

EFFECT OF PORTFOLIO MANAGEMENT PRACTICES ON THE PERFORMANCE OF SOME SELECTED SMALL AND MEDIUM ENTERPRISES (SMEs) IN NIGER STATE, NIGERIA

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<https://doi.org/10.57233/gujaf.v6i1.02>

Abstract

This study examined the effect of portfolio management practices on the performance of small and medium enterprises (SMEs) in Niger State, Nigeria. Portfolio management practices are proxies by corporate risk management, diversification, and security choice. Questionnaires were distributed to the whole SMEs in Kontagora portfolio platform. The study adopted a cross-sectional survey method with Ninety-Two (92) SMEs that has data whereas Twenty-Nine (29) firms were left out from the population of 121 SMEs because they did not have data. The data collected from 89 usable copies of questionnaires were subjected to various statistical analyses using SPSS23 and SmartPLS3.0. The results of this study show that CRM and Diversification have insignificant effects on SMEs performance whereas security choice has a positive and significant effect on the performance of SMEs. Therefore, the study concludes that firms should pay more attention to security choice because the variable has a positive and significant influence in explaining the variability of SMEs performance. Finally, a suggestion for future directions was made accordingly.

Keywords: Corporate risk management, diversification, portfolio management, security choice and SMEs performance

1.0 Introduction

For years, SMEs performance has become a very popular topical issue in both private and public organizations. This is because SMEs had succeeded in attracting a good deal of public interest due to its apparent importance for the economic health of investment firms (Zouari-hadiji & Zouari, 2021). SMEs is a comprehensive description of the enterprise, which characterize not only their financial and property status but also the risks and prospects that allows making a comprehensive picture of the market activities, this has played an increasingly important role in Nigeria and international business dynamics (Chebri & Bahoussa, 2020). However, this variable has played an important role in fulfilling the goals of the firm owners. Currently, the international research community devotes increasing attention to this area, whether sustainability or the role of other variables comes to the focus. The condition for the long-term survival of SMEs is the

preservation of competitiveness and the continuation of efficient management (Rákos & Fenyves, 2021).

Statistics have shown that SMEs engaged in different portfolios, in Romania (2019 and 2020) 33.47% and 32.16%, respectively, and in Hungary 22.42% (Rákos & Fenyves, 2021). Also, measures of performance such as profitability, ROI, ROA have been statistically reported using accounting measures 33.1%, 29.8%, 42.5% (Mantovani & Moscato, 2020). ROE, ROI 25.7% and 32.9% respectively (Ferri, Tron, Fiume & Corte, 2020). Karamoy and Tulung (2020) measure market value, ROC, and profit growth which have 39.7%, 37%, and 28.5%. EBITDA, market share, profitability and ROC were widely studied and the statistics was summarized 37%, 25.9%, 39.7%, 42%, 23.3%, 26%, 35.2%, 52% and 36.5%. Others were 31.5%, 28.9%, 62% (Mantovani & Moscato, 2020; Al-saidi, 2021; Gupta et al., 2021; Biase & Onorato, 2021; Golubeva, 2021). In this study, the researcher is unable to find evidence of any study using subjective means that measure SMEs performance.

Specifically, this study is narrowed down to the sizeable numbers of SMEs in Niger State, this is because it is an avenue to maximize shareholders' value and contribute to the economic revitalization of its stakeholders. Generally, the responsible factors for lack of performance are; insufficient capital and financial circumstances, lack of technical and professional expertise, low level of technology, changes in economic conditions, unfavourable government policies and political instability, low returns and untimely risk occurrences, poor market information and poor selection of securities. Therefore, all of these factors have been frequently reported as the SMEs' consistent problems. But the most severe concern has been insufficient capital, inadequate technically skilled labour, low returns, and poor market information which was reported to have 82%, 75%, 78%, and 72% respectively (NSDC Bulletin, 2015). Therefore, given these significant costs of SMEs performance in portfolio investment, more studies are needed to adopt the use of subjective evaluation to measure SMEs performance. However, it is against this background that this study examines the effect of portfolio management practices (corporate risk management, diversification, and security choice) to measure the performance of SMEs in Niger State.

Statement of the Problem

Several factors have been studied as construct of SMEs performance. Most of the major predictors are related to the companies (Olanike et al., 2022). To date, some of the factors that have been studied in relation to SMEs include growth and profitability (Sa & Gemechu, 2016; Zeb, 2016; Khalid *et al.*, 2017), return on assets and return on equity (Mwangi, 2018; Ologbenla, 2018; Khurramshabbir, 2018) and return on investment and operating cash flow among others (Vakilifard & Oskouei, 2014) which are considered to be monetary measures.

Similarly, portfolio management construct have been conducted with various findings; such as Demirg, Evran and Demirg (2016) and Naz, Ijaz and Naqvi (2016). Literature revealed information asymmetry, different market dynamics and characteristics, especially in emerging economies has been identified as some of the major bottlenecks in investment decision making (Naz *et al.*, 2016).

Biase and Onorato (2021) pointed out that majority of investment firm and investors lack sufficient knowledge of the various combinations of financial assets which they should hold in order to maximize earnings and minimize risks. Low level of commitment and poor information flow on how to diversify it funds into different sectors (Wan et al., 2016). Zhai and Wang (2016) also reported that imperfect nature in the security market which is characterized with uncertainty holds some investment firms not to invest in any form of security.

In general, these studies found that unfavourable enabling business environment as reflected by poor selection of securities, inadequate information flow with regards to investment portfolio, high level of risk with low return on investment and poor management among others, play significant role in influencing SMEs performance.

Despite the aforementioned, literature indicated that very few studies (Adamu, Zubairu, Ibrahim, & Ibrahim, 2011; Paulinus & Jones, 2017) have looked at the effects of portfolio practices on SMEs performance, even if there are, studies are limited to examining one or two dimension of portfolio on SMEs such as corporate risk management (CRM) and SMEs performance. But, in reality, firms' engage in various types of investment in different portfolios (Shaban, Al-hawatma & Abdallah, 2019). Considering specific measure of SMEs performance will not allow better understanding of the variety of investment SMEs engage in.

Literature have provided insight into the portfolio management and SMEs theoretically as well as empirically. Previous studies by Boniface and Ibe (2012), Abduh, Azmi and Tarmiz (2014), Habib, Masood, Hassan, Mubin, and Baig (2014), and Kinyua, Gakure, Gekara, and Orwa (2020) found positive significance relationship while Paulinus and Jones (2017) and Ologbenla (2018) found negative relationship between CRM and SMEs performance. However, a weak relationship was found by Zahavi and Lavie (2013); Andrés, De, and Velasco (2014); Doaei, Anuar, and Ismail (2014) while a positive linear relationship was found by Adamu et al. (2011); Abbas, Hayat, and Saddique (2013); Hashai (2015); Wan *et al.* (2016) between diversification construct and SMEs performance. In the studies of Jean, Tan, and Sinkovics (2011); Fernandes and Scherrer (2012); Botchkarev (2015); Zhai and Wang (2016) found a positive significance relationship while Fortich, Gutierrez, and Pombo (2008); Ramkumar and Raglend (2014) have empirically demonstrated a significant negative impact on the relationship between security choice and SMEs performance. Therefore, the issues as to why firms invest in different portfolio is yet unresolved.

Furthermore, previous studies of Ribeiro Serra and Ferreira, (2020); Reichert and Zawislak, (2019); Naz et al., (2018); Sa and Gemechu, (2019); Zeb, (2019); Khalid *et al.*, (2019); Mwangi, (2018); Ologbenla, (2021); Khurramshabbir, (2021) considered monetary measures to assess SMEs performance. Although previous studies (Ribeiro Serra & Ferreira, 2010; Nayak, Sinha, & Guin, 2011; Reichert & Zawislak, 2014) four dimensions were used: sales growth, profit growth, growth in market share, growth in return on capital and improve service through innovation. Three control variables were considered: sector, firm size and firm age. Scholars have shown that these control variables affect SMEs performance (Lindberg, Tan, Yan, & Starfelt, 2015; Pal, 2015; Zogjani, Kelmendi, Humolli, & Raçi, 2017) and this study have adopted these variables to measure SMEs performance in Niger State.

Meanwhile, from the methodological perspectives, a comprehensive review of the literature on SMEs indicated that SMEs performance has been assessed mainly using objective measures (Rosa, Bernini & Mariani, 2018; Chebri & Bahoussa, 2020; Fayyaz, Jalal, Antanucci, & Venditti, 2021). However, there has been a paucity of research on the use of subjective measures of SMEs performance.

Additionally, despite many studies that have been carried out in different part of the world linking portfolio management dimension and SMEs performance, most of them were mainly conducted in Asia, United States of America (USA), Australia and Europe (Shaban et al., 2019; Gupta et al., 2021; Campa et al., 2020; Biase & Onorato, 2021; Rosa et al., 2018; Ammari, 2021; Beshlawy & Ardroumli, 2021; Zouari-hadji & Zouari, 2021; Dogan et al., 2019; Khaddafi & Heikal, 2020), paying less attention to the African continent, particularly in Nigeria. Hence, portfolio management practices on SMEs performance deserves further investigation in Nigeria because the findings of the previous studies may not be generalizable to the Nigerian context due to cultural and contextual differences.

Similarly, only few studies of portfolio management practices and SMEs performance have been conducted in Nigeria. Few of which are; the study by Boniface and Ibe (2012) who researched on portfolio management and SMEs performance in the brewery industry in Lagos State, Nigeria. Similarly, Paulinus and Jones (2017) researched on portfolio practices in the corporate performance of deposit money banks (DMBs) in Nigeria using a sample of 15 DMBs from 2012 to 2016 and the findings show insignificance effect on performance during the year under review.

In light of the above, this study incorporated three dimensions of portfolio management practices (CRM, diversification and security choice) to measure SMEs performance. Additionally, the literature reviewed had shown inconsistent findings. Therefore, the issue of portfolio management and SMEs performance construct is yet unresolved. Also, added was adoption of three control variable (sector, firm size and firm age). Lastly, a comprehensive of previous studies shows a consistently used of objective evaluations to measure SMEs performance. Therefore, this study used subjective evaluations to measure SMEs performance. Therefore, it is against the issues stated above that this study examines the effect of portfolio management practices on SMEs performance in Niger State, Nigeria.

2.0 Literature Review

Portfolio Management Practices (PMP) and SMEs Performance

Several studies examined the relationship between PMP and SMEs performance. Uzoamaka and Ebenouvbe (2019) examine the effect of portfolio management and the performance of business organizations in Nigeria. The total number of respondents was 66. The result of the study shows portfolio management has a significant effect on market share and a positive effect on the capital growth of business organizations in Enugu, Nigeria. Also, Muller, Martinsuo, and Blomquist (2018) examined the impact of PMP on SMEs in construction companies in Finland. The study used a sample of 36 companies. The result found a significant impact on firm performance. The above studies, conceptualized portfolio management practices in terms of two dimensions (CRM and diversification) thereby ignoring security choice. Also, the study concentrated on 66 and 36 respondents in Nigeria and Finland. However, this study builds on the weaknesses, additional

determinants of PMP (security Choice) were incorporated with an increased number of respondents to 92 SMEs.

In addition, Dirk, Eichholtz, and David (2019) examined PM intensity (choice of security and diversification) and performance implications on the trading activity of listed property companies in Australia, the United States, and the United Kingdom. The results indicated that none of the dimensions is significantly associated with performance. Therefore, it is proved that the independent variable does contribute positively towards changes in the dependent variable. However, the study neglects CRM as a dimension of PMP to measure SMEs performance. This study considered CRM as one of the dimensions, a population of 92 firms was used to measure SMEs performance.

In addition, Sabrin, Takdir, and Sujono (2021) examined the impact of portfolio management (risk-taking and security assessment) on performance in Indonesia-based SMEs, a sample of 10 companies listed on the securities database of global property of Indonesia-based SMEs. The empirical results demonstrated negative CRM, even though, there are positive returns on the firms with other related control variables, the most active Indonesian SMEs did not provide the expected portfolio performance. This study used diversification with a sample size of 92 and was conducted in Nigeria.

Furthermore, Muriuki and Gitonga (2018), examined drivers of project PMP (risk evaluation/management and information-based choice of security) influencing performance in Isiolo county projects of Kenya, a sample size of 158 was used. The result of the study indicated that information-based choice of security had the greatest effect on the implementation of project PMP while risk evaluation and management had a weaker effect on the performance. The study of Muriuki and Gitonga (2018) also neglects the aspect of diversification, therefore this study builds on the weaknesses of the above study to measure the performance of SMEs in Niger State.

Corporate Risk Management and SMEs Performance

Recently, risk management failures have captured headlines especially in the financial sector and this has always been the shortcomings in financial risk-taking (Virginus, Adaeze & Gabriel, 2021). The occurrences and the possible nature of risk are uncertain and may adversely affect investors' attitudes towards investment (Al-Nimer, Abbadi, Al-Omush & Ahmad, 2021).

The relationship between CRM and SMEs performance has a direct bearing on information quality to the investment. Information quality of a firm refers to the transparency that is achieved over the whole scope of the portfolio (Beasley, Branson & Hancock, 2021). Jordan Al-Nimer, Abbadi, Al-Omush, and Ahmad (2021) examined the relationship between CRM and SMEs with the mediation of business model initiative (BMI) and the result indicated that CRM has a significant influence on BMI and financial FP. The BMI significantly contributed to the financial and non-financial performance, whereas it displayed insignificant effects regarding environmental performance. In Kenya Kinyua, *et al.* (2020), examined the relationship and the result indicated a significant association between CRM and SMEs. The study further recommends that the focus should now be on compliance and financial control to identify, assess and control risks. Studies of Ewool and Quartey (2021), evaluated risk management practices (RMP) on the SMEs of some selected microfinance institutions (MFIs) in the Kumasi metropolis of Ghana. The FM measures used were Return on Asset (ROA) and Return on Equity (ROE).

The results indicated the mean ROA and ROE of the selected MFIs to be 3% and 35% respectively. The results also revealed a moderate to great extent usage of risk identification, risk appraisal, risk control, risk monitoring, and often practiced risk management occasionally. The study of Kafidipe, Uwalomwa, Dahunsi, and Okeme (2021), examined CRM and FP of listed deposit money banks in Nigeria. The results showed a negative but significant impact on the bank's FP. Similarly, Otekunrin et al. (2021), examined the relationship between CRM and the performance of 30 listed manufacturing firms in Nigeria, and the results confirmed statistical significance levels.

Furthermore, Mahmod *et al.* (2017) investigated CRM on SMEs performance, a cross-sectional survey method was adopted in Malaysian manufacturing companies. From 152 companies, 100 companies were randomly selected. The result indicated 18% of users of risk management have performance in the framework of their strategic business operation while the non-users show weak evidence.

Diversification and SMEs Performance

It is well-known that the expansion of a single product or business unit may bring cost advantages to the firm through the specialization and division of labor. Its practice via merger, acquisition, or internal expansion may also generate benefits for the firm (Setiawan & Agustin, 2018; Lee & Le, 2020; Mehmood, Hunjra & Chani, 2019). Defined diversification as the entry of a firm into new lines of activities either by the process of an internal expansion or by acquisition.

The relationship between diversification and SMEs has been the subject of abundant research in several fields, including strategic management, industrial organization, and corporate finance (Septian & Dharmastuti, 2019; Westerman, De Ridder & Achtereekte, 2020; Long Khuc, Thu Bui & Mai Ha, 2021; Maragia & Kemboi, 2021; Cahyo, Kusuma, Harjito & Arifin, 2021).

In Taiwan Lee and Le (2020), examined the relationship between technological diversification and SMEs. This study focuses on Taiwanese publicly listed firms in high-tech industries because they are facing increasing innovation pressure. The study found that there is an inverted U-shaped performance effect of technological diversification with a non-linear performance effect of technological diversification. Mehmood, Hunjra, and Chani (2019) examined the impact of corporate diversification and financial structure on SMEs. Data were collected from 520 manufacturing firms from Pakistan, India, Sri Lanka, and Bangladesh. Panel data of 14 years from 2004–to 2017 were used for analysis. The results indicated that product diversification and geographic diversification significantly affected the SMEs while dividend policy and capital structure had a significant impact on SMEs.

Furthermore, Long Khuc, Thu Bui, and Mai Ha (2021) examined the relationship between diversification on Board and SMEs. This was done using panel data with a sample of 204 Vietnamese listed companies in two different groups: large-cap and Midcap, listed in HOSE and HNX during the period of five years from 2015 to 2019. The study uses three performance measures (including return on equity, return on asset, Tobin's Q). The results indicated that FP has a positive relationship with nationality diversity on Board and gender diversity on Supervisory boards. CEO duality shows a significant result of negative effect on FP. In addition, Maragia and Kemboi (2021), investigated the effects of diversification strategy on FP of manufacturing companies in Uasin Gishu County. The population of 36 manufacturing comprised of 5662 employees of selected firms was used. A sample of 374 employees was

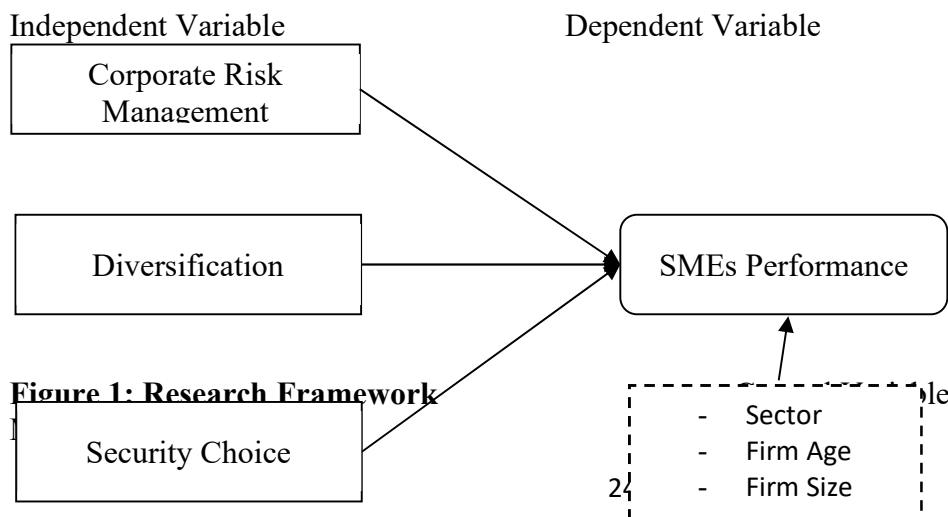
selected using stratified, proportionate, and simple random sampling techniques. The results indicated that horizontal diversification is a significant factor that influences SMEs.

In the light of the above, studies on the relationship between diversification and SMEs performance have not yet reached a definite consensus on whether investment firms are better off with or without diversification. Therefore, diversification construct on performance is complex as such have produced mixed related results.

Security Choice and SMEs Performance

Generally, the study of security choice is essentially based on the notion that all individual investors are similar in some ways and perhaps different regarding security selection (Ramkumar & Raglend, 2014). According to Sony and Bhadurib (2020) reported that contemporary financial analysts have agreed that security choice is defined as a pattern of systematic arrangement of investments, hoping to minimize risk and maximization return. This definition consists of individual investors, which are seen as enduring patterns across numerous social and personal contexts of risk lover or risk averter.

The relationship between security choice and SMEs cannot be overemphasized, Shohaieb, Hashem, and Hanafy (2018) investigated the effects of physical security choice and supply chain performance in Cairo, Egypt chemical company, a sample of 12 chemical firms were used. The results show a positive significant influence on SMEs. In addition, Fernandes and Scherrer (2012), examined the effect of security price discovery in dual-class shares across multiple markets. The study sampled 2 share prices in Brazil, 4 share prices in the US, plus the exchange rate. The results indicated that the foreign market is at least as informative as the home market and stocks in the dual-class premium entail a permanent effect in normal times, but transitory in periods of financial distress. Essentially, Kalantonis, Kallandranis, and Sotiropoulos (2021) examined the effects of leverage on the selection of security and SMEs evidenced on the role of the economic sentiment using accounting information. The study findings offer evidence of patterns of pecking order behavior on the choice of security and thus significant for internal financing over external. Furthermore, Wang, Wu, Woo, and Xie (2021), studied the effect of stock return and the performance of manufacturing firms listed on the Chinese A-shares market over the 2000 - 2016 period. The study revealed firms that OFDI, have to deal with the risks of the overseas market. The results show a significantly higher on SMEs. In the light of the above, the literature review has indicated that studies between security choice and SMEs performance are yet unresolved. This was depicted in the theoretical model (Dirk & David, 2015);



Using census sampling, data were collected through self-administered questionnaires from 92 SMEs in Niger State. Owners Managers has been used as the unit of analysis. In all, 92 respondents, male respondents have higher participation of 49 (55.1%) over their female counterparts with 40 (44.9%). In terms of the highest educational qualification, 21 respondents (23.6%) are holders of Diplomas and/or NCEs. 33 respondents (37.1%) possessed first degrees and/or HNDs. 27 respondents (30.3%) had a second degree. And lastly, 8 respondents (9%) of the sampled have their third degree. Sectorial statistics shown that 26 SMEs (29.2%) belong to Agriculture, 10 SMEs (11.2%) venture into construction, the activities of 12 SMEs (13.5%) can be classified as industrial, 20 SMEs (22.5%) were into manufacturing activities, 3 SMEs (3.4%) were into mining operation and 18 SMEs (20.2%) were service-oriented. In terms of age, 33 SMEs (37.1%) started operation in less than 13 years, 15 (16.9%) are within the age bracket of 13 to 15 years, 24 SMEs (27%) fall between 16 to 21 years and 17 (19.1%) lived for 22 years and above. In terms of staff strength, 18 SMEs (20.2%) had less than 29 staff, 12 enterprise (13.5%) had between 29 to 36 staff, 16 firms (18%) had between 37 to 47 staff, 16 SMEs (18%) had between 48 to 65 staff, 13 SMEs (14.6%) had between 66 to 97 staff and 14 SMEs (15.7%) had several 98 staff.

Measurement of Variables

SMEs performance was measured using the scale adapted from Hernández-perlines, García, and Yáñez-araque (2017). CRM, a total of 7 items adapted from Habib et al.ss (2014) risk management scale. Diversification, three items were adapted from Abbas et al., (2013), diversification scale, and three items were also adapted from Adamu et al., (2011). Finally, seven items were adapted from Fernandes and Scherrer, (2012) to measure the security choice scale. All items were adapted and the respondents were rated using a five-point scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*).

4.0 Results and Discussions

The research findings here consist of sections. Section one, which was carried out with the aid of the IBM SPSS Statistics 23 consists of data coding, data entry, checking for error in data entry and missing values, collapsing metric control variable to a categorical variable for data presentation, transforming metric control variable to natural logarithm, creating dummy variables from categorical control variable. Also carried out with the SPSS are outlier checking and presentation of the demographic. Section two was carried out using the Hair, Risher, Sarstedt, and Ringle (2018) SmartPLS3.0. In this section, the measurement (outer) model was assessed to determine the individual item reliability, internal consistency reliability, and convergent validity. Equally assessed is the structural (inner) model which represents the constructs (circles or ovals). This structural (inner) model also displays the relationships (paths) between the constructs (Hair et al., 2017). This was used for multicollinearity assessment, the coefficient of determination (R-squared), and the significance of path coefficients (hypotheses testing).

Assessment of Measurement (outer) Model

An assessment of a measurement model involves determining individual item outer loading reliability, internal consistency reliability, content validity, convergent validity, and discriminant validity (Hair et al., 2014). The measurement model assesses the relationship between a latent construct and its observed indicators. Composite Reliability (CR) was used to evaluate internal consistency, Average Variance Extracted (AVE) to evaluate convergent validity, Fornell, and

Larcker (1981). Standard PLS algorithm was used to calculate the various assessments mentioned and the results are discussed.

Indicator Reliability

The acceptable standard value for individual item reliability is the outer loading of 0.708 (Hair et al., 2017). However, Hair, Hult, Ringle and Sarstedt (2017) argued that indicators with loadings between 0.40 and 0.70 should be considered for removal from the scale only if deleting these indicators will lead to an increase in AVE and CRM above the threshold values of 50% and 70% respectively.

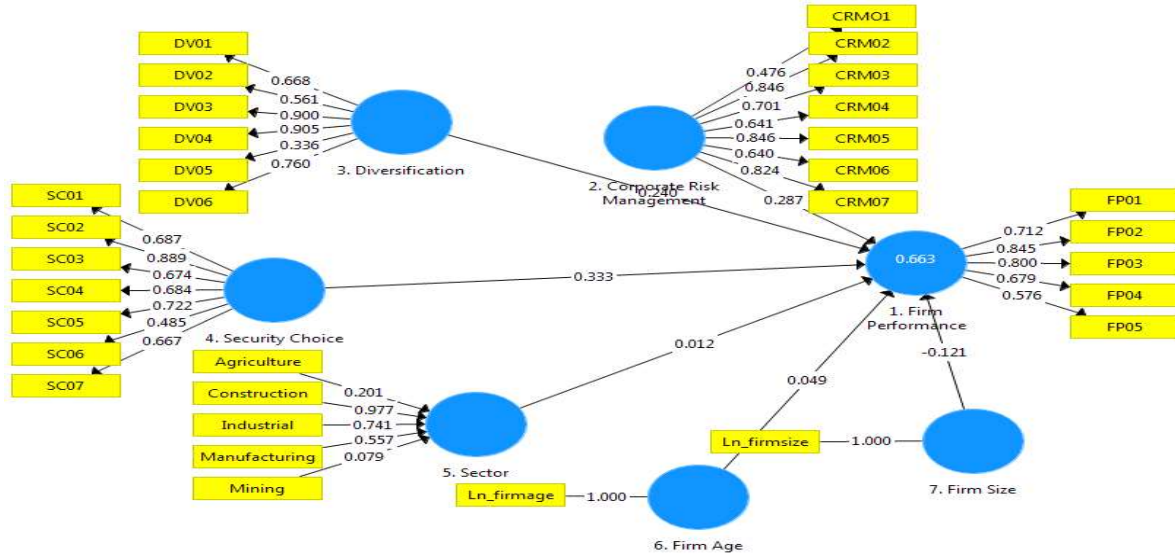


Figure 2: Initial PLS Algorithm result

As shown in Figure 2 above, Items FP04, FP05, CRM01, CRM04, CRM06, DV01, DV02, DV05, SC03, SC06, and SC07 with the respective loadings 0.679, 0.576, 0.476, 0.641, 0.640, 0.668, 0.561, 0.336, 0.674, 0.485, and 0.667 were dropped because their deletion had led to a significant increase in the AVE and CRM above the recommended threshold. As shown in Figure 3 and Table 2, indicator reliability was met as all the remaining items were above 0.708.

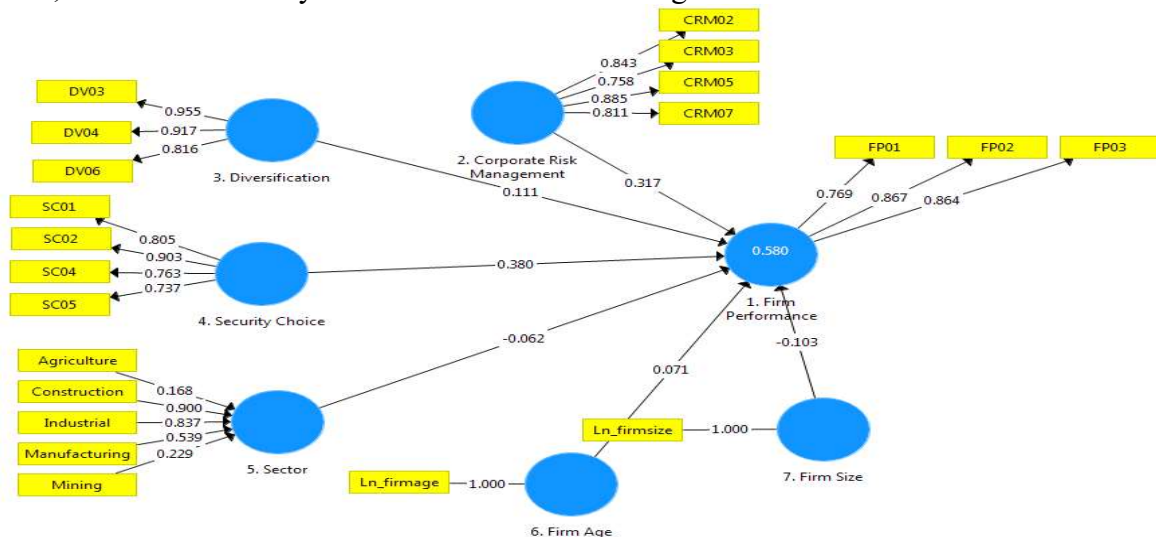


Figure 3: Final PLS Algorithm result

Table 1: Internal Consistency Reliability and Convergent Validity

Construct	Indicator	Loading	Cronbach's Alpha	Rho, A	Composite Reliability	AVE
SMEs Performance	SP01	0.770	0.783	0.798	0.873	0.697
	SP02	0.868				
	SP03	0.863				
Corporate Risk Management	CRM02	0.843	0.844	0.870	0.895	0.682
	CRM03	0.759				
	CRM05	0.885				
	CRM07	0.811				
Diversification	DV03	0.955	0.877	0.891	0.925	0.806
	DV04	0.917				
	DV06	0.815				
Security Choice	SC01	0.805	0.816	0.835	0.880	0.647
	SC02	0.903				
	SC04	0.763				
	SC05	0.737				

Source: PLS OUTPUT, 2025.

Internal Consistency Reliability

Internal consistency reliability refers to the extent to which all items on a particular scale are measuring the same concept. Cronbach's alpha coefficient and composite reliability coefficient are the most commonly used estimators of internal consistency reliability. However, Cronbach's Alpha has been criticized as a non-reliable estimator of internal consistency reliability because it is sensitive to the number of indicators in a scale. Consequently, composite reliability measure is preferred for PLS-based research as it provides a better estimate of true reliability (Hair et al., 2017). Composite reliability measures the different outer loadings of the indicator variables and is interpreted in the same manner as Cronbach's Alpha. In table 1, it can be seen that all latent variable has values above the composite reliability threshold of 0.70. Specifically, diversification had the highest composite reliability value (0.925), followed by corporate risk management (0.895), security choice (0.880), then SMEs performance (0.873). Cronbach Alpha Coefficient and Composite Reliability have different implications and uses. Cronbach Alpha Coefficient is used to evaluate the internal consistency of a set of items while Composite Reliability Coefficient is used to evaluate the reliability of a composite score. That to say the more friendly policies and of government in Niger State the healthier the SMEs.

Convergent Validity**Table 2: Convergent Validity**

Fornell - Larcker Criterion								
Variables	FP	CRM	DV	SC	Sector	FS	FA	AVE
SMEs	0.835							0.697
CRM	0.681	0.826						0.682
DV	0.682	0.838	0.898					0.806
SC	0.694	0.707	0.750	0.805				0.647
Sector	CC	CC	CC	CC	CC			CC
FS	S	S	S	S	S	S		S
FA	S	S	S	S	S	S	S	S

Source: PLS OUTPUT, 2025.

Convergent validity seeks to ensure that a construct is one-dimensional, which is to say that there is a reasonable degree of agreement among the indicators measuring the same construct. AVE is the prominent measure of convergent validity. AVE of 0.50 or higher is considered acceptable (Hair et al., 2017). Table 2 exhibited high AVE loadings above 0.50 on the respective variables of this study, indicating adequate convergent validity. The AVE values on the table range between 0.647 to 0.806. High Convergent Validity has important implications for research, theory and practice and can increase confidence in research findings, improve measurement accuracy and enhance generalizability for SMEs to thrive in Niger State.

Assessment of Structural (Inner) Model

Having ascertained the requirement for the measurement (outer) model, the next logical step is to assess the structural (inner) model. These include the assessment of structural collinearity and testing the significance of the structural paths.

Multicollinearity Test**Table 3. Correlation Matrix**

	SMEs	CRM	DV	SC	FS	FA	Sector	VIF
SMEs	1							
CRM	0.682	1						3.857
DV	0.685	0.838	1					4.483
SC	0.681	0.722	0.739	1				2.472
FS	-0.048	0.088	0.049	0.031	1			1.369
FA	0.072	0.006	0.114	0.063	0.324	1		1.184
Sector	-0.236	-0.178	-0.292	-0.102	0.405	0.138	1	1.419

Source: PLS OUTPUT, 2025.

Multicollinearity refers to a situation in which one or more exogenous latent constructs become highly correlated. One way of assessing multicollinearity is through variance inflationary factor (VIF). VIF of standardized scores of exogenous latent constructs not less than 5 show the presence of multicollinearity (Hair et al., 2017). From Table 3, it can be seen that all the VIF columns are below 5. This has significant implication for the accuracy and reliability of regression models which is essential to address SMEs performance in Niger State using appropriate techniques and strategies to ensure that SMEs provides accurate and reliable results.

Coefficient of Determination (R Square)

As shown in Figure 2, the R Square value is 0.579, this means that all the six independent variables namely corporate risk management, diversification, security choice, sector, firm age, and firm size can collectively explain 57.9% changes in the dependent variable SMEs performance. The remaining 41.2% will be explained by other independent variables that were not captured in this structural model. According to Hair et al. (2017), a model is moderate when the R Square value is between 50% to 69%.

Hypothesis Testing

Structural path coefficients stand for the hypothesized relationships among the model constructs. Hair et al. (2017) suggested that when using PLS-SEM, a standard bootstrapping procedure with 5,000 subsamples be used. The significance of the path coefficients for the first sub-model was ascertained using a one-tail test at a 5% significance level and a critical value of 1.96 ($t \geq 1.96$). Table 4 shows results of hypotheses testing in their alternate form.

Table 4: Hypothesis Testing

Hypothesis	Relationship	Std. Beta	Standard Error	t-value	p-value	Decision
H1	Corporate Risk Management -> SMEs Performance	0.313	0.272	1.151	0.125	Not Supported
H2	Diversification -> SMEs Performance	0.116	0.316	0.367	0.357	Not Supported
H3	Security Choice -> SMEs Performance	0.383	0.219	1.744**	0.041	Supported
	Sector -> SMEs Performance	-0.056	0.094	0.595	0.276	
	Firm Age -> SMEs Performance	0.062	0.073	0.855	0.196	
	Firm Size -> SMEs Performance	-0.111	0.071	1.555	0.060	

Source: PLS OUTPUT, 2025.

Hypothesis One states that there is no significant relationship between CRM and SMEs performance. The result of the hypothesis testing in Table 4 shows that corporate risk management has an insignificant effect on SMEs performance. This is because the beta value is not significant at 5% level. Therefore, the alternate hypothesis is not supported. This result is

consistent with the findings of (Kafidipe, Uwalomwa, Dahunsi & Okeme, 2021; Paulinus & Jones, 2017; Sanda & Omoro, 2021; Ologbenla, 2018).

The result of hypothesis two Table 4 indicates that diversification has an insignificant effect on SMEs performance. This is because the beta value shows a statistically insignificant result at 5% level. And this means that the alternate hypothesis is not supported. This study is in line with the findings of (Lee & Le, 2020; Adamu *et al.*, 2011; Cahyo, Kusuma, Harjito & Arifin, 2021) but contrary to the findings of (Mehmood, Hunjra & Chani, 2019).

The result confirmed the alternate hypothesis three that security choice has a positive and significant effect on SMEs performance. This is because the beta value is significant at 5% level. The interpretation of the statistical output here tells us that as security choice goes up by 1-unit, SMEs performance will go up by 38%. Therefore, the null hypothesis is rejected and the alternate hypothesis is supported. This finding concurs with that of (Grözinger, Wolff, Ruf & Moog, 2021; Duong *et al.*, 2020; Shohaieb, Hashem & Hanafy, 2018).

Discussion of Findings

The results from the hypothesis testing generally revealed that CRM and diversification were insignificant in predicting SMEs performance, while security choice was found to have a positive and significant influence in explaining the variability of SMEs. This is to say, out of the three-research hypothesis formulated for the study, one was accepted while two were rejected. Discussions of the findings were based on the three (3) formulated objectives and hypotheses of the study. In this study SMEs performance is about not only minimization of certain transaction costs (improvement to turnover, delivery time) but also adding value to the investors, shareholders, economy, and the society by maximization of the returns (Reichert & Zawislak, 2014).

CRM revealed an insignificant relationship, on SMEs respectively open a *beta value*, *t-value* and *p-value* respectively. This indicates that SMEs adopt the use of very little risk, identify specific risk through technical and fundamental analysis, the risk managers adopt the use of historical data to mitigate the risk, and decisions were made to invest in the sector associated with high risk. This plays a vital role in predicting SMEs. This result is supported by empirical evidence from (Kinyua *et al.*, 2023) study Financial Firms Listed in Nairobi Security Exchange, Paulinus & Jones, 2017 in Deposit Money Banks in Nigeria and Ologbenla, 2018 in the Nigerian Stock Exchange).

Additionally, as evidenced in Table 4 above, an insignificant effect exists between diversification and SMEs with *beta value*, *t-value*, and *p-value* respectively. The major reasons indicated that diversification attempts to have reduced the cost of investment to the barest minimum and firms diversify to gain social governance advantage as well as the commendable financial strength to allow for healthy diversification. This is in line with the empirical findings of the previous studies of (Doaei *et al.*, 2014 in Manufacturing Firms in Bursa, Malaysia, and Zahavi & Lavie, 2013 in U.S.-Based Software Firms as well as Adamu *et al.*, 2011 in selected Construction Firms of Nigeria Stock Exchange).

In addition, security choice is defined as the ability of an investor to select or to arrange investment such that it will meet the expected return (Tewamba *et al.*, 2019). As evidenced in

Table 4.5 above, a positive and significant relationship exists between the two variables (SC and, SMEs) at 5% respectively open with *beta value*, *t-value*, and *p-value* respectively. Hence, the null hypotheses were rejected. In addition, a standardized beta coefficient of .383 was uncovered between the two variables. Expectedly, the finding related to the objective of this study was consistent with hypothesis H3, which states that security choice is not significantly related to SMEs. More importantly, the finding of the study is moreover supported by the previous studies of (Wang, Wu, Woo & Xie, 2021 in Manufacturing Firms Listed in Chinese Share Market, Duong, et al., 2020 studies Non-Financial Listed Firms in Vietnam, and Fernandes & Scherrer, 2012 on Price Discovery Analysis in London).

Finally, results regarding the security choice and SMEs appear to be congruent with modern portfolio theory (Roncalli, 2020). Consistent with the view that the right choice of security is an important cognitive resource that can guide an individual firm to engage and consult the right people before engaging in any investment. Likewise, also consistent was passive portfolio theory which suggested that investor's goals and temperament with financial actions as well as propose minimal input from the investor largely relied on the right choice of security to match the performance of a firm (Kristian, Lejon & Persson, 2020)

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