Exploring the Moderating Effects of Firms' Experience

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Abstract

This study investigates the moderating effects of firms' experience on the relationship between supply chain risk management strategy dimensions and business performance of oil and gas marketing companies in Lagos State. The study adopted a cross-sectional research design; 1,044 employees of five selected oil and gas marketing companies constituted the population of the study and a sample size of 362 was derived using Krejcie and Morgan formula. The study employed mixed sampling technique; purposive, stratified and proportionate sampling. Primary data were gathered through self-administered questionnaire and 332 copies were retrieved, representing approximately, 91.7% response rate and later used for analysis. The study employed descriptive statistics and hierarchical multiple regression analysis to derive meaning from the data. The findings showed that the relationship between supply chain risk management strategy and business performance of oil and gas marketing companies in Lagos State, is significantly moderated by firms' experience ($\beta = -0.134$, $t = -6.169$, $p < 0.05$). This implies that experience enables firms to develop organisational routines to be able to perform their activities with more efficiency and this may better their performance. It is recommended that management of oil and gas marketing companies should incorporate good risk management strategies such as risk-avoidance, risk-reduction, risk-transfer and risk-acceptance in their operations.

Keywords: Business performance, firms' experience, Nigerian oil and gas industry, supply chain risk management.

Introduction

Owing to technological disruptions, inconsistent legal and regulatory frameworks, consumer sophistication and awareness, intense competition from alternative sources of energy, geo-political conflict, trade wars and other factors, the global economy is vulnerable to a wide range

of threats. Thus, oil and gas firms in both developed and emerging economies are faced with a number of challenges that threaten their ability to survive and remain competitive. Accordingly, oil and gas marketing companies are under pressure to devise measures to lessen the impact of uncertainty and risks on their operations and by extension, business performance.

Oil and gas industry world-wide is recognised as a catalyst for economic development and growth, since all sectors in any economy depend on it for energy, raw materials, transportation, feedstock, revenue, among others (Chukwu, Nwaozuzu, & Nteegah, 2023; Ojabello, 2025; Zand, 2024). However, oil and gas marketing companies in recent time are grappling with much more uncertainty, risks and challenges that influence their performance in emerging economies, when compared to developed economies. Nigeria's downstream oil sector has faced margin compression amid subsidy reforms, exchange rate fluctuation, pricing uncertainty, sluggish consumer demand, alternative source of energy, inflationary pressure, supply chain disruptions and logistical inefficiencies to mention but few (Alli, 2025; Aminu & Olawore, 2014; Ariawhorai, 2025; Michael, 2025; Okafor, 2021).

In order to maintain competitiveness within the dynamic oil and gas industry, it is imperative for companies to consistently monitor and adjust their corporate governance. The application of corporate governance practises plays a vital role in determining the strategic path and extent of an organisation's operations, in order to effectively attain its desired goals and objectives practices (Stewart & Niero, 2018). The primary elements of corporate governance include directors training, staff development and risk management practices. Supply chain risk management practices involve a systematic process of recognising, evaluating, and minimising potential risks that could impact an organisation's supply goals (Cooper, 2019). The application of these practices assumes an important role within the realm of corporate governance, as they aid companies conduct their operations in a responsible and sustainable manner, while concurrently protecting the interests of stakeholders (Morgan & Liker, 2006).

Firm-level experiences are key requirements for firm survival and should be gradually developed, in order to minimize the potential treats to companies' operations (Fernhaber, McDougall-Covin, & Shepherd, 2009). Firms' experience, a dimension of firm characteristics has the potential possibility of influencing the relationship between supply chain risk management and how it eventually performs on the novel market (Hennart & Slangen, 2015). Experience and knowledge about various threats to supply chain management activities of firms' operations enable firms to effectively navigate unpredictable circumstances, make well-informed choices, and bolster their overall capacity to withstand challenges (Mureithi & Maende, 2024).

Given the importance of resources and capabilities for successful implementation of risks management, it is surprising that the literature has not empirically considered the potential difference that firm's experience might have on the relationship between SCRM strategy dimensions and business outcomes, specifically in oil and gas downstream sector in Lagos State, Nigeria. Review of extant literature showed that most of the previous studies focused on practice of SCRM in the automotive, aerospace, electronics and IT, manufacturing such as metal, textile, construction, to mention but few (Mureithi & Maende, 2024; Saeidi et al., 2021; Khuan, Shee, & Suan, See, 2023). More than a few studies documented the crucial role of risks management in oil and gas downstream sector in the economic development of countries (Alao,

Adefulu, Asikhia, & Makinde, 2020; Arokodare, Asikhia, & Makinde, 2020; Owuso & Poi, 2019; Owuso & Luke, 2020). Little is known about role of firms' experience on the relationship between supply chain risk management and business performance of oil and gas marketing companies.

Against this background, the purpose of this study is to answer the research question: How does firms' experience moderate the effect of supply chain risk management on business performance of selected oil and gas marketing companies in Lagos State, Nigeria? More specifically, this study objective is: to investigate the moderating effect of firms' experience on supply chain risk management and business performance of selected oil and gas marketing companies in Lagos State, Nigeria.

That is, this study attempts to identify the influence of firm's experience on the relationship between dimensions of supply chain risk management and business performance of oil and gas marketing companies for the first time. Essentially, this study responds to the call for a new thinking about firms' experience in management of risks associated with supply chain activities in oil and gas industry, specifically, the downstream sector in Nigeria and draws inspiration from Kurniawan, Zailani, Iranmanesh, and Rajagopal (2017), Mbithi, Muturi, and Rambo (2017), Ouabouch, and Pache (2014), who stressed the need **to** consider the use of other moderator variables to test the relationships between vulnerability mitigation strategies and supply chain effectiveness.

The current study makes important contributions to the limited literature on the effect of firm's experience on supply chain risk management and firms' value. To the best of our knowledge, this study is the first to investigate how a firm's experience influences the relationship between supply chain risk management and business performance in oil and gas marketing companies in Lagos State, Nigeria. In addition, it prompts management to cautiously weigh the prospects of a firm's long-term existence and devise sound policies that oversee its long-term survival, guaranteeing sustained growth and success (business performance) that result from years of experience. In order to achieve the objective of this study, the following hypothesis was tested:

H_0: The effect of Supply Chain Risk Management on the Business Performance of selected oil and gas marketing companies in Lagos State, Nigeria, are not significantly moderated by a firm's experience.

The paper has four parts. First, it reviews the existing literature relevant to supply chain risk management, business performance, and firms' experiences. The research methodology is then presented, which comprises a description of the research methods, the population, the sampling plan, data collection procedures, measures, and data analysis methods. Next, the findings are discussed, and finally, the conclusion, recommendations, limitations and suggestions for future studies are provided.

Review of Related Literature

Supply chain disruptions are considered a mixture of unforeseen events and the resulting consequences, which threaten the flow of material and normal business activities significantly (Melnyk, Rodrigues, & Ragatz, 2009). Supply chain risk has been defined as an unplanned and

unexpected incident that disrupts the flow of goods or provision of services within the supply chain (Shahbaz, Kazi, Bhatti, Abbasi, & Rasi, 2019).

A number of studies have investigated the relationship between the supply chain risk management variables and performance. For instance, Ngii (2017) conducted a study to investigate the effects of the supply chain risk management process on organisational performance using a case study. The study, which adopted a cross-sectional survey research design, found that risk identification is the most crucial in the whole risk management process. The study concluded that risk identification strategies affected the performance of the company used as a case (Accelar Logistics). The study relied on primary quantitative data to measure the supply chain risk management process; however, the present study measures supply chain risk management using four constructs —risk reduction, risk avoidance, risk transfer, and risk acceptance— based on primary quantitative data.

Likewise, Shahbaz et al. (2019) investigated the impact of supply chain risks on supply chain performance in the Malaysian manufacturing industry. The study employed a survey design and targeted a population of 2,300 organisations. The study concluded that supply chain disruptions, measured by logistics risk and financial risk, significantly and negatively influence the business performance of manufacturing companies in Malaysia. According to Lechner and Gatzert (2018) successful risk management practices enable firms to enhance their values and manage risk in an effective way. These scholars argued that the effective implementation of risk management increases a firm's profitability by reducing various operational and marginal costs, as well as mitigating the uncertainty of stock market returns (Lechner & Gatzert, 2018). Additionally, in 2017, Okumu and Wanjira investigated the relationship between risk mitigation strategies and the performance of the insurance industry in Kenya, using the case of motor insurance companies. They reported that the risk control strategy and performance of regulated motor insurance companies in Kenya are positively and significantly related. The study concluded that risk avoidance strategy and product-mix strategy and the business performance of regulated motor insurance companies were positively and significantly related. Likewise, it was established that risk-based audit strategy and performance of regulated motor insurance companies were also positively related.

In another study, Dimitrios (2008) investigates the effect of inventory management on firm performance. He reports that too much inventory could demand more physical space, increase the possibility of inventories damage, losses and deterioration and consequently, could lead to financial problems. Additionally, the scholar argues that holding large amount of inventory frequently is an indication of inefficient and careless management practices and procedures (Dimitrios, 2008). Although, keeping too little inventories could also lead to the disruption of operation in manufacturing process, increase the sale loss and thus lower the profitability of the firms. Nevertheless, Panigrahi (2013) posits that there can be an unexpected relationship, where the link between inventory conversion period and sales can be positive. Decrease in inventory conversion period can result into decrease in sales and vice versa (Panigrahi, 2013). This unexpected relationship shows the ineffectiveness of managers to increase sales level, because of decrease in inventory conversion period.

Similarly, Mburu, Ngugi, and Ogollah (2015) investigate the relation between risk identification management strategy and supply chain performance with special focus on

manufacturing companies in Kenya. Using a sample of 131 listed companies for period of 2001-2004, the result from regression analysis indicated that there was a statistical significant positive relationship between hedging against risk (risk reduction strategy) and supply chain performance. From those results, they argue that most organisation risk management strategy acts as the drivers to any successful organisation performance.

In another study to examine supply base rationalisation risk strategy and performance of food and beverage manufacturing firms in Kenya, Nyang'au, Rotich, and Ngugi (2016) used a sample size of 187 food and beverage manufacturing firms. The structural equation modelling (SEM) revealed a significantly positive relationship between supply base risk rationalisation strategies and the performance of food and beverage manufacturing firms in Kenya. These scholars observed that risk management strategy (supply base rationalisation risk strategy), which was measured with inspections of qualified suppliers and supplier selection, mixed sourcing, supplier contracts**,** localised sourcing, an extended usage of flexible contract agreements with multiple suppliers, reduced supply chain risks and influenced supply chain performance in terms of costs, delivery, quality and customer service levels.

From the foregoing literature, it is observed that a single study examining the effect of supply chain risk management strategy on the performance of oil and gas marketing companies in Lagos State, Nigeria, is missing. Hence, there is a need to fill such a research gap.

Firms' Experience and Performance

The firm's experience is one of the key attributes that sets it apart from the rest. It is the unique features and qualities that belong to a particular organisation. The resources and objectives of a firm are regarded as the firm's characteristics and, in several ways, influence the performance of any particular firm (Kwaltommai, Enemali, Duna, & Ahmed, 2019). They vary from organisation to organisation and their variability plays important roles in the success of the business. A review of the existing literature reveals various attributes of a firm's characteristics, including ownership, size, age (experience), liquidity, leverage, and capital intensity (Czarnitzki & Kraft, 2009). In order to achieve its objectives, this article will focus on the firm's experience.

Experience is the business skills, expertise and knowledge acquired by a firm over length of time (Islam, Khan, Obaidullah, & Alam, 2011). The experience of firms in the industry is a significant factor in business achievement (Takahashi, 2009). The experience and competency of an organisation, as provided by age, help firms develop their operations in more efficient ways (Sorensen & Stuart, 2000), a finding corroborated by Majeed (2011). The amount of time that a business has been in operation affects its ability to grow (Hui et al., 2013; Mann & Sager, 2007). The experience of a business is associated with the firm's risk of failure, implying that younger firms are at a higher risk of failure than older ones. Experience could actually help firms become more efficient (Yang, Hua, & Hua, 2022). As pointed out by Matemilola, Bany-Ariffin, Azman-Saini, and Nassir (2019), older firms do have time to learn about their risks and so will have an accurate evaluation of their risks.

Hui et al. (2013) examined the impact of firms' age and size on the relationship among organisational innovation, learning, and performance among Asian Food Manufacturing Companies. Using a sample of 168 food manufacturing companies, the regression analysis

revealed that firm age and size are two moderators which control the relationship among organisational innovation, learning, and performance. The findings apparently demonstrate that age enables firms to develop organisational routines that enable them to perform their activities with greater efficiency and better performance.

A review of the existing literature revealed that attempts have been made to address the issue of risk management in various industries. However, most of the research works concentrate on supply chain risk management (Amponsah & Opei, 2017; Munyuko, 2015; Nsikan, Ekeins-Wilson, Ayandike, & Ortencia, 2019; Nyang'au, 2016; Owuso & Poi, 2019; Owuso & Luke, 2020; Shobayo, 2017), and most of the studies also do not establish the relationship between supply chain risk management strategy and business performance. Furthermore, no single study has investigated all four supply chain risk management strategy dimensions (risk avoidance, risk transfer, risk reduction, and risk acceptance) in a comprehensive manner.

Measuring Business Performance

Performance measures could include traditional accounting measures such as sales growth, market share, and profitability, revenue, return on equity, return on assets, profit margin, sales growth, capital adequacy and stock prices (Oghuvwu & Omoye, 2016). In addition, non-financial goals factors such as operating performance, competitive advantage/performance, market/marketing performance, environmental performance, and social performance internal customer/employee satisfaction, external customer satisfaction, overall satisfaction of the stakeholders are also very important in evaluating performance (Daryanto & Nurfadilah, 2018; Inthavong et al., 2023), especially, when evaluating large firms such as oil and gas multinational companies with network of supply activities. This is consistent with the view of Asikhia (2009) and Wanjoi (2008) that both financial and non-financial measures should be used to assess organisational performance.

Several studies have shown that subjective and objective performance indicators proved to be positively correlated (Adeleke, Ogundele, & Oyenuga, 2010; Wall et al., 2004). Due to the difficulties in obtaining objective (financial) data from documentary sources and the unwillingness of organisations to reveal such truthful information, because of its sensitivity (Santos & Brito, 2012), the subjective approach will be adopted in this study, which includes, operational performance, competitive performance and market performance to measure business performance outcomes in oil and gas marketing companies in Lagos State, Nigeria.
Studies have shown that non-financial measures of business performance are as good as the financial ones in measuring firm's performance (Brady & Cronin, 2001; Schlegel & Britzelmaier, 2008; Wall et al., 2004), and offer the advantages of making comparison across firms and extract responses from stakeholders that may be reluctant in releasing actual performance data (Santos & Brito, 2012).

Theoretical Foundation

The study draws on learning curve theory, as propounded by Wrights (1936), to explain the relationship between firms' experience, supply chain risk management, and business performance. The theory posits that older firms learn from experience than firms in nascent

stages, which in turn leads to business performance. In line with learning theory, the growth of the firm can be explained by the experience it acquires over time (firm age), which enables expertise within its workforce (Islam et al., 2011; Matemilola et al., 2019). From the theory, this study proposed that; the aging of the firm implies building up resources and capabilities, which in the long-term results in firm performance. Additionally, the longer a firm has survived, the more learning has arguably taken place, and this is reflected in the organisations' performance (Cucculelli, 2017). Relatedly, large firms enjoy economies of scale, better funding, access to loans and vast expertise than the smaller firms.

Methodology

The study was conducted in Lagos State, Nigeria. Lagos State, with a population of over 24 million, is the commercial and industrial hub and a key driver of the country's economic growth. It also serves as the headquarters of all the major oil marketers. A cross-sectional research design was adopted. The design was adopted because the data were collected from respondents across a sample of selected oil and gas companies at a single point in time. As the name suggests, a cross-sectional study aims to obtain a representative sample by taking a cross-section of the study population (Rahi, 2017). The study population consists of 1,044 full-time employees from five selected oil and gas marketing companies in the downstream sector of the petroleum industry in Lagos State. This includes staff in Supply/Purchasing/Procurement, Logistics/Distribution/Transportation, Finance/Accounting, Marketing/Sales, Stores/Depot/ Inventory, and Production/Operations management departments, who are considered knowledgeable and familiar with the supply chain management operations of their firms. The selected firms were considered because they control more than 60% of the petroleum products market (Arokodare et al., 2020). Additionally, the selected firms are public limited liability companies that are well-structured, listed on The Nigerian Stock Exchange (NGX), and are subject to the discipline of the capital market, which includes data veracity and corporate governance structure (Alaba, 2021).

The samples were drawn from five of the six members of Major Oil Marketers Association of Nigeria (MOMAN) now known as Major Energies Marketers Association of Nigeria (MEMAN) in Lagos State. The sampled companies were chosen based on size of their operations in supply of petroleum products and high concentration of their petrol stations outlet in Lagos and across the country. The staff population distribution of these companies is shown in Table 1 below:

Table 1. The population of the study

No	Selected Oil and Gas Marketing companies	Population
1	Total Nigeria Plc.	451
2	Conoil Plc	201
3	MRS Oil Nigeria Plc.	104
4	Ardova Plc.	153
5	OVH Energy Marketing Ltd	135
	Total	**1,044**

Source: 2019 Annual Reports of the respective companies

The Krejcie and Morgan (1977) formula for determining sample size was used in this study. From the population of 1,044, 362 were identified as the sample size for the study, which covers the staff who are familiar with supply chain operations across the five selected oil and gas companies. This set of staff was to be covered because of the objectives that this study intends to achieve. These employees are known in literature as key informants (Khuan et al., 2023) and were suitable as potential respondents for this study, because they were considered competent to provide information about the subject of supply chain risk management and the business performance of their various firms. The sample size for each oil and gas company is shown in Table 2 below:

Table 2. The sample size for the selected oil & gas marketing companies

No	Organisations	Estimated population	Calculated sample size for each organisation	Sample size	Sample Percent %
1	Total Nigeria Plc.	451	$\frac{451}{1044} \times 362 = 156$	**156**	43.09 (43)
2	Conoil Plc	201	$\frac{201}{1044} \times 362 = 70$	**70**	19.33 (19)
3	MRS Oil Nigeria Plc.	104	$\frac{104}{1044} \times 362 = 36$	**36**	9.94 (10)
4	Ardova Plc.	153	$\frac{153}{1044} \times 362 = 53$	**53**	14.64 (15)
5	OVH Energy Marketing Ltd	135	$\frac{135}{1044} \times 362 = 47$	**47**	12.98 (13)
	Total	1,044		**362**	100

Source: own elaboration

Given the descriptive nature of the research, previous measurement scales were used by adapting Coad, Holm, Krafft, and Quatraro (2018), and Mgeni and Nayak (2016). The main data for this study were primary data which were collected through a self-administered questionnaire, which was developed by the authors and tested (pilot study) for content validity and reliability. A six Likert scales ranging 6 for Very High (VH) to 1 for Very Low Extent (VL) was adopted for the questionnaire response options. The items in the questionnaire are 36 items with each variable – supply chain risk management strategies (18 items), business performance (15 items), and firm characteristics [firm's experience] (8 items). The study used Cronbach's Alpha to ascertain the reliability of the research instrument. Generally, a reliability value of 0.70 is regarded as good. Hence, the results in Table 3 demonstrate the reliability of the instrument is adequate (Barbera, Nobert, & Pentecost., 2021). To improve the content validity of the instrument, the questionnaire was administered to experts, and suggestions were incorporated into the final draft. Data generated from the field were analysed with the assistance of Software Package for Social Science (SPSS).

Table 3. Reliability Test of Data using Cronbach's Alpha

Variable	Reliability test	No of items
SCRM Strategies	0 .945	18
Business Performance	0.940	15
Firm's Experience	0.889	8

Source: own elaboration

Table 3 shows the reliability of the data obtained from the respondents. The reliability coefficients of the study variables are above 0.70, indicating that the instrument used to measure the variables in this study is reliable. Three hundred and sixty-two copies of the questionnaires were administered to staff of the selected oil and gas marketing companies, and 332 copies were retrieved, representing 91.7% and subsequently used for analysis**.**

Data Analysis and Results

The study employed descriptive and inferential statistical techniques to achieve its objectives. The descriptive analysis includes frequencies, percentages, means, and standard deviations. Hierarchical Multiple Regression analysis was employed to test the hypothesis.

The researchers distributed 362 copies of the questionnaire, of which 332 were returned from the field. This represented an overall successful response rate of 91.7%. The remaining 30 (8.3%) of the copies consisted of those questionnaires that were not properly filled out or never returned. According to Wimmer and Dominick (2006), a response rate of 21%-70% is acceptable for self-administered questionnaire. It guarantees accuracy and minimizes bias. Based on this high value of response rate, the 91.7% achieved was adequate for drawing conclusions on the study objectives.

Sample Characteristics

Results of analysis of the demographic data of respondents show the following: 71% represents male, while 29% were female; 32.4% were between 21-30 years, 53.7% were between 31-40 years, 13.7% represents 41-50 years, while 0.2% represents age bracket 61-65 years; 0.1% of the respondents were holders of SSCE certificate, 6.2% were holders of ND/NCE, 28.5% were holders of first degree, while 65.2% were holders of post-graduate certificates; 7.6% had 1-5 years working experience, 29.5% had 6-10 years' experience, 60.1% had 11-15 years' experience and 2.8% had 16-20 years of working experience; 1.6% were in the Finance/Account department, 7.2% were in the Marketing/Sales department, 23.8% were in the Supply/Purchasing/Procurement department, 25.7% were in the Stores/Depot department, 12.6% were in Production/Operation management department, while 29.1% were in Logistics/Distribution/Transportation department; 5.2% of the respondents were top management staff, 25.8% were middle-level management staff, 30.7% were lower-level management, while 38.3 were supervisory staff. The implications of these results showed that

all the respondents can be classified as mature and possessed the requisite level of understanding to participate in the survey research.

Test of Hypothesis

The study's hypothesis was tested using Hierarchical multiple regression analysis. Supply Chain Risk Management Strategies (dimensions) are the independent variable, while Business Performance is the dependent variable, and Firms' Experience is the Moderating variable in the Regression model. Table 4 below displays the result of the hypothesis testing at a 0.05 significance level (95% confidence level).

Hypothesis: *The effect of Supply Chain Risk Management on Business Performance of selected oil and gas marketing companies in Lagos State is not significantly moderated by Firms' Experience.*

Table 4: Hierarchical Multiple Regression

	Model	B	**SEB**	***β***	***t***	***F***	***P***
1	(Constant)	3.389	.138		24.485	130.589	.000
	Supply Chain Risk Management Strategy	.317	.028	.532	11.428	1,330	.000
2	(Constant)	2.284	.128		17.784	227.392	.000
	Supply Chain Risk Management Strategy	.227	.022	.381	10.271	2,329	.000
	Firm Experience	.339	.022	.565	15.250		.000
3	(Constant)	-.420	.455		-.923	181.351	.357
	Supply Chain Risk Management Strategy	.799	.095	1.341	8.404	3,328	.000
	Firm Experience	.975	.105	1.629	9.258		.000
	SCRMS*Firm Experience	-.134	.022	-1.626	-6.169		.000
	R^2 = 0.284, 0.580 and 0.624 for steps 1, 2 and 3 respectively. ΔR^2 = 0.284, 0.297 and 0.044 for steps 1, 2 and 3 respectively *$p < 0.05$						

1. Predictors: (Constant), Supply Chain Risk Management Strategy (SCRMS)
2. Predictors: (Constant), Supply Chain Risk Management Strategy, Firm Experience (FE)
3. Predictors: (Constant), Supply Chain Risk Management Strategy, Firm Experience, SCRMS*FE

Dependent Variable: Business Performance

Table 4 above shows the regression coefficient results with three models. In step one supply chain risk management strategy (risk-reduction strategy, risk-avoidance strategy, risk-transfer strategy, risk-acceptance/retention strategy) was regressed on business performance of selected oil and gas marketing companies in Lagos State. The findings from the table show the result of

hierarchical regression analysis for Model 1, when only supply chain risk management strategy and business performance of selected oil and gas marketing companies in Lagos State, variables are in the equation model ($R = 0.532$, $R^2 = 0.284$, Adjusted $R^2 = 0.281$, $p = 0.000 < 0.05$, $\Delta R^2 = 0.284$). These indicate that supply chain risk management strategy accounts for 28.4% of the variability in business performance of selected oil and gas marketing companies. Furthermore, the table shows beta coefficient, β, is 0.317, $p<0.05$ when supply chain risk management strategy is in the model. These results indicate that for every unit increase in supply chain risk management strategy, business performance of selected oil and gas marketing companies increased by 0.317. The overall model was also significant ($F_{(1,330)} = 130.589$, $p<0.05$) as evident from the table.

The introduction of the moderator (firms' experience) in Model 2 significantly improves the effect of supply chain risk management strategy on business performance of selected oil and gas marketing companies in Lagos State ($R = 0.762$, $R^2 = 0.580$, Adj. $R^2 = 0.578$, $p = 0.000 < 0.05$, $\Delta R^2 = 0.297$). Supply chain risk management strategy and firm's experience explained about 58.0% of the variation in business performance of selected oil and gas marketing companies as against 41.6% changes that occur when only supply chain risk management strategy was regressed against business performance. The F value is statistically significant ($F_{(2,329)} = 227.392$, $p<0.05$) that the influence of the independent variable and the moderator (firm's experience) were significant in the model as seen in the table. Furthermore, the table shows the beta coefficients supply chain risk management strategy ($\beta = 0.227$, $p<0.05$) and firm experience ($\beta = 0.339$, $p<0.05$). That is, for every unit increase in supply chain risk management strategy and firm's experience, business performance of the selected oil and gas marketing companies increases by 0.227 and 0.339 respectively. Summing up the effect, it shows a reduced Beta value of ($\beta = 0.317$, $p<0.05$) as against the 0.227 when only supply chain risk management strategy was regressed against business performance, which implies that the moderator did not boost the effect.

In addition, the table further shows the changes that occurred, when the interaction term was introduced. Supply chain risk management strategy, firm's experience and the interaction term were entered in the regression model. In Model 3, the hierarchical regression analysis shows the moderating and interaction effect of firm experience. The results under change statistics, reveal that the R^2 change increased by 0.044 from 0.580 to 0.624 ($\Delta R^2 = 0.044$) when the interaction variable (supply chain risk management strategy *firm's experience) was added. The change showed an inverse relationship between the moderating firm's experience and Business performance with supply chain risk management. ($\beta = -0.134$). This test was statistically significant at t = -6.169 and p=0.000 (p-value<0.05). The results show statistically significant relationship between supply chain risk management strategy, firms' experience and the interaction term ($F_{(3, 328)} = 181.351$, p<.05). The table reveals the F statistics changed from 227.392 to 181.351 ($\Delta F = 38.052$) showing a decrease when interaction term was added.

The results suggest that firm's experience has statistically significant moderating effect on the relationship between supply chain risk management strategy and business performance of the selected oil and gas marketing companies in Lagos. The confirmed regression equation from the results is stated as follows:

BP = -0.420 + 0.799SCRMS +0.975FE -0.134(SCRMS*FE) ----------Eqn.1

Where:
BP = Business Performance
SCRMS = Supply Chain Risk Management Strategy
FS = Firm Experience
SCRMS*FE= The interaction of supply chain risk management strategy and Firm experience.

Based on these findings, the null hypothesis (H_0) which states that firm experience has no significant moderating effect on the relationship between supply chain risk management strategy and business performance of the selected oil and gas marketing companies in Lagos, is rejected.

The findings imply that FE is a strong predictor of the effect of SCRM dimensions on organisational performance and, hence, an imperative tool that can be used to solve issues of supply chain disruptions, inefficiency and ineffectiveness in supply chain management practices in the oil and gas downstream sector.

Discussion, Conclusion and Recommendations

Discussion

Results from Hierarchical multiple regression analyses (Tables 4) indicated a positive effect of firms' experience on the association between supply chain risk management strategy dimensions and the business performance of oil and gas marketing companies in Lagos State, Nigeria, thus supporting hypothesis H_1. This means that experience of a firm relates decrease in risks and leads to an increase in business performance. This is true because as companies grow older, they obtain more experience in the market, gaining a competitive advantage over young firms that usually suffer the liability of newness, while grappling to meet their cost structure. These findings concur with the conclusions of other researchers (Coad, Segarra, & Teruel, 2016; Nketsiah. 2018). These scholars established that the experirnce of a firm is a significant pointer to its growth and survival prospects. These findings were confirmed by Atieno, Ogutu, Munjuri and Kagwe (2020). They posited that mature companies demonstrate advanced liquid trading, more disclosure, catch the eyes of analysts easily, and have a diversification of activities, hence not inclined to experience adverse financial agony. The above results also rhyme with the conclusion of other researchers, such as Ismail, Rose, Abdullah, and Uli (2010), Lucas (2017), and Sadeghi et al. (2016). They acknowledged that age comes with experience that helps organisation to achieve better business performance. This affirms the theory of learning curve, which confirms that as firms continues to exist, it becomes more productive overtime. The study is not in agreement with Mutende, Mwangi, Njihia, and Ochieng (2017), Nyatete and Kisavi (2020) and Xiahui, Mike, and Igor (2013) all of whom suggested a negative relationship between firm experience and performance.

The present study's findings support the preposition of the learning curve theory. It has been observed that management team (firm) experience is a significant predictor that deserves appropriate consideration in theoretical studies investigating the determinants of the performance of organisations. The study concurs with learning theory assumption that firms' management team characteristics can explain some external and internal decision-making

processes that affect company performance. Firms that have survived the test of time tend to establish formal structures, expand through supply risks management, innovation and diversification, establish distinct competencies, prioritize rapid sales growth, and broaden their product line (Habib & Hasan, 2019). Moreover, the theory postulates that older firms have more experience and networks of relationships and can obtain superior returns (Aboramadan, 2021).

Theoretical Implication

First, this study has confirmed the presumption of experience as a firm's internal resource by establishing a positive effect of firms' experience on the link between supply chain risk management activities and the business performance of oil and gas companies in the petroleum downstream sector in Nigeria. Therefore, this study has recognised that as firms grow and they minimise their exposure to supply chain risks, their performance improves. Furthermore, the results of this study provide policymakers with guidance on supply chain risk management strategies (risk-avoidance, risk-reduction, risk-transfer, and risk-acceptance) that should be adopted at different times to mitigate supply risks and ensure business success and long-term sustainability.

Implications for Managers and Researchers

Overall, the present study reinforces our understanding of the nexus between a firm's experience and SCRM business performance in oil and gas marketing companies in Lagos State, Nigeria. In the organisational context, findings provide insights into devising strategic risk management approaches and identifying the factors management should prioritize to achieve long-term business survival and better performance. Furthermore, using a quantitative approach, the study findings have oriented researchers toward examining the role firms' experience play in SCRM strategy-performance relationship.

Recommendations

The study recommends that companies invest in training and development of management staff responsible for activities and decision making that will enable their long-term survival and growth in operational, competitive and marketing capacity thereby, improving their performance. Oil and gas companies can only survive if they implement pro-active and re-active strategies to minimize supply risks, to boost their operational, competitive and market performance through supply chain management innovation. Managers should also develop contingency plans in managing risks associated with their companies' supplies, so they can make strategic and investment decisions that are appropriate for their businesses.

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