bootstrapping). The results of the regression analysis revealed that bootstrapping ( $\beta = 0.316$ ,  $t = 7.732$ ,  $p < 0.05$ ) has positive and significant effect on performance of Small and Medium Scale Enterprises (SMEs). This implies that one-unit change in bootstrapping is associated with 0.316 change in performance of Small and Medium Scale

Enterprises (SMEs). The overall model confirmed that bootstrapping had a significant contribution to the performance of Small and Medium Scale Enterprises (SMEs) ( $F(1, 643) = 59.783, p < 0.05$ ).

The results in model II revealed that bootstrapping ( $\beta = 0.316, t = 7.786, p < 0.05$ ) and innovation ( $\beta = 0.419, t = 4.011, p < 0.05$ ) has positive and significant effect on performance of Small and Medium Scale Enterprises (SMEs), while Cost of Doing Business ( $\beta = -0.292, t = -3.269, p < 0.05$ ) has negative but significant effect on performance of Small and Medium Scale Enterprises (SMEs). This implies that one-unit change in bootstrapping and innovation is associated with 0.316 and 0.419 change in performance of Small and Medium Scale Enterprises (SMEs). The regression coefficients for bootstrapping and innovation revealed that it affects performance of Small and Medium Scale Enterprises (SMEs) in a positive and significant way. The overall model also confirmed that bootstrapping, innovation and Cost of Doing Business had a significant contribution to the performance of Small and Medium Scale Enterprises (SMEs) ( $F(3, 641) = 25.832, p < 0.05$ ).

Model III considered existence of the interaction effect and thus the independent variables were Bootstrapping (BO), Innovation (IN), Cost of Doing Business (CDB), Interaction of BO, IN and CDB. When interaction was included in the model, the explained variation in SME performance increased to 10.8% ( $R^2 = 0.108$ ) with an adjusted R-squared value of 0.102.  $R^2$  changes ( $\Delta R^2$ ) from 0.104 in Model II to 0.102 in Model III ( $\Delta R^2 = 0.000$ ). Further, the overall model was statistically significant ( $F = 19.378, p < 0.05$ ). The change in F ratio ( $\Delta F = 0.123$ ) at  $p > 0.05$  was statistically insignificant. The results were further confirmed by the beta coefficient of the interaction term ( $\beta = 1.825E-7, t = 0.350, p > 0.05$ ), thus indicating moderating effect of Cost of Doing Business with a total effect of  $1.825E-7$  which was not statistically significant. MacKinnon, Fritz, Williams, and Lockwood (2007) suggested that a variable has a moderating effect if the coefficient of the variable is significant both before and after moderation. Therefore, based on the moderation rule by Mackinnon et al. (2007) that a variable has a moderating effect if the coefficient of the variable is significant both before and after moderation. Innovation and cost of doing business did not have moderating effect. Therefore, the model showing the relationship between the independent variables and the dependent variables was expressed as follows:

$$\text{SMEP} = 77.414 + 0.296\text{BO} + 0.371\text{IN} - 0.334\text{CDB} + 1.825E-7*\text{BO}*IN*\text{CDB} \dots\dots\dots \text{Eq. (ix)}$$

Where: BO = Bootstrapping IN = Innovation CDB = Cost of Doing Business SMEP = Small and Medium Enterprises Performance

The regression equation established shows that taking all factors (Bootstrapping, Innovation, Cost of Doing Business, Interaction of Bootstrapping and Cost of Doing Business (BO\*IN\*CDB) into account, constant at zero, performance of Small and Medium Scale Enterprises (SMEs) would be 77.414 which is positive. As seen in Model III, when interaction is included in the model, the effect of any improvement in Bootstrapping, Innovation, Cost of Doing Business and the interaction variable (BO\*IN\*CDB) by a single unit would lead to a corresponding increase in performance of Small and Medium Scale Enterprises (SMEs) in South-West, Nigeria by 0.296, 0.371, -0.334 and 1.825E-7 units respectively. The implication is that the contribution of innovation and cost of doing business and their interactions with bootstrapping when the effects of other variables have been removed is insignificant. The results showed that the combination of innovation and cost of doing business have negative and insignificant effect on the effect of bootstrapping on performance of Small and Medium Scale Enterprises (SMEs) in South-West, Nigeria. Based on the results, the null hypothesis which states that bootstrapping has no significant effect on performance of the selected Small and Medium Scale Enterprises (SMEs) in South-West, Nigeria as moderated by Innovation and Cost of Doing Business cannot be rejected.

## DISCUSSION

The combined results of multiple regression analysis for hypothesis revealed that Bootstrapping dimensions of owner's financing, subsidy financing, delayed payment, joint utilization, and social capital has no significant effect on performance of the selected Small and Medium Scale Enterprises (SMEs) in South-West, Nigeria as moderated by Innovation and Cost of Doing Business. In other words, Bootstrapping dimensions of owner's financing, subsidy financing, delayed payment, joint utilization, and social capital has no significant effect on performance of the selected Small and Medium Scale Enterprises (SMEs) in South-West, Nigeria as moderated by Innovation and Cost of Doing Business. Conceptually, financial capital plays an important role in enhancing firm performance (Contessi & De Nicola, 2012; Sibanda et al., 2018). Compared with large firms, SMEs invest less in innovative technology and use less sophisticated technical equipment. Difficulty in accessing external finance is the main barrier to adopting technological innovations. The capacity of SMEs regarding their ability to pay back loans creates difficulties when they wish to access financial capital (Jaradat et al., 2018). To access external finance from banks and financial institutions, SME owners are normally required to provide collateral as a guarantee for a loan as these signals the financial health of a firm to lenders (Hanedar et al., 2014). Insufficient finance can later generate a decline in firm performance (Jaradat et al., 2018; Sibanda, Hove-Sibanda, & Herring., 2018). SMEs are more

likely to access financial support for working capital rather than for enhancing firm growth (Fanta, 2012).

Conversely, Bawuah et al. (2014) showed that small and medium scale enterprises resort to owner's financing in order to avoid the high interest rate of banks which also conforms with the position of Badri (2016). These negative effects also complement the findings of Afolabi (2013), who found an indirect relationship between interest rate and SMEs performance in Nigeria. In a similar perspective, Bebczuk (2004) also found a negative impact on the cost of doing business and performance of SMEs in a study conducted on determinants of access to credit by SMEs in Argentina. In the same vein, Galolo (2017) revealed that loans even with the equity scheme introduction do not make significant positive impact on loan disbursement to finance SMEs.

In the light of the aggregated multiple regression results for hypothesis, bootstrapping dimensions of owner's financing, subsidy financing, delayed payment, joint utilization, and social capital has no significant effect on performance of the selected Small and Medium Scale Enterprises (SMEs) in South-West, Nigeria as moderated by Innovation and Cost of Doing Business.

## **CONCLUSION AND RECOMMENDATIONS**

The main objective of this study was to investigate the effect of bootstrapping on performance of small and medium scale enterprises in South-West, Nigeria. Specifically, the study surveyed the effect of bootstrapping dimensions (owner's financing, subsidy financing, delayed payment, joint utilization, and social capital) and performance (sales growth, employee turnover, market share growth, profitability, and productivity growth) of selected small and medium scale enterprises in South-West, Nigeria moderated by innovation and cost of doing business. The study concluded that bootstrapping has significant effect on performance of the selected Small and Medium Scale Enterprises (SMEs) in South-West, Nigeria as moderated by cost of doing business. However, the study concluded finally that bootstrapping has no significant effect on performance of the selected Small and Medium Scale Enterprises (SMEs) in South-West, Nigeria as moderated by innovation and cost of doing business.

The results showed that bootstrapping has significant effect on performance of the selected Small and Medium Scale Enterprises (SMEs) in South-West, Nigeria as moderated by innovation. Therefore, this study recommended that management of small and medium scale enterprises in South-West, Nigeria should invest in technological innovation, product innovation, service innovation, organizational innovation, and process innovation as these are arbitrators between bootstrapping and performance. The results showed that bootstrapping has no

significant effect on performance of the selected Small and Medium Scale Enterprises (SMEs) in South-West, Nigeria as moderated by innovation and cost of doing business. Therefore, the study recommended that although innovation and cost of doing business combined played no significant moderating effect, management of the selected small and medium scale enterprises in South-West, Nigeria should consider innovation and cost of doing business individually as they influence how bootstrapping can affect their performance.

## IMPLICATIONS FOR FURTHER STUDIES

Further studies can be carried out to examine how labour cost or regulatory expenses in different regions or industries/ sectors can shape the strategies and outcomes of bootstrapped SMEs. More so, further research in this area could compare how bootstrapping strategies varies among SMEs in different industries/sectors and how cost of doing business and level of innovation can influence these strategies. Furthermore, research can also be carried out to examine the role of government policies in supporting bootstrapped SMEs

## REFERENCES

- Afolabi, M. O., (2013). Effect of financial reporting on investment decision making of manufacturing firms in Nigeria. *European Journal of Humanities and Social Sciences*, 22(1), 43-57.
- Agyapong, F. O., Agyapong, A., & Poku, K. (2017). Nexus between social capital and performance of micro and small firms in an emerging economy: The mediating role of innovation. *Cogent Business & Management*, 4(1), 1-20.
- Al Issa, H. (2020). The impact of improvisation and financial bootstrapping strategies on business performance. *EuroMed Journal of Business*, 13(5), 42-55.
- Alvarado, M. & Mora-Esquivel, R. (2020). Financial Bootstrapping among Costarican small businesses: An exploratory study. *Tec Empre*, 14(1), 1-27.
- Arregle, J. L., Hitt, M. A., Sirmon, D. G., & Very, P. (2007). The development of organizational social capital: Attributes of family firms. *Journal of Management Studies*, 44(1), 73-95.
- Barney, J. B., & Clark, D. N. (2007). *Resource-based theory creating and sustaining competitive advantages*. Oxford: Oxford University Press.
- Bawuah, B., Yakubu, A. S., & Alhassan, M. (2014). The effects of interest rate on micro, small and medium enterprises financing decision in Wa Municipality of Ghana. *International Journal of Business, Humanities and Technology*, 4(4), 43-58.
- Bebczuk, R. N. (2004). *What determines the access to credit by SMEs in Argentina?* Department of Economics, Working Papers 048, Departamento de Economía, Facultad de Ciencias Económicas, Universidad Nacional de La Plata.
- Bello, A., & Mohammed, Z. (2015). Impact of banking sector credit on the growth of small and medium enterprises (SME's) in Nigeria. *Journal of Resources Development and Management*, 15(1), 1-9.
- Bhide, A. (1992). Bootstrap finance: The art of start-ups. *Harvard Business Review*, 70(6), 109-117.
- Björn, G., & Sönke, A. (2016). *Long-term effects of subsidies on firm growth: introducing the concept of outcome additionality*. ZBW: Leibniz Information Centre for Economics.
- Chipeta, C., & Muthinja, M. M. (2018). Financial innovations and bank performance in Kenya: Evidence from branchless banking models. *South African Journal of Economic and Management Sciences*, 21(1), 1-11.
- Contessi, S., & de Nicola, F. (2013). *What do we know about the relationship between access to finance and international trade?* FRB of St. Louis Working Paper No. 2012-054B.



- Dato-on, M. C. (2017). Innovation support and small-firm performance in India: A social capital perspective. *Thunderbird International Business Review*, 5(7), 1-14.
- Doing Business (2019). *Global reports on doing business*. From <https://www.doingbusiness.org/en/reports/global-reports/doing-business-2019>. Accessed August 2021.
- Doing Business (2020). *Global reports on doing business*. From <https://www.doingbusiness.org/en/reports/global-reports/doing-business-2020>. Accessed August 2021.
- Entezar, M., Adibpour, M., & Ghavidel, S. (2016). The effect of social capital on workforce productivity. *Journal of Economics and Finance*, 7(4), 108-110.
- Etzkowitz, H., & Ranga, M. (2015). Triple helix systems: An analytical framework for innovation policy and practice in the knowledge society. *Industry and Higher Education*, 27(4), 237-262.
- Freear, J., Sohl, J.E., & Wetzel, W.E. (1995). *Early stage software ventures: what is working and what is not*. Durham, NH: Centre for Venture Economies, University of New Hampshire.
- Galolo, J. (2016). *100 establishments found violating BIR regulations*. From <https://www.sunstar.com.ph/article/62885>. Accessed June 2021.
- Hanedar, E. Y., Eleonora, B., & Flavio, B. 2014. Collateral requirements of SMEs: The evidence from less-developed countries. *Journal of Banking & Finance Elsevier*, 38(C), 106–121.
- Hernández-Carrión, C., Camarero-Izquierdo, C., & Gutiérrez-Cillán, J. (2017). Entrepreneurs' social capital and the economic performance of small businesses: the moderating role of competitive intensity and entrepreneurs' experience. *Strategic Entrepreneurship Journal*, 11(1), 61–89.
- Hoffman, J., Hoelscher, M., & Sorenson, R. (2006). Achieving sustained competitive advantage: A family capital theory. *Family Business Review*, 19(1), 135-145.
- Horváth, K. (2016). Financial bootstrapping techniques: A systematic review of the literature. *On Research*, 1(2), 84-95.
- Horváth, K., & Szerb, I. (2018). Managerial practices and the productivity of knowledge-intensive service businesses: An analysis of digital/IT and cash management practices. *Strategic Change*, 27 (2), 161-172.
- Imoughelu, L. E., & Ismaila, M. (2014). The impact of commercial bank credit on the growth of small and medium scale enterprises: An econometric evidence from Nigeria 1986-2012. *Journal of Educational Policy and Entrepreneurial Research*, 1(2), 16-23.
- Jaradat, Z. A., Roshaiza, B. T., Rosliza, B. M. Z., & Wan, Z. W. Z. (2018). The impact of financial accessibility constraints and government regulations on the organisational performance of small-and-medium-sized enterprises. *Journal of Business and Retail Management Research*, 13, 108–20
- Jiang, X. Liu, H., Fey, C., & Jiang, F. (2018). Entrepreneurial orientation, network resource acquisition, and firm performance: A network approach. *Journal of Business Research, Elsevier*, 87(C), 46-57.
- Kamrul, H. (2020). SME financing and entrepreneurship development in Bangladesh: An impact analysis. *Entrepreneurship Journal of Business Management*, 11(2), 4-6.
- Lima, J. B., Andrade, D. M., & Grzybovski, D. (2005). *Practices entrepreneurial succession in family businesses*. São Paulo: Atlas
- Miao, C., Rutherford, M.W., & Pollack, J.M. (2017). An exploratory meta-analysis of the nomological network of bootstrapping in SMEs. *Journal of Business Venturing Insights*, 8, 1-8.
- Monteiro, A. S., Palma, P. J. Da, & Lopes, M. P. (2012). How the giants learn to dance: The role of mediator entrepreneur in relation between capital culture of innovation and performance. *Inmr - Innovation & Management Review*, 9(4), 44-67.
- Nnabuiife, E., Okeke, T., & Purity, N-O. (2018). Doing business in Nigeria: Implications for Africa's industrialization. *Unizik Journal of Business*, 1(1), 17-39.
- Onyeiwu, C. (2013). Domestic debt and the growth of Nigerian economy. *Research Journal of Finance and Accounting*, 3(5), 43-58.
- Pal, U., Sethi, M. K., Jena, P. K., Patra, A. R., & Pal, S. (2020). Bootstrapping: An innovative technique of business finance. *EPRA International Journal of Multidisciplinary Research (IJMR)*, 6(3), 210-214.
- Rashiti, S., Ramadani, V., Abazi, H., Dana, L-P., & Ratten, V. (2017). ICT, innovation and firm performance: The transition economies context. *Thunderbird International Business Review*, 59(1), 93-102.

- Rhee, J. H., & Ji, H. (2011). How to further exploit social capital: An empirical investigation of three dimensions of social capital and their contributions to individual performance. *Asian Business & Management*, 10(1), 485–507.
- Rita, M. R. (2019). Financial bootstrapping: External financing dependency alternatives for SMEs. *JurnalEkonomidanBisnis*, 22(1), 83-100.
- Salim, B., & Ellingstad, P. (2016). Social innovation model for business performance and innovation. *International Journal of Productivity and Performance Management*, 65(1), 256-274.
- Shah, S. Z., & Ahmad, M. (2019). Entrepreneurial orientation and performance of small and medium-sized enterprises: Mediating effects of differentiation strategy. *Competitiveness Review: An International Business Journal*, 29(5), 551-572.
- Sibanda, K., Hove-Sibanda, P., & Herring, S. (2018). The impact of SME access to finance and performance on exporting behaviour at firm level: A case of furniture manufacturing SMEs in Zimbabwe. *ActaCommerci*, 18(1), 1–13.
- Tahir, F.A., & Inuwa, F.U. (2019). Empirical investigation of the factors affecting micro, small and medium scale enterprises performance in Borno state, Nigeria. *International Business Research*, 3(5), 43-57.
- Valdez-Juárez, L. E., García-Pérez de Lema, D., & Maldonado-Guzmán, G. (2016). Management of knowledge, innovation and performance in SMEs. *Interdisciplinary Journal of Information, Knowledge, and Management*, 11, 141-176.
- Winborg, J. (2009). Use of financial bootstrapping in new businesses: a question of last resort? *Venture Capital*, 11(1), 71-83.
- Winborg, J., & Landstrom, H. (2001). Financial bootstrapping in small businesses: Examining small business managers' resource acquisition behaviors. *Journal of Business Venturing*, 16(3), 235-254
- Xia, X., & Gan, L. (2020). SME financing with new credit guarantee contracts over the business cycle. *International Review of Economics and Finance*, 2(7), 1-33.
- Žampa, S., & Bojnec, S. (2017). The impact of subsidies on production innovation and sustainable growth. *Management and Production Engineering Review*, 8(3), 10-21.