UNIVERSITY OF PORT HARCOURT BUSINESS REVIEW (UPBR)
UNIVERSITY OF PORTHARCOURT
RIVERS STATE NIGERIA

VOLUME 1 NUMBER 2

ISSN: 2992-5320 (PRINT)

E-ISSN:

EMAIL: upbr@uniport.edu.ng

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x. Results and Discussion of Findings.
xi. Conclusion and Recommendations
xii. References

Note: All tables and figures (where necessary) must be included in the body and must be clearly titled

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INNOVATION AND PRODUCT QUALITY OF SMALL AND MEDIUM AGRO-FOOD FIRMS

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Abstract

Innovation has been identified as an enhancer of product quality of Small and Medium-Size Enterprises (SMEs). Despite the vast number of studies concerning innovation and quality in SMEs, very few have been done among Agro-food SMEs in developing countries of Sub-Saharan Africa, such as Nigeria. This study investigated the relationship between Innovation and product quality of Agro-food Small and Medium-Size Enterprises (SMEs) in South-South, Nigeria. The study drew a sample of 322 from a population of 1958 registered agro-food SMEs using the Krejcie and Morgan's (1970) table. Data collected from 291 valid copies of the questionnaire were analyzed to generate descriptive outputs, with the aid of the International Business Machine Statistical Package for Social Sciences version 28.0.1. Spearman's Rank Order Correlation Coefficient was utilized to test the three hypotheses. Analysis shows that there is a positive and statistically significant association between all three types of innovation (product, process, and marketing) and product quality. The study concluded that the introduction of new products, processes and marketing strategies, or improvement on existing ones, enables the agro-food SMEs meet or exceed customers' expectations on the overall goodness or excellence of products. The study recommended that small holder farmers and agro-food SMEs owners/managers should intensify product innovation through crossbreeding, budding and grafting, amongst others.

Keywords: Innovation, Marketing, Product Quality.

1.0: Introduction

Small and medium-sized firms (SMEs) have proven essential to economic growth in both industrialized and developing nations (Wellalage & Locke, 2020). Thus, company founders, board members and scholars are interested in the growth of SME innovation (Kafetzopoulos et al., 2020; Ajer et al., 2023; Le et al., 2023). Moreover, due to its demonstrated internal performance benefits (Jalil et al., 2022), innovation is garnering great attention among small and medium sized firms (YahiaMarzouk & Jin, 2022; Zighan et al., 2023) nowadays. Taneo et al. (2020) and Paoloni et al. (2022) aver that, to stay competitive and sustainable, small holder farms need to innovate (Taneo et al., 2020; Paoloni et al., 2022).

One of the most challenging sectors is the agro-food sector. To retain consumers, agro-food businesses must compete with other firms, foresee logistical risks that might influence product quality, and understand market preferences and wants (Tomasevic et al., 2020). One way that small and medium-sized enterprises (SMEs) may set themselves apart from the competition and increase their chances of survival is by focusing on quality. This is due to the fact that consumer satisfaction and subsequent purchasing decisions are directly tied to a product or service quality. Opasvitayarux et al. (2022) noted that keeping the quality and safety of food along the supply chain has become a crucial challenge. Wicaksono et al. (2021) argue that it is crucial for SMEs to prioritize business quality by determining business requirements based on client needs. Using this method, small and medium-sized enterprises (SMEs) can create innovation in the form of higher-quality commercial operations tailored to satisfy client needs (Wicaksono et al., 2021).

Although there is an emphasis on quality control among agro-food SMEs, there are still significant difficulties facing the food industry. Among these obstacles are (a) extremely perishable food supplies, (b) manual or very limited automation operation(s), (c) fluctuations in the quality of raw materials, (d) increased dissimilarities of composition/products, (e) processing methods, and (f) decreased batch quantities (Dora et al., 2013; Okpala & Korzeniowska, 2023).

Small agro-food farms can reduce cultivation risk related to climatic factors and increase resilience during turbulence by modernizing their production processes with the help of innovations. This will allow them to produce more high-quality food at a lower cost (by reducing staffing costs). Moreover, innovation is crucial to the success of any business and plays a significant part in the expansion of the agriculture sector as a whole due to the ever-changing nature of consumers' wants and the proliferation of new competitors that inevitably raises the level of competition. The Oslo handbook, released by the OECD (2005), categorizes innovation into product, process marketing, and organizational. This research examines how product innovation, process and market innovation (Anning-Dorson & Nyamekye, 2020) will orchestrate higher levels of quality in Agri-food SMEs.

Agro-sector innovation has been researched by many scholars (Hutahayan & Yufra, 2019; Paoloni et al., 2022; Ajer, 2023). Despite the many studies on innovation in SMEs (Zhang, 2022), few have examined the quality benefits of innovation among agro-food SMEs in less developed countries like Nigeria. The theorizing logic of the study is that agro-food SMEs in South-South Nigeria may use innovation to improve product quality to compete in global markets (Tell et al., 2016). This paper is relevant since Nigerian agro-SMEs are lagging behind developed countries in innovation. The rest of the study provides a literature review on innovation and quality in agri-businesses and then develops testable hypotheses. The study presents its findings, conclusions, and recommendations based on the outputs of the tested hypotheses.

2.0 Theoretical background and hypothesis development

2.1 The Dynamic Capabilities Theory

The Theory of Dynamic Capabilities, which has its roots in the resource-based view (RBV) (Penrose, 1959; Wernerfelt, 1984; Barney, 1991; Peteraf, 1993) and Ricardian evolutionary economics, was popularized by Teece and Pisano (1994), and Teece, Pisano and Shuen (1997). Teece et al. (1997) submit that “dynamic capabilities as the firm’s ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments (p. 516). Helfat et al. (2007, p. 4) define dynamic capabilities as “the capacity of an organization to purposefully create, extend, and modify its resource base”. Dynamic capabilities relate “to the firm’s ability to sense, seize, and transform to generate and exploit internal and external firm-specific competences, while both responding to and shaping the environment” (Augier & Teece, 2009, p. 412). In a similar vein, Lütjen et al. (2019) argue that DCs are primarily concerned with an organization’s capacity to adjust its resources in response to shifts in its external environment by locating and tailoring opportunities via a process of constant scanning, filtering, and review of technologies and markets.

Among these capabilities is innovative thinking (O’Connor, 2008). Entrepreneurs and managers must actively orchestrate intangible and real resources to facilitate the innovation process. In light of the interdependencies and market positions that characterize modern business, a company's dynamic capabilities reveal the extent to which it can create and use novel sources of competitive advantage (Leonard-Barton, 1992). Improvement of quality is one of the ways to know if a company has innovation as a dynamic capability.

According to Schoemaker, Heaton and Teece (2018), a company’s dynamic capabilities are the set of interrelated skills it need to pursue disruptive innovation and substantially different business models. They contend that a wide variety of actions constitute dynamic capabilities, such as the creation of novel products, the introduction of novel business models, and the establishment of new partnerships. DCs thus define the firm’s ability to innovate, adapt to change, and create products or services that are beneficial to customers (Teece, Peteraf, & Leih, 2016). When a window of opportunity presents itself, the business seizes it by coordinating and integrating its operations in order to innovate to better fulfil the demands of its customers (Ilmudeen, Bao, Alharbi, & Nawaz, 2020; Liu et al., 2020).

2.2 Innovation

Schumpeter (1934) described innovation as adopting and developing ways that distort the economic order and introduce novelties. Drucker (1988) defines innovation as a deliberate effort to alter an organization or improve society. Innovation is referred to as the “production or adoption, assimilation, and exploitation of a value-added novelty in economic and social spheres; renewal and broadening of products, services, and markets; development of new production methods; and establishment of new management systems” (Crossan & Apaydin, 2010). It is both a process and an outcome (p. 115). The application of findings from scientific research to agricultural enterprise may thus be understood as an example of innovation in agriculture. Innovation goes hand in hand with research and development results which may include (i) new or enhanced plant varieties, breeds, species, and poultry; (ii) new or better food items, materials, equipment, technology in the crop production, animal husbandry, and processing industries; and (iii) new or improved organization, management systems, and social services. Bee vectoring, precision agriculture, indoor vertical farming, laser scarecrows, minichromosome technology, novel water management, fertilizer deep placement, and smartphone applications (e.g. VetAfrica) are among the top developments in agro-SMEs.

Al-Kalouti et al. (2020) note that innovation is essential to a company’s success and survival, as it increases competitive advantage (Anning-Dorson, 2018), knowledge creation (López-Nicolás & Meroño-Cerdán, 2011), user satisfaction, organizational prosperity, return on investment, market share, and overall firm success and survival López-Nicolás & Meroño-Cerdán, 2011). It has been lauded as a way for businesses to reduce their supply, transaction, and overhead costs, thereby increasing their profits (Damanpour et al., 2009), as well as a stable base from which businesses can manage risk and find their way through an unpredictable and complex marketplace. Agro-based SMEs/smallholder farmers may increase output and reduce environmental impact with innovations. Therefore, industrial externalities like pollution and waste are reduced, assuring long-term sustainability. The agro-food industry's expansion has been driven by innovation (Zouaghi & Sanchez, 2016).

2.2.1 Dimensions of Innovation

Innovation can be radical, incremental, market, administrative, strategic, behavioral, or technological (Snihur & Wiklund, 2019). Business, process, product, and process innovation are all categories of innovation, according to the Oslo Manual (OECD, 2005; OECD/Eurostat, 2005). Garca-Zamora et al. (2013) added the fifth component, managerial innovation. Most studies agree that product, process, and market innovation occur most commonly in organizations (Cainelli et al., 2006; Murat & Baki, 2011; Chang et al., 2015).

Product Innovation

When a company introduces a completely new product or service to the market that is radically different from anything they have ever offered before, they are engaging in product innovation (Wang & Ahmed, 2004). According to the (OECD, 2005). Product innovation is "introducing new product or service with the significantly improved performance characteristics such as technical specification, incorporated software to full fill the key customer needs better than the existing product" (p. 49). The introduction of new breeds or varieties with specific advantages (such as higher yields or resistance to certain weather/soil conditions) is one example of product innovation in agro-based SMEs. Other examples include the introduction of new species that extend the farming calendar or the type of farming, and the transformation of plant produce into cash crops (Van der Veen, 2010).

Process Innovation

The Oslo Manual (OECD, 2005) defines a process innovation as "the implementation of a new or significantly improved production or delivery method. This includes significant changes in techniques, equipment and/or software." (p. 49). Adaptability and flexibility are hallmarks of process innovation (Piening & Salge, 2015), which is viewed as the successful implementation of new or improved task specifications, work and information flow mechanisms, technological processes, administrative procedures, or product/service delivery or operational procedures anywhere in the value chain (Damanpour, 2010; Moreira et al., 2017; Anning-Dorson, 2018).

Meeus and Edquist (2006) and Damanpour and colleagues (2009) note that process innovations might be either technological or administrative in character. Technological process innovation (or technovation) in an organization involves creating new systems or improving existing ones (Meeus & Edquist, 2006). Administrative process innovation involves introducing new organizational techniques, policies, administrative systems, processes, regulations, and roles or making significant modifications to these to motivate people, nurture talent, and improve management performance (Lin & Chen, 2007; Birkinshaw et al., 2008; Damanpour et al., 2009). There are many ways in which administrative innovation can improve the performance of a business. These include improved service quality (Evangelista & Vezzani, 2010; Lee et al., 2019), lowering the costs associated with running the business, boosting employee satisfaction, productivity, and loyalty, and gaining access to non-tradable assets (such as tacit, external knowledge) that were previously unavailable (Damanpour & Gopalakrishnan, 2001; Walker, 2008; Birkinshaw et al., 2008). In addition, it encourages firms to adopt new technologies, increase delivery flexibility, and respond quickly to customers' ever-changing wants and demands (O'Regan et al., 2006; Prajogo & McDermott, 2011; Kafetzopoulos & Psomas, 2015).

New procedures like grafting, better seed types, and more efficient irrigation systems are examples of "process innovations" in agricultural technology. Innovative agricultural methods consist of using animals for more than just meat and skins, such as wool, milk, blood, and traction (Van der Veen, 2010).

Market Innovation

Non-technical developments in the marketing of products and services are also common in a market economy and occur simultaneously with innovations in products and processes. The Oslo Manual (OECD, 2005) define market innovation (or commercial innovation) is "the implementation of a new marketing method involving substantial changes in product design or packaging, product placement, product promotion, or pricing." (p. 45).

It is an ongoing successful market penetration typified by an organization's efforts to reach consumers, provide information, and sell its goods and services (Lee et al., 2019, p. 509). Therefore, market innovations include the use of innovative marketing tactics, as well as the adoption of new market-oriented behaviors (Sundbo & Gallouj, 1999). In order to grow sales, better satisfy customers, enter new markets, or reposition an existing product, businesses turn to marketing innovation. The growth of industries is greatly influenced by the introduction of cutting-edge marketing techniques and tools. Hamilton (2005) argues that farmers have always had an eye on marketing innovation because of the high demand for healthy, locally sourced products, the need to foster sense of community via purchasing experiences, and the need to attract new customers. Kamarulzaman et al. (2023) found that innovative marketing strategies, specifically promotion, had the most effect on the performance of agro-food manufacturers.

2.3. Quality

Quality is defined as "a measure of the extent of durability, reliability, functionality, superiority and overall excellence of a product or service which leads to a favorable user experience" (Sylva, 2020, p.302). According to Zeithaml (1988), quality can be generally viewed as superiority or excellence of a product or service. According to Kotler and Amstrong (2020), quality is the property of a good or service that determines how well it meets the customer's explicit or implicit requirements. Customer satisfaction and the perception of an item's acceptability or even high quality are based on whether or not it lives up to the purchaser's expectations. Companies that ignore quality risk losing market share and profitability.

Companies focus on product quality to improve their competitive position, business performance, and product differentiation (Belohlav 1993; Carr 1995; Flynn, Schroeder, & Sakakibara, 1995; Foster & Sjoblom, 1996; Yuen & Chan, 2010). Agro-food quality is difficult to define and monitor (Okpala & Korzeniowska, 2023), but various research have explored it in the context of the sector. Freshness, safety, and hygiene have long been the most essential factors in agro-food product selection, followed by price (Raut, Gardas, Narwane & Narkhede, 2019; Wicaksono & Ille´s, 2022). According to Okpala & Korzeniowska (2023), quality in the agro-food industry encompasses a wide range of concepts, such as the standard of appeal established by savvy users, the degree to which a product meets the needs and desires of the consumer, the degree of excellence (of a food product), and the aggregate of attributes that govern the purchase and consumption of that food product. The agro-food product business is also affected by the possibility of individual companies competing via quality efforts. However, not all businesses realize this potential, leaving them at a disadvantage in the (local/international) marketplace.

2.4 Innovation and Quality

Rapidly innovating businesses may boost product quality while cutting expenses associated with new product development (Gupta & Souder, 1998; Kessler & Bierly, 2002). The introduction of an organizational innovation is crucial for achieving goals such as reducing the time required to respond to customer or supplier requirements and enhancing product quality (Evangelista and Vezzani, 2010). Kafetzopoulos and Psomas (2015) investigated the effect of innovation capability on the performance of Greek manufacturing firms. As dimensions of innovation, the study utilized product innovation, process innovation, market innovation, and organizational innovation; while product quality, operational performance, and financial performance were selected as measures of performance. Reliability, durability, and conformance to specifications are some of the quality attributes utilized in the study. The study showed that innovation capability has a significant and positive impact on operational performance and, secondarily, product quality. Srivastava, Sultan, and Chashti (2017) investigated the impact of innovation on the competitive performance of India's agro-food processing companies. Quality was observed by Srivastava et al. (2017) through (i) level of quality acceptance in the firm's final products, (ii) acceptance level of product quality by distributors/retailers/customers, and (iii) level of quality certifications earned by the firm. The study revealed that agro-food processing enterprises' total competitive performance (with quality as one of the components) is influenced by their innovation capability.

Based on the above, the following hypotheses are hereby formulated:

HA1: Higher levels of product innovation will have a significant relationship with quality.

HA2: Process innovation will significantly relate with quality.

HA3: There is a significant relationship between market innovation and quality.

Research Model

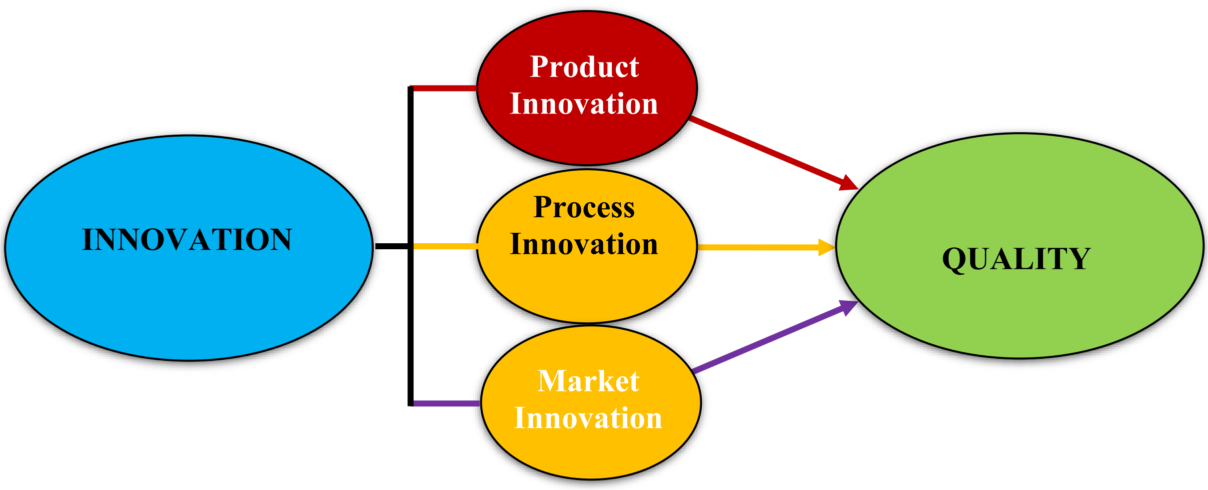

Figure 1: Innovation: Product Innovation, Process Innovation, and Market Innovation (Anning-Dorson, 2018; Anning-Dorson & Nyamekye, 2020; Mabenge et al., 2022). Quality (Ward et al., 1998; Awwad et al., 2013; Nawanir et al., 2013; Srivastava et al., 2017; Afum et al., 2020).

3: Methodology

3.1 *Research Design, Population, Sample, Sampling Technique and Questionnaire*

A cross-sectional survey, a sort of quasi-experimental study design, was used to collect data from respondents at a specific point in time (Howitt & Cramer, 2020). This inquiry employs a hypothetico-deductive technique. The population consists all the owners of small and medium scale agribusinesses in the South-South states of Nigeria. More specifically, the target population are owners located in Rivers State, Akwa Ibom State and Delta state. Preliminary investigation shows that a total of 1958 registered SMEs exist in the three states. Rivers, Akwa Ibom and Delta state had 529, 390 and 1039 SMEs respectively. The figures for Delta and Akwa Ibom state were accessed from their Ministries of Agriculture, while that of Rivers State was accessed from the Rivers State Agricultural Development Programme (ADP) office. A sample size of 322 was determined using the Krejcie and Morgan's (1970) table. The sample was randomly drawn from the population by generating random numbers using a random numbers generator (*https://www.calculatorsoup.com/calculators/statistics/random-number-generator.php*) based on the clusters (states) which represent each unit to be selected. This study collected quantitative data from primary source, through structured questionnaire (see appendix 1). The questionnaire was administered by hand and through $Qualtrics^{XM}$ electronic software by the researcher and two research assistants.

3.3 *Measures*

Innovation has three subscales, namely: product innovation, process innovation and market innovation (Anning-Dorson, 2018; Anning-Dorson & Nyamekye, 2020; Mabenge et al., 2022). Product innovation has six (6) attributes (e.g. "*Our company is faster in bringing new products into the market than any other*"). Process innovation is measured by six statement items (e.g "*Our enterprise discovers and removes non-value adding activities in its processes related to service delivery*"), while marketing innovation is constructed with seven items, examples of which are "*The enterprise made new packaging to products.". Our new products/services offerings allow us to enter new markets*". Quality comprises five items (e.g. *We always meet customer requirements in terms of the quality of our products*) (Ward et al., 1998; Awwad et al., 2013; Nawanir et al., 2013; Battaglia et al., 2014; Srivastava et al., 2017; Afum et al., 2020). All the items of the instrument are anchored on a five-point Likert's type scale of 1 to 5, where 1 = strongly disagree, and 5 = strongly agree (see appendix 1).

3.4 *Validity of the Instrument (Face, Content and Construct) & Reliability*

Seven experts in entrepreneurship and business strategy were engaged to review the questionnaire for face validity. They all agreed the questions and layout of the instrument were fair, clear, easy to understand, and useful (Kimberlin & Winterstein, 2008). To ensure content validity, a deep search on the literature concerning the study's variables was conducted so that the items sufficiently reflect and cover the broad range of meanings of the variables (Bollen, 1989; Morgado et al., 2017). For convergent validity, AVEs values of the constructs were compared with a threshold of 0.5. If the AVE is equal to or above 0.5, there is no problem of convergent validity (Fornell & Larcker, 1981; Bagozzi & Yi, 1988; Hair, Hult, Ringle, & Sarstedt, 2022). Discriminant validity is established when the square root of an individual construct's AVE is larger than its correlation with all other constructs (Fornell & Larcker, 1981). This study utilized the following reliability indices: (i) composite reliability - Jöreskog's rhoA or DillonGoldstein's ρc - which has a cut-off value of 0.7 (Jöreskog, 1970; Wertz, Linn & Jöreskog, 1974; Werts et al., 1978; Dillon & Goldstein, 1984); (ii) reliability coefficient - Dijkstra–Henseler's ρA (Dijkstra & Henseler, 2015a, 2015b) - which has a cut-off value of 0.7; and (iii) the coefficient alpha - Cronbach's alpha (∝) - with cut-off value of 0.7, and not exceeding 0.95 (Cronbach, 1951; Nunnally & Bernstein, 1994).

3.5 *Data Analysis Techniques*

We analyzed the collected data, via IBM@SPSS, using frequencies and percentages to generate descriptive statistics regarding the demography of the respondents (Pallant, 2013). Univariate analysis was also conducted. Data were imported into Smart PLS 3.3.7 (Ringle, Wende, & Becker, 2015) in order to examine the indicator- and internal consistency reliability as well as the loadings of the different observables. Using Spearman's Rank Order Correlation Coefficient, the correlation between innovation and quality was analyzed.

4.0 Results

4.1 *Fieldwork, Data Cleaning and Demographic Report*

Three Hundred and Twenty-Two (322) copies of the questionnaire were administered, out of which 291(90.4%) were completely filled and returned. Furthermore, 23(7.1%) were not properly filled but returned. However, 8(2.5%) copies were not returned. The researcher then requested assistance from a very conscientious MSc student from the University of Port Harcourt in order to help verify the data submissions. The data were used for analysis after final verification revealed that all 291 instances had been recorded appropriately.

Results indicated that out of the 291 respondents, 104(35.7%) are males, while 187(63.3%) of the subjects are females. This means that the number of females is about two-thirds of the total number of managers of Agrobusiness SMEs in South-South, Nigeria. Table 4.3 also reveals that out of the 291 respondents, 23(7.9%) are between the age grade of 20-35 years, while 188(64.6%) are between 36-50 years, and 80(27.5%) are above 51 years in age. Thus, it was stated that majority of the subjects are within 36-50 years. Moreover, 95(32.6%) of the subjects are Higher National Diploma and Bachelor degree holders, 155(53.3%) have Master degree and above, while holders of West African School Certificate and Ordinary National Diploma (WASC-OND) are 41(14.1%). Most of the owners/ managers of the SMEs are well educated. Furthermore, 95(32.6%) of the categories of products are fishing, 155(53.3%) are integrated, while poultry are 41(14.1%). Table 4.5 also indicates that 161(55.3%) have operated between 6-10 years, 41(14.1%) are below 5 years, while those with over 11 years are 89(30.6%).

4.2 *Univariate Analysis*

The means, standard deviations, skewness, and kurtosis of the four latent variable data were examined; together with mean thresholds of low (2.33 and <), medium (2.34 to 3.67), and high (3.68 to 5.00). Moreover, if the skewness and kurtosis values of each variable are divided by their respective Standard Errors (S.E) and the outputs lie between -2 and +2, there is no substantial violation of normality assumptions (George & Mallery, 2019; Gravetter & Wallnau, 2017). Table 4.1 displays the results of the univariate analysis and the normality test.

Table 4.1 Descriptive statistics on the Latent Variables

Latent Variable	N	Mean	Std. Deviation	Skewness (S_k)		Kurtosis (Ku)	
	Stat.	Stat.	Stat.	Stat.	Std. Error	Stat.	Std. Error
PDI	291	3.01	1.40	1.42	0.64	1.18	0.61
PCI	291	2.73	0.72	1.08	1.21	1.61	1.78
MKI	291	2.47	0.68	1.43	0.74	1.60	0.56
QUA	291	3.24	0.87	0.82	1.36	1.09	0.43

Note: PDI = Product Innovation; **PCI** = Process Innovation; **MKI**= Marketing Innovation; **QUA**= Quality.

Source: IBM@SPSS version 29.0 Computation from Data, 2023

Table 4.1 suggests that the agrobusiness SMESs in South-South, Nigeria have moderate mean scores on product innovation (*M* = 3.01, *SD* = 1.40), process innovation (*M* = 2.73, *SD* = 0.72), and quality (*M* = 3.24, *SD* = 0.87), while market innovation (*M* = 2.47, *SD* = 0.68) recorded the low mean score. Thus, quality has the highest mean score, while market innovation has the lowest mean score. Thus, from the perception of the respondents, most of the agri-businesses are moderate in the introduction of new products or services, and moderately introduce new or improved ways of production or methods of service delivery. Moreover, the quality of the SMEs products and services is moderate. However, the Agri-food SMEs are poor in the implementation of a new marketing method such as changes in product design or packaging, product placement, product promotion, or pricing.

4.3. *Assessment of Reliability and Validity*

Reliability and convergent validity (AVE) of the constructs, along with factor loadings and indicator reliabilities, are demonstrated in Table 4.2.

Table 4.2: Evaluation of Measurement Models Using PLS-SEM

Latent Variable	Indicators	Convergent validity			Internal consistency reliability		
		Loadings	Indicator reliability	AVE	Composite reliability ρ_c	Reliability Coefficient ρ_A	Cronbach's alpha (CA)
		>0.70	>0.50	>0.50	>0.70	>0.70	0.70 - 0.95
PDI	PDI$_1$	0.754	0.569	0.572	0.737	0.773	0.809
	PDI$_2$	0.842	0.709				
	PDI$_3$	0.719	0.517				
	PDI$_4$	0.731	0.534				
	PDI$_4$	0.730	0.533				
	PDI$_6$	***0.294***	***0.086***				
PCI	PCI$_1$	0.795	0.632	0.570	0.757	0.777	0.798
	PCI$_2$	0.718	0.516				
	PCI$_3$	0.837	0.701				
	PCI$_4$	***0.179***	***0.032***				
	PCI$_5$	0.708	0.501				
	PCI$_6$	0.709	0.502				

MKI	MKI_1	0.843	0.709	0.582	0.784	0.780	0.801
	MKI_2	0.711	0.506				
	MKI_3	***0.407***	***0.166***				
	MKI_4	0.757	0.573				
	MKI_5	***0.413***	***0.171***				
	MKI_6	0.782	0.612				
	MKI_7	0.715	0.511				
QUA	QUA_1	0.820	0.672	0.588	0.789	0.809	0.847
	QUA_2	0.727	0.529				
	QUA_3	0.914	0.835				
	QUA_4	0.842	0.709				
	QUA_5	0.754	0.569				
Note: PDI = Product Innovation; **PCI** = Process Innovation; **MKI** = Market innovation; **QUA** = Quality; **Note: Bold and italicized items/scores did not meet recommended threshold, hence were not used for computation.**							

Source: SmartPLS 3.2.6 output on research data, 2023

Table 4.2 shows the outer loadings (l_k) of the attributes of the Innovation, and those of Quality. With respect to the dimensions of innovation, all loadings that are not in bold italic scored above 0.70, which range from PCI_5 (l_k = 0.708) to MKI_1 ($l_k =$ 0.843). Moreover, all the manifest indicators of quantity scored above 0.70, which range from QUA_2 (l_k = 0.727) to QUA_3 ($l_k =$ 0.914). Furthermore, the values for composite reliability, reliability coefficient, and Cronbach's alpha for the constructs are well above the prescribed cutoff of 0.7, thereby satisfying the reliability conditions. Moreover, AVE values are greater than 50%. Therefore, there is no issue with the model's convergent validity. Composite reliability, reliability coefficient, and Cronbach's alpha for the constructs are all greater than 0.7, indicating good reliability. In table 4.3, the results of the discriminant validity test are tabulated.

Table 4.3: Test of Discriminant Validity - Fornell and Larcker (1981) criterion

Latent Variable	AVE	PDI	PCI	MKI	QUA
PDI	0.572	**0.756** (1)			
PCI	0.570	0.401	**0.755** (1)		
MKI	0.582	0.398	0.367	**0.763** (1)	
QUA	0.588	0.371	0.344	0.445	**0.767** (1)
Note: PDI = Product Innovation; **PCI** = Process Innovation; **MKI** = Market innovation; **QUA = Quality. The off-diagonal values are the correlations between latent variables, while the diagonal values (in bold) denote the square roots of AVEs.**					

Source: SmartPLS 3.2.6 output on research data, 2023

Table 4.3 demonstrates that each construct distinguishes itself sufficiently from every other construct in the model, as all diagonal numbers (square roots of the AVEs) exceed 0.7 and are significantly larger than the off-diagonal figures (correlations between the constructs). Consequently, there is no issue with the model’s discriminant validity.

4.4: Test of Hypotheses

The test of hypotheses involves the relationship between the dimensions of Innovation (Product Innovation, Process Innovation, and Market innovation), and Quality. Table 4.4 shows the outcome of the tests.

Table 4.4: Correlation between Innovation and Quality

	Product Innovation	Process Innovation	Market Innovation	Quality

Spearman's rho	Product Innovation	Correlation Coefficient	1.000	.231*	.127*	. 391*
		Sig. (2-tailed)	.	.012	.010	.000
		N	291	291	291	291
	Process Innovation	Correlation Coefficient	.231*	1.000	.198*	0.510**
		Sig. (2-tailed)	.012	.	.011	.018
		N	291	291	291	291
	Market Innovation	Correlation Coefficient	.127*	.198*	1.000	0.274*
		Sig. (2-tailed)	.010	.011	.	.000
		N	291	291	291	291
	Quality	Correlation Coefficient	.391*	0.510**	0.274*	1.000
		Sig. (2-tailed)	.000	.018	.000	.
		N	291	291	291	291
**. Correlation is significant at the 0.01 level (2-tailed).						
*. Correlation is significant at the 0.05 level (2-tailed).						

Source: IBM@SPSS version 29 Computation from Data, 2023

The results in Table 4.4 reveal moderate, positive and significant relationship between product innovation and quality (rho = 0.391, n = 291, p < 0.05), a strong, positive and significant relationship between process innovation and quality (rho = 0.510, n = 291, p < 0.05) and a weak, positive and significant path between market innovation and quality (rho = 0.274, n = 291, p < 0.05). Based on the results, hypothesis one (H_{01}), hypotheses two (H_{02}) and three (H_{03}) are accepted.
More specifically, the table indicates that a one-unit gain in product innovation could enhance quality by about two-fifths; a unit increase in process innovation is associated with about a half increase in quality; and a unit increase in market innovation is associated with about one-quarter increase in quality. The model does not account for all possible influences on relationships, therefore the remaining unknowns in the relationships are due to extraneous variables. This implies that, when a theoretical foundation has been established, more factors need to be introduced in order to strengthen the explanatory power of the innovation-quality model.

Based on the aforementioned, the findings of this study are:

i. Product innovation is related to quality.
ii. Higher level of process innovation is associated with improvement in quality.
iii. Market innovation can amplify quality.

Discussion

The first hypothesis (HA_1) is stated as “Higher levels of product innovation will have a significant relationship with quality”. The results of the investigation showed a strong and beneficial association between product innovation and quality. Thus, hypothesis one was accepted. This means that the more the agribusiness SMEs introduce a new product or service that is significantly upgraded, the more will they have higher levels of quality in terms of possessing natural and uncontaminated products, and meeting the standard set by regulatory bodies as well as customer requirements. This finding aligns with the Theory of Dynamic Capability (Teece & Pisano, 1994; Teece, Pisano & Shuen, 1997) which contends that a company's dynamic capabilities reveal the extent to which it can create and use novel sources of competitive advantage such as improvement of quality. Scholars has acknowledged that rapidly innovating businesses may boost product quality while cutting expenses associated with new product development (Gupta & Souder, 1998; Kessler & Bierly, 2002). The finding is also in tandem with Evangelista and Vezzani's (2010) submission that the introduction of an organizational innovation is crucial for achieving goals such respond to customer or supplier requirements and enhancing product quality.

Next is the second hypothesis (HA_2) which is stated as "Process innovation will significantly relate with quality". The output from data analysis supported this proposition. The study found that higher levels of process innovation is associated quality improvement. Hence, the study advances that when agribusinesses should discover and remove non value adding activities in their processes and adapt to different methods, the products would have good quality by remaining in their natural and uncontaminated state thus satisfying their customers. This finding is in agreement with Kafetzopoulos and Psomas (2015) who demonstrated that process innovation amplify operational performance and product quality. Nevertheless, the finding differs with the research of Kiss (2010) and Wanyoike (2016) who found that process innovation does not play a significant role in quality of firms' products.

The third hypothesis (HA_3) is stated as "There is a significant relationship between marketing innovation and quality". Empirical evidence supported this hypothesis. Therefore, this study advocates that Market innovation can amplify quality. This means that as agrobusinesses quickly grasp and utilize current market trends and techniques, as well as constantly build their capacity to identify potential markets faster than competitors, the quality of their products will be enhanced. Kafetzopoulos and Psomas (2015) who demonstrated that marketing innovation is a fertile ground for quality improvements. This finding also resonates with the work of Srivastava, Sultan, and Chashti (2017) who empirically established that agro-food processing enterprises' total competitive performance (with quality as one of the components) is influenced by their innovation capability.

5.0: Conclusions, Implications and Recommendations

Opasvitayarux et al. (2022) noted that keeping the quality and safety of food along the supply chain has become a crucial challenge. Wicaksono et al. (2021) argue that it is crucial for SMEs to prioritize business quality by determining business requirements based on client needs. Agri-sector innovation has been researched by many scholars (Hutahayan & Yufra, 2019; Paoloni et al., 2022; Ajer, 2023). There have been several studies on innovation in small and medium-sized enterprises (Zhang, 2022), but not many have looked at the quality gains that come from innovation in agro-food SMEs in developing nations like Nigeria. Further, South-South Nigerian agro-food SMEs are not as innovative as their counterparts in other nations.

Based on extant studies (Kafetzopoulos & Psomas 2015; Srivastava, Sultan & Chashti, 2017) and the Dynamic Capabilities Theory (Teece & Pisano, 1994; Teece, Pisano & Shuen, 1997), this study identified innovation as a dynamic capability that could serve as a mechanism in mitigating the challenge of low quality in the agribusiness sector in the South-South, Nigeria. Thus, the present study empirically examined the nexus between innovation and quality in Agro-food Small and Medium-Size Enterprises (SMEs) in South-South, Nigeria. The study concludes that the three strands of innovation (Product Innovation, Process Innovation, and Market innovation) foster quality.

Theoretical applications may be drawn from the study's results and conclusions in the fields of organizational innovation and competitive priorities. The study has both theoretical and practical ramifications, the latter demonstrating how the findings may affect future managerial practice and decision-making. This study the validates Dynamic Capabilities Theory (Teece & Pisano, 1994; Teece, Pisano & Shuen, 1997) by demonstrating that as the agro-food SMEs create and use novel sources to innovate in new products, processes and marketing techniques, they will boost product quality. In addition, this study confirms earlier studies that provided empirical evidence of the positive relationship between innovation and quality (Kafetzopoulos & Psomas 2015; Srivastava, Sultan & Chashti, 2017).

The findings of this study have important practical implications for the management and owners of small and medium-sized agri-food enterprises (SMEs), suggesting that they ought to introduce new products or services that are significantly upgraded if they wish to pursue higher levels of quality in terms of possessing natural and uncontaminated products and meeting the standard set by regulatory bodies and customer requirements. Managers and owners of agro-food SMEs should be aware that there is urgent need to discover and remove non-value adding activities in their processes and adapt to different methods in order to improve on the quality of their products and services. Also, it is necessary for agro-food SMEs operators to understand that for their products to have better quality, they need to quickly grasp and utilize current market trends and techniques, as well as constantly build their capacity to identify potential markets faster than competitors. Overall, the conclusion of this study that product, process and market innovation amplify quality calls for owners of agribusinesses to realize the need to introduce new products, processes and marketing strategies, or improve on existing ones in other to meet or exceed customers' expectations on the overall goodness or excellence of a product.

Based on the findings and conclusions, the following recommendations were made:

i. Agrobusinesses should embrace more innovations as regards products such as crossbreeding, budding and grafting by combining offspring with other plants/animals that have desired properties. This will yield a new variety of produce that combines all beneficial characteristics, increase growth rate and get a hybrid with improved quality.
ii. Owners of agrobusinesses in Nigeria should make improvement in their processes for better quality of products through continuously introducing new safe ways of protecting crops and animals from a variety of diseases (using drones to spray pesticides thus decreasing the risk of chemical poisoning from direct contact) to enhance plant and animal growth and prolong shelf life of crops.
iii. Agrobusinesses should intensify their efforts in innovative marketing activities such as product promotion in other to identify and meet the wants and needs of consumers as regards the expected quality of products. The appropriate form of physical distribution should also be put into consideration always to prevent compromise of produce quality.

5.1: Limitations of the Study and Suggestions for Further Studies.

Despite the noteworthy findings of this study, some limitations which hamper their generalizability and provide avenues to stimulate more research need to be considered. The limitations are outlined as follows:

i. The study is a cross-sectional, hence data collection is limited to a single snapshot. As a result, the study was unable to address causation or give any evidence on the long-term relationship between innovation and quality. Longitudinal surveys should be used in future investigations of these associations since they allow researchers to track the influence of innovation on quality over time.
ii. The study was restricted to SMEs in the agriculture industry. As a result, the findings of this study do not apply to other industries. Future research will benefit from expanding the model to include more industries such as banking and hotels.
iii. Because the study relied on self-reported data from a single source, it may have suffered from common method variance or self-selection bias (Campbell & Fiske, 1959; Podsakoff et al., 2003; Podsakoff et al., 2012; Baumgartner & Weijters, 2021). Furthermore, possible common method bias might exaggerate the relationships between variables, raising doubts about their correlation. Further research should incorporate some measurements, such as the test of Common Method Variance, to ensure the consistency of responses.
iv. This study relied solely on a structured questionnaire to collect quantitative data. Future research should evaluate the relationship between the variables by integrating qualitative data (e.g., in-depth interviews) with quantitative data to increase the study's richness and depth.
v. Additionally, the lack of a mediating or moderating variable in the model raises concerns. Contextual factors, such as knowledge-sharing behavior, might be included in future research

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Virtual Team Management and Normative Commitment of Oil & Gas Servicing Firms in South-South, Nigeria.

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Abstract

The study examined the nexus between virtual team management (dimensioned by virtual communication and virtual teamwork) and normative commitment of oil and gas servicing firms in South-South, Nigeria. The underpinning theory of this study is the social exchange theory and philosophical posture is positivism. A cross-sectional survey was adopted, and primary data was generated through the use of questionnaire. The elements of the accessible population are **1,038** middle and top-level managers of the registered oil and gas servicing firms in the state capitals of Benin, Calabar, Warri, Uyo, Port Harcourt and Yenagoa, while the Taro Yemene formular was used to determine a sample size of 281 respondents. The hypotheses were tested at 0.05 level of significance, using the Structural Equation Modelling. The study concluded that Management commitment to virtual communication significantly enhanced normative commitment, and effective management commitment to virtual teamwork, significantly enhances normative commitment of oil and gas servicing firms in South-South. Therefore, it is recommended that Management of oil and gas servicing firms should increase the adoption of virtual communication by disseminating data and information through virtual platforms, effectively using video and audio tools, ensuring work experiences are shared through virtual platforms, and communicated through phone calls, email and teams' data base.

Keywords: Virtual Communication, Virtual Teamwork Teamwork, Normative Commitment.

1. Introduction

The oil and gas sector are pivotal to the Nigerian Economy. However, over the past few years, the sector has witnessed a nosedive in commitment of employees and this can be attributed to: insecurity, lack of proper job design, boredom due to strerotyped way of performing tasks, inadequate renumerations; stress, unstable work-life balance, frequent strike actions and unethical practices (Ojo & Jonah, 2021; Uju & Tantua, 2021). Moreso, the manisfestations of inadequate employee commitment includes decreased job satisfaction (Vandenberg & Lance 1992); decreased job performance (Mathieu & Zajac, 1990); increased intention to search for alternative employers (Cohen, 1993) and increased absenteeism (Cohen, 1993). The context of normative commitment implies a situation where an employee perceives that he is morally obliged to remain in the organization due to the benefits he had gained from the organization. This persuades such employee to remain in the organization, as a reciprocal measure. Similarly, employees may face more ambiguity in their daily activities, however, employees who share a commitment to the organization and their collective wellbeing are more suitable to generate the social capital that facilitates organizational learning (Bergmann, Lester, De Meuse & Grahn, 2000). Some factors which had been identified in the literature as predictors of normative commitment are leadership style (Lo, 2009); organizational fairness (Ponnu and Chuah, 2010); and corporate social responsibility (Ali et al, 2010). Others include rewards and compensations (Pretheepkanth, 2011); Job security (Peene, 2009); grievance handling (Zuwena, 2014); job experience and job status (Benligiray & Sonmez, 2013). Despite the myriad of solutions put forward by various scholars in tackling the problem of inadequate normative commitment, only few studies that have considered the context of vitual team management. Besides, studies that have deployed structural equation modelling (SEM) as a statistical technique to investigate the link between virtual team management and normative commitment are scant. Thus, some gaps exist at the contextual and methodological levels. Therefore, this study seeks to fill some holes in literature by assessing virtual team management and how it relates to normative commitment of oil and gas servicing firms in South South, Nigeria.

1.1 Research hypotheses

H_{01}: There is no significant relationship between virtual communication and normative commitment.

H_{02}: There is no significant relationship between virtual teamwork and normative commitment.

2. LITERATURE REVIEW

2.1 **Theoretical framework:** The underpinning theory of this study is and the social exchange theory (Homans, 1958; Blau, 1964). According to Blau (1964), the social exchange theory is premised on the fact that relationships providing more rewards than costs will yield enduring mutual trust and attraction. Accordingly, the theory suggests that interactional processes between individuals are motivated by a desire to maximise rewards and minimise losses. In essence, the theory enhances interpersonal communication and brings about employees' commitment in oil and gas firms.

2.2 Conceptual framework: The predictor variable - virtual teamwork was dimensioned by virtual communication and virtual teamwork, which were adopted from Alibhai (2017), while the criterion variable- normative commitment, as adopted from Meyere and Herscovitch (2005) as a single factor.

2.2.1 Virtual team management: Virtual team management is the ability to organize and coordinate a group whose members who are not in the same location or time zone, and may requires deeper understanding of people, process, and technology, and recognition that trust is a more limiting factor compared with face-to-face interactions (Kwamboka, 2018).

2.2.2 Virtual communication: Virtual communication implies using both synchronous (simultaneous) and asynchronous (delayed interaction) methods such as phone, audio and video conferencing, and email (Cornell, 2010). Likewise, Berry (2011) noted that virtual communication is the process of electronically transferring information, meaning, and understanding between two or more parties.

2.2.3 Virtual teamwork: Virtual teamwork is the procedure by which groups of people work together, although they are often dispersed across space, time, and/or organizational boundaries (Lurey & Raisinghani, 2001). Likewise, Harvey et al. (2005) viewed virtual teamwork as the process whereby geographically and organizationally dispersed members work in different time zones.

2.3 EMPIRICAL REVIEW: In the context of virtual team management and normative commitment, Mitchell (2015) carried out a study on the correlation between virtual communication and employee engagement. The population of the study was 75 virtual workers from ABC designs, a form of purposive sampling. The results of the regression analysis were statistically significant, indicating that quantity of time a manager spent communicating with virtual employees and the virtual employees' perceived quality of communication positively affected employee engagement which also affects the employee performance in the organization. Moreover, Graham, Daniel and Doore (2018) studied vitual teamwork and commitments impact on project quality. 114 sophomore students at the Maine Business School were surveyed using Qualtrics online survey administration software. Partial Least Squares Structural Equation Modeling was used to estimate the model. The findings suggest that commitment in virtual teams, particularly those virtual teams that engage in short term projects, may not exert the influence observed in co-located teams involved in longer duration projects.

3. Research Methods: The study adopted positivism as the underlying philosophy, and a cross-sectional survey research design was utilised because the researcher could not control the study variables. As retrieved from the Nigerian Midstream and Downstream Petroleum Regulatory Authority (https://www.nmdpra.gov.ng), the elements of the accessible population are the **1,038** middle and top-level managers of the registered oil and gas servicing firms in the cities of Benin, Calabar, Warri, Uyo, Port Harcourt and Yenagoa. A sample size of 281 respondents was determined using the Krejcie & Morgan's (1970) formula and the simple random sampling was adopted. Primary data was collected by use of quationnaire and the hypotheses were tested by deploying the Structural Equation Modelling, at 0.05 level of significance.

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Table 1.1: Reliability Statistics

SN	CONSTRUCT	NO. OF ITEMS	CRONBACH'S ALPHA STATISTICS
1.	Virtual Communication	5	0.872
2.	Virtual Teamwork	6	0.806
3.	Normative Commitment	5	0.774

Source: Researcher's Desk, SPSS 25.0 Outputs 2023.

The instrument was subjected to test of reliability with the following Cronbach's alpha values: Virtual communication (0.872), Virtual teamwork (0.806) and Normative Commitment (0.774). This is in tandem with Nunnally and Bernstein (1994), who noted that an alpha value of 0.7 and above indicates reliability of the measured variables.

3.1 Assessement of Normality: All the items in the dataset were found to be normally distributed with the skewness in each case in the range of ± 1.0, with standard error of 0.160, and kurtosis values in the range of ± 1.0, with standard error of 0.320.

3.2 Assessement of Linearity: The evidence from the scatterplots of all the latent constructs, shows that there was indication of curvilinear relationships, thus the assumption of linearity was not violated.

Table 1.4: Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
VITUAL COMMUNICATION	Based on Mean	1.066	4	225	.374
	Based on Median	1.041	4	225	.387
	Based on Median and with adjusted df	1.041	4	214.501	.387
	Based on trimmed mean	1.060	4	225	.377
VITUAL TEAMWORK	Based on Mean	.215	4	225	.930

	Based on Median	.307	4	225	.873
	Based on Median and with adjusted df	.307	4	221.445	.873
	Based on trimmed mean	.215	4	225	.930
NORMATIVE COMMITMENT	Based on Mean	.394	4	225	.813
	Based on Median	.386	4	225	.819
	Based on Median and with adjusted df	.386	4	198.046	.819
	Based on trimmed mean	.393	4	225	.814

Source: SPSS Researcher's data (2023)

3.3 Assessement of Homogeneity of Variance: In this study, Levene's test in SPSS 25.0 was used to determine the presence of homogeneity of variance in the dataset (see Tables 1.4) using Age of Respondents as a non-metric variable on the one-way ANOVA. The results of the ANOVA and Levene's tests revealed that all of the latent variables were non-significant (i.e., $p>0.05$), thus the assumption of homogeneity of variance was not violated.

3.4 Measurement Model: The suggested goodness of fit indices provided in Hu and Bentler (1999), states that acceptable model fit is defined by the following criteria: RMSEA (≤0.6), SRMR (≤0.8), CFI (≥0.95), TLI (≥0.95), GFI (≥0.90), NFI (≥0.95) PCLOSE (≥0.5) and AGFI (≥0.90) (Byrne, 2013). Where: RMSEA = Root Mean Squared Error of Approximation, CFI = Comparative Fit Index, TLI = Turker-Lewis's index, GFI = Goodness-of-Fit-Index, AGFI = Adjusted Goodness-of-Fit-Index, SRMR = Standardized Root Mean Residual. The factor loading should be preferably above 0.7 (Byrne, 2010).

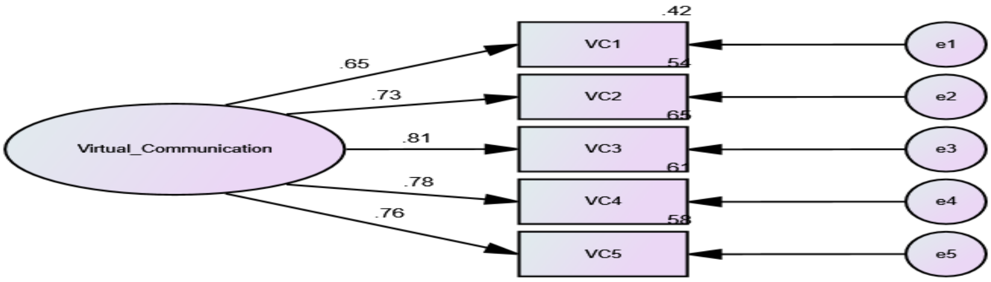

Figure 1.1: Measurement Model of Vitual Communication

Table 1.5: Measurement Model Analysis of Virtual Communication

Model	Chi-Square(df), Significance	χ^2/df	NFI	TLI	CFI	RMSEA	Variable	Factor Loading Estimates	Error VAR
Virtual Communication	(5df) =33.591,	2.399	0.961	0.956	0.976	0.48	VC1	0.65	0.42
							VC2	0.73	0.54
							VC3	0.81	0.65
							VC4	0.78	0.61
							VC5	0.76	0.58

Source: Amos 24.0 output on research data, 2023

The results of the goodness of fit indices indicated acceptable fit to the data for one-factor model (chi-square (5df) =33.591, χ^2/df=2.399, RMSEA=0.48, CFI=0.976, NFI=0.961 and TLI=0.956). Factor loading estimates revealed that five indicators were strongly related to latent factor virtual communication. The indicators VC1-VC5 had factor loadings of 0.65, 0.73, 0.79, 0.77, and 0.76 respectively and error variances of 0.42, 0.54, 0.65, 0.61, and 0.58 respectively. These parameters are consistent with the position that these are reliable indicators of the construct of virtual communication.

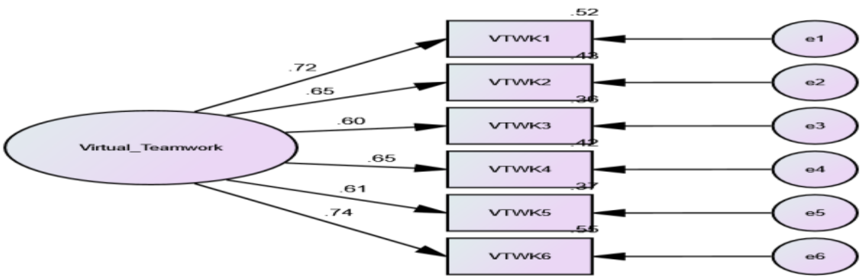

Figure 1.2: Measurement Model of Virtual Teamwork

Table 1.6: Measurement Model Analysis of Virtual Teamwork

Model	Chi-Square(df), Significance	χ^2/df	NFI	TLI	CFI	RMSEA	Variable	Factor Loading Estimates	Error VAR
Virtual Teamwork	(7df) =48.623	6.946	0.943	0.977	0.951	0.104	AFC1	0.61	0.37
							AFC2	0.56	0.31
							AFC3	0.65	0.42
							AFC4	0.61	0.37
							AFC5	0.58	0.33
							Deleted		
							Deleted		

Source: Amos 24.0 output on research data, 2023

The results of the goodness of fit indices indicated acceptable fit to the data for one-factor model (chi-square (14df) =53.515, χ^2/df=3.822, p=0.000, RMSEA=0.111, CFI=0.968, NFI=0.958 and TLI=0.952). Table 4.1.37 summarized the goodness of fit indices, the factor loading estimates and the error variances. Factor loading estimates revealed that six indicators were strongly related to latent factor -virtual teamwork. The indicators VTWK1-VTWK6 had factor loadings of 0.72, 0.65, 0.60, 0.65, 0.61, and 0.74 respectively and error variances of 0.52, 0.46, 0.26, 0.42, 0.37, and 0.55 respectively. These freely estimated parameters are consistent with the position that these are reliable indicators of the construct- virtual teamwork.

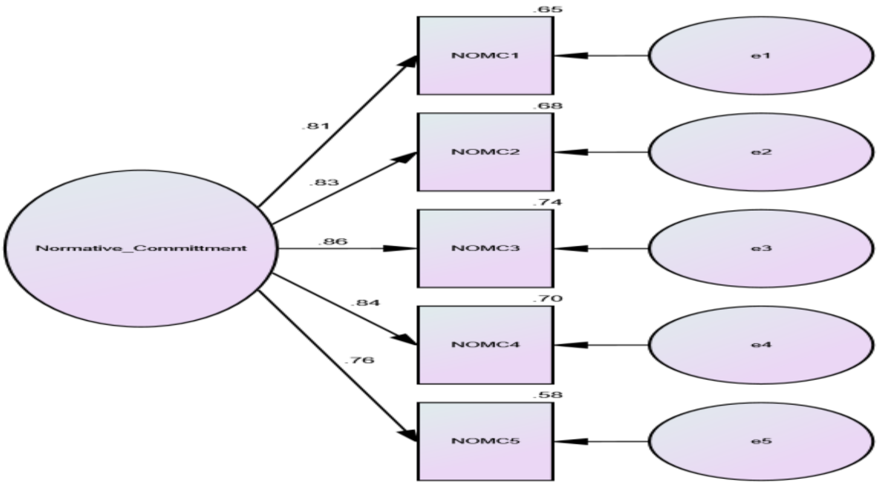

Figure 1.3: Measurement Model of Normative Commitment

Table 1.7: Measurement Model Analysis of Normative Commitment

Model	Chi-Square(df), Significance	χ^2/df	NFI	TLI	CFI	RMSEA	Variable	Factor Loading Estimates	Error VAR
Normative Commit’									
	(9df) =41.085	4.565	0.955	0.964	0.983	0.125	NOMC1	0.81	0.65
							NOMC2	0.83	0.68
							NOMC3	0.86	0.74
							NOMC4	0.84	0.70

NOMC5	0.76	0.58

Source: Amos 24.0 output on research data, 2023

The results of the goodness of fit indices indicated an acceptable fit to the data for one-factor model (chi-square (9df) =41.085, χ^2/df=4.565, p=0.000, RMSEA=0.125, CFI=0.983, NFI=0.955 and TLI=0.964). Factor loading estimates revealed that the five indicators were related to latent factor -normative commitment. The indicators NOMC1-NOMC5 had factor loadings of 0.81, 0.83, 0.86, 0.84, and 0.76 respectively and error variances of 0.65, 0.68, 0.74, 0.70, and 0.58 respectively. These parameters are consistent with the position that these are reliable indicators of the construct of normative commitment.

Table 1.8: Correlations and Average Variance Extracted

Variable	VC	VTWK	NOMC	AVE	Sq. Root of AVE
VC	**1.0**	0.725	0.606	**0.746**	**0.863**
VTWK	0.725	**1.0**	0.744	**0.662**	**0.814**
NOMC	0.606	0.744	**1.0**	**0.820**	**0.905**

Where: VC= virtual communication, VTWK= virtual teamwork, NOMC= normative commitment, AVE= average variance extracted, Sq. Root of AVE= square root of average variance extracted.

Correlation is significant at the 0.01 level (2-tailed).

Source: SPSS 25.0 and Amos 24.0 output on research data, 2023

3.4.1 Convergent Validity: The results in Tables 1.8 show that all variables have average variance extracted (AVE) values exceeding the 0.50 threshold recommended by Fornell and Larcker (1981). Therefore, with the AVE>0.5, the model has evidence of convergent validity (Fornell & Larcker, 1981).

3.4.2 Discriminant Validity: The square root of AVE of each construct be greater than its correlations with other constructs. In view of this result, the model, has evidence of discriminant validity (Fornell & Larcker, 1981).

3.5 Structural ModelFigure 1.4 Structural model (linking the hypotheses)

Table 1.9: Test of Hypotheses

S/N	Stage	Hypotheses	Standardised Estimate (Beta value) ≥ 0.7	Critical Ratio (C.R) the t-value) ≥ 1.96	P-value < 0.05	Remark	Decision
1	VC→NOMC (Hypothesis 1)	There is no significant relationship between virtual communication and normative commitment.	0.763	3.778	0.003	Positive and Significant	Not supported
2	VTWK→NOMC (Hypothesis 2)	There is no significant relationship between virtual teamwork and normative commitment.	0.742	2.452	0.000	Positive and Significant	Not supported

3.6 Discussion of Findings

The first hypothesis (Ho:1), states that there is no significant relationship between virtual communication and normative commitment. However, table 1.9 suggests that that virtual communication hascommunication has a positive and significant relationship with normative commitment of oil servicing firms in South-South Nigeria (β=0.763, C. R=3.778, p=0.003). Therefore, Ho:3 was not supported, and the alternate hypothesis is hereby accepted.

Statistically, it shows that a unit increase in virtual communication is associated with 76.3% increase in and normative commitment. Therefore, when managers ensure that major assignments to be carried out are communicated through phone calls, email and teams' data base, the organization will have high work morale. This finding agrees Mitchell (2015) who found that quantity of time a manager spent communicating with virtual employees and the virtual employees' perceived quality of communication positively affected employee engagement which also affects the employee performance in the organization.

The second hypothesis (Ho:2), states that there is no significant relationship between virtual teamwork and normative commitment. However, table 1.9 suggests that virtual teamwork has a positive and significant relationship with normative commitment of oil servicing firms in South-South Nigeria (β=0.742, C. R=2.452, p=0.000). Therefore, Ho:9 was not supported, and the alternate hypothesis is hereby accepted. This means that virtual teamwork is a good predictor of normative commitment of oil and gas servicing firms in South-South Nigeria. Statistically, it shows that a unit increase in virtual teamwork is associated with 74.2.0% increase in normative commitment. Therefore, when managers ensure that each team consists of people with complementary skills so as to improve performance and complement each other, the organisation will have employees who are loyal towards the organization as the employee's values will align to the organisational values. This finding agrees with Mitchell (2015) who found that quantity of time a manager spent communicating with virtual employees and the virtual employees' perceived quality of communication positively affected employee engagement which also affects the employee performance in the organization.

3.8 Conclusion and Recommendations: The study concludes that Management commitment to virtual communication significantly enhances normative commitment, and effective management commitment to virtual teamwork, significantly enhances normative commitment. of oil and gas servicing firms in South-South. Therefore, it is recommended that Management of oil and gas servicing firms should increase the adoption of virtual communication by disseminating data and information through virtual platforms, effectively using video and audio tools, ensuring work experiences are shared through virtual platforms, communicated through phone calls, email and teams data base, as well as networking and linking employees through virtual platforms. Also, the Managers should put in place, mechanisms to enhance virtual teamwork. This can be achieved by linking employees with their work colleagues and enhancing team trust amongst the employees, while ensuring that each team consists of people with complementary skills to improve performance.

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PROCUREMENT STRATEGIES AND PERFORMANCE OF PROJECTS

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ABSTRACT

This research examines procurement and supply strategies and the performance of projects and programs in the First Bank of Nigeria. The study aims to identify the need for proper procurement strategies, analyze the effect of strategic sourcing and development on project performance, evaluate procurement cost optimization and its relationship to project performance, and recommend procurement and supply strategies to improve project success. It adopted a meta-analysis approach to systematically synthesize and analyze the existing body of literature about the impact of procurement strategies on performance. First Bank of Nigeria Limited, the leading bank in West Africa, is undergoing a digital transformation to meet the changing needs of its 36 million customers. To ensure a seamless transition, the bank requires efficient procurement and supply management practices. The report highlights the importance of strategic sourcing and development in improving project performance. Strategic sourcing, supplier assessment, and procurement project management are found to enhance supply chain and organizational performance, resulting in cost savings, increased efficiency, and higher customer satisfaction

Keywords: Procurement management, Supply strategies, Project performance.

1. Introduction

The success or failure of project and program implementation in organisations is significantly influenced by procurement and supply management. Proper management is needed for projects and programs to be carried out, as procurement and supply management entail the process of procuring products and services from outside sources. Procurement and supply chain management inefficiencies can result in project delays, cost overruns, subpar products and services, and even project failure (Aibinu & Jagboro, 2002). The success of projects and programmes strongly depends on efficient procurement and supply management in the quickly changing business environment of today. Project results, such as cost, quality, delivery, and customer satisfaction, can be significantly impacted by procurement and supply management operations. A project or programme's overall performance can be adversely affected by ineffective procurement and supply management, which can result in delays, budget overruns, and quality problems. (Smith & Love, 2005). On the other side, efficient procurement and supply management may aid in cost-cutting, quality improvement, cooperation, and innovation-driven project results. Businesses with a focus on supply management and procurement will have an advantage over rivals in their particular markets. Additionally, such actions can boost the happiness of all stakeholders, including clients, staff, and shareholders. (Shenhar & Dvir, 2007).

Despite the rising acknowledgement of procurement and supply management's strategic role in project and programme management, many organisations continue to suffer from inefficient procurement procedures. Inadequate procurement strategy, poor supplier management, and ineffective procurement oversight are all common concerns. These difficulties can lead to project delays, cost overruns, and quality concerns, all of which can have a detrimental influence on project outcomes. Organizations must prioritise the development of strong procurement and supply management systems to overcome these difficulties. Investing in procurement and supply management personnel, using sophisticated procurement technology, and developing strong procurement governance frameworks are all part of this strategy. Furthermore, organizations must prioritize collaboration between procurement and project teams to ensure that procurement processes align with project goals and objectives.

The activities of banks require a sufficient supply of necessary materials to run smoothly. These materials range from technical hardware to office supplies which are not manufactured by these banks. Proper procurement and supply strategies put in place should lead to the smooth running of the organization and this study is necessary to ascertain its effect on the performance of First Bank plc, Nigeria.

The objectives of this study are:

i. to identify the procurement and supply needs of First Bank Nigeria
ii. to critically analyse how strategic sourcing and development affect project performance
iii. to evaluate procurement cost optimization and how it relates to project performance
iv. to recommend procurement and supply strategies that will improve the success of projects in First Bank Nigeria

2. Literature Review

Several procurement management theories can help organisations manage their procurement operations successfully. Two theories were adopted for this study: The transaction cost theory, which proposes that organisations should minimise transaction costs related to procurement, and the agency theory, another procurement management theory that focuses on the principal-agent relationship between the organisation and its suppliers.

Transaction Cost Theory

This theory was established by Williamson (1975) to explain why corporations opt to internalise some operations rather than rely entirely on market interactions to get the commodities and services they require. According to the idea, transaction costs, which include the expenses of negotiating and enforcing contracts, are a crucial element in determining whether enterprises choose to manufacture or acquire products and services. (Williamson, 2002).

According to transaction cost theory, the choice to create or purchase an item or service is based on a comparison of the transaction costs of each alternative. If the transaction costs of purchasing an item or service from a supplier are less than the transaction costs of producing it in-house, the company will opt to purchase. In contrast, if the transaction costs of producing an item or service in-house are lower than the transaction costs of purchasing it, the business will prefer to produce it. The transaction cost theory also argues that the degree of asset specialization, or the degree to which an asset is specialised and committed to a single function, influences the decision between making and purchasing.

The application of TCT to procurement and supply demonstrates that the higher the transaction costs associated with a certain procurement or supply chain activity, the more likely the activity will be conducted internally rather than outside. This is because internal transactions have lower transaction costs than external transactions (Geyskens *et al*, 2006). For example, if a project necessitates the procurement of a specialised component that is not commonly available in the market, the transaction costs involved with locating a suitable source and negotiating a price may be prohibitively expensive. To save these expenditures, the project team may opt to undertake the work internally. If the component is easily accessible in the market, the transaction costs associated with internal manufacture (e.g., tooling, training) may be greater than the transaction costs associated with the external purchase.

The agency theory

The agency theory is a theory of economic organisation that describes how conflicts of interest and information asymmetry may impact the interaction between principals (such as shareholders) and agents (such as managers). (Jensen & Meckling, 1976). According to the idea, agents' actions can be affected by their self-interests, which may clash with the interests of the principals they are intended to represent.

When managers engage agents to undertake activities on their behalf, they have difficulty aligning the agents' interests with their own, according to the agency theory. The agents are required to operate in the best interests of the principals, but they may be inclined to pursue their own, which can result in inefficiencies, disputes, and poor performance. The agency theory also indicates that the firm's ownership structure might influence the alignment of interests between principals and agents. Separation of ownership and control in publicly traded firms, in particular, can lead to agency issues since management may have different objectives than dispersed shareholders.

Here are some examples of how agency theory might be used for procurement and supply on project and programme performance:

Goal alignment: One of the most important parts of agency theory is ensuring that the agent's and principal's goals are aligned (Mahaney & Lederer, 2011). This means that, in the context of procurement and supply, the procurement department must collaborate closely with the project/program team to ensure that the goods and services bought are aligned with the project/program's goals. Failure to achieve objective alignment can result in a waste of resources and a negative influence on the project/program's performance.

Contractual arrangements: According to agency theory, it is critical to have a clear and comprehensive contract between the principal and agent (Zogning, 2022). In the context of procurement and supply, this means that the procurement department must create a clear and simple procurement contract outlining the agent's and principal's roles and expectations. This can assist in reducing the chance of misunderstandings and disagreements, which can have a detrimental influence on the project/program's performance.

Performance monitoring: Agency theory indicates that the principal should monitor the agent's performance to verify that the agent is acting in accordance with the principal's expectations (Zogning, 2022). This implies that the project/program team should monitor the procurement department's performance to verify that they are fulfilling the project/program's needs and delivering products and services on time and within budget.

Incentives: According to agency theory, incentives can be utilised to align the interests of the agent and the principal (Lisciandra, 2007). This implies that the project/program team may incentivise the procurement department to deliver items and services that match the project/program's demands while remaining within budget. Performance-based contracts or other sorts of incentives can help achieve this.

Review of Empirical Literature

Rudzki (2006) strategic sourcing is the practice of "a fact-based, rigorous process that involves substantial internal data gathering and evaluation, as well as extensive external data gathering and interactions, to select the most appropriate strategy and negotiation approach and, ultimately, the right supplier." The following empirical studies on this topic have been undertaken and will serve as the foundation for analysis.

Thawiwinyu and Laptaned (2009) evaluated the impact of strategic sourcing and electronic procurement on supply chain performance management. The questionnaire was distributed in 40 copies. The collected data was examined. According to the data, many modern firms see strategic sourcing as a feasible method for improving purchasing and firm-level performance.

Paulraj, Chen, and Flynn (2004) illustrated how strategic buying organisations may develop long-term, cooperative partnerships and communication while also being more sensitive to the demands of their suppliers. Strategic purchasing encourages communication, which is necessary for efficient supply chain integration.

Akinrata *et al*., (2020) investigated strategic alliance procurement in the construction industry, concentrating on the influence of strategic alliances on the financial performance of the Nigerian construction sector. The survey design was used in the study to collect information via questionnaires sent to construction professionals. According to the study, the primary effect of strategic alliance on the financial performance of the Nigerian construction sector is "the ability to accrue economies of scale and scope in value-added activities, as well as easy cash flow coordination."

Nkrumah *et al*. (2019) assessed the strategic sourcing process and its influence on company performance. The study relies on a sample of 80 respondents drawn from the procurement and supply chain departments of the company's several sites of operation. Data were collected using a standardised questionnaire and statistically evaluated using both descriptive and inferential approaches. Employee learning, performance, planning, and supplier relationship procedures were identified as strategic sourcing practices in the research.

Akintokumbo and Otonye (2021) evaluated the impact of supplier assessment on shipping enterprises' supply chain performance in Rivers State, Nigeria. The research used an explanatory research design with a causal inquiry. To get relevant data for analysis, both primary and secondary data collection approaches were employed. Two senior management employees from each of the shipping enterprises operating in Rivers State were chosen as respondents for the study, yielding a total of ninety (90) respondents. Pearson's Product Moment Correlation statistic was used to analyse the data. The findings demonstrated the existence of a strong and positive association between supplier assessment and the supply chain performance of Rivers State shipping enterprises.

Sobhani, Malarvizhi, Al-Mamun, and Jeyashree (2013) evaluated the strategic procurement and financial performance of Iranian manufacturing businesses. A cross-sectional explanatory study was conducted to assess procurement management practices and performance outcomes in Iranian manufacturing firms. The study's findings demonstrated a link between strategic procurement and corporate financial success.

Oyedokun *et al*., (2021) investigated procurement policy as a predictor of organisational success in Ibadan teaching hospitals. In the review, there were 158 people. Negotiation management, supplier relationship management, and procurement policy indices were revealed to have a favourable and substantial influence on organisational performance. The study concluded that procurement strategies are proactive and can improve organisational performance. Ngunyi (2014) studied Kenyan parastatals' procurement practices and performance. To collect data, 76 senior and middle-level managers at the organisations were given a self-administered questionnaire. According to the findings of the study, procurement is both a driving element in competitive strategy decisions and a substantial resource for boosting organisational performance. Muo and Omwenga (2018) sought to ascertain the influence of supplier management practices in optimising operational performance in Kenya's telecommunications service business. The supplier selection process, supplier participation practises, supplier development practises, and supplier monitoring programmes are the independent variables in this study, while the optimisation of operational performance is the dependent variable. The findings revealed that the four variables, namely the supplier selection process, supplier development programmes, supplier involvement, and supplier monitoring programmes, explained 76.2% of the change in Optimisation of Operational performance and revealed that they play a significant role in optimising operational performance.

Adeniyi (2008) stated that cost reduction begins with the presumption that current or anticipated cost levels are too high, even if cost control is effective and the organisation is performing well. This comprises attempting to ensure that costs per unit of goods or services are kept as low as possible without compromising the advantages of the intended use of such things. Adeniyi (2008) emphasised the need to use crash programs while aiming for cost reduction.

Mwangi (2021) investigated the impact of procurement cost optimisation on the performance of Kenyan manufacturing enterprises. The research concentrated on transaction cost analysis theory, the theory of constraints, and competence theory. A cross-sectional survey research approach was utilised for the investigation. The study's target audience comprised supply chain managers in charge of the procurement department in Nairobi County industrial enterprises. According to the findings of this study, there is a substantial positive linear link between procurement cost optimisation and the performance of Kenyan manufacturing enterprises.

Musau (2018) evaluated the impact of procurement cost-cutting strategies on the e-procurement performance of Kenyan state parastatals. The study included both qualitative and quantitative research approaches. This study's population included ICT and procurement managers from all 190 Kenyan state parastatals, for a total of 380 respondents. A questionnaire was used to obtain primary data. The link between the independent and dependent variables was determined using correlation analysis. It was also shown that the procurement cost reduction plan has a direct link with procurement strategy and, as a result, increases the e-procurement performance of Kenyan state parastatals.

Ellram's (2002) research focuses on strategic cost management in the supply chain from the perspective of purchasing and supply management. The purpose of this study was to examine best practices in strategic cost management in today's cutting-edge purchasing and supply management (PSM) firms. All the significant organisations studied believe they have been exceptionally effective in supplier cost control, as indicated by considerable, verifiable savings provided to the organization's bottom line.

Mwansokole and Maagi (2020) used a case study design to examine the impact of cost-cutting strategies on organisational performance. The study findings demonstrated that strategic procurement practises assist organisations in lowering all expenses involved with purchasing products, labour, or services.

3. Methodology

In this study, we adopted a meta-analysis approach to systematically synthesize and analyze the existing body of literature about the impact of procurement strategies on performance. The goal of this meta-analysis was to provide a comprehensive overview of the cumulative findings from previous research studies to draw more robust conclusions about the effectiveness of procurement strategies in improving organizational performance.

4. Main Findings

The chapter shows the findings of this research and how the data retrieved from the reviewed empirical research can be incorporated to solve the research problems that led to this research. This chapter will provide solutions to the problems faced by FirstBank related to Procurement and Supply Chain strategies in their quest to transition from brick-and-mortar to digital banking.

The Case of First Bank of Nigeria Plc.

First Bank of Nigeria Limited, founded in 1894, is the top bank in West Africa, Nigeria's number one bank brand, and the country's leading provider of financial services solutions. FirstBank is a diverse financial services conglomerate that is the largest private-sector financial services provider in Sub-Saharan Africa (excluding South Africa) (FBN, 2023). The long-awaited reform of Nigeria's financial services sector has established FirstBank as the country's most powerful financial services organisation.

FirstBank is assisting its 36 million clients in transitioning from traditional to digital banking by providing ultrafast, dependable, convenient, and secure multichannel (Switch, 2022). FirstOnline, FirstMobile, Lit App, USSD Banking, Chat Banking, Branch Banking, Agency Banking, and Self-Service Banking are some of the channels developed to achieve this as well as many other projects in progress. The results are clear: FirstBank has 19 million digital users and accounts for more than 20% of all e-banking transactions in Nigeria today. In 2021, it rated second in the Agusto & Co. Nigerian Consumer Digital Banking Satisfaction Index. Indeed, all account holders have access to real-time digital banking services at any time and from any location.

The evolution of FirstBank into a digital bank produced a need for appropriate procurement and supply management, which is now deeply embedded in Nigerian banking. Kristofik *et al*. (2012) stated that there is a growing demand for banks to engage in supply chain management as a means of disbursing financial resources across banks.

Strategic Sourcing and development

The first objective of this study is to critically analyse how Strategic Sourcing and development affect Project performance and the empirical research reviewed concluded that strategic sourcing increases supply chain performance overall performance of enterprises. These studies' conclusions may be valuable to First Bank Nigeria in its procurement efforts. According to the research, efficient procurement management, which includes strategic sourcing, supplier assessment, and procurement project management, may improve supply chain and organisational performance. This might result in cost savings, enhanced efficiency, and more customer satisfaction.

To strengthen its procurement practises, First Bank Nigeria should investigate strategic sourcing. As Paulraj *et al*. (2004) propose, this might include forming relationships with important suppliers for better communication and collaboration. First Bank Nigeria may also consider developing supplier assessment programmes like those investigated by Akintokumbo and Otonye (2021) to ensure that it is working with high-quality suppliers who can contribute to enhanced supply chain performance. Furthermore, Sobhani *et al*. (2013) indicate that excellent procurement management may lead to financial success. This might be very interesting for First Bank Nigeria, as financial success is a crucial company goal. First Bank Nigeria may be able to save money and enhance its financial performance by using good procurement management practices.

In its shift from conventional to digital banking, First Bank may employ the following procurement management methods and practices. Here are some practices to consider:

Develop a digital procurement strategy: A digital procurement plan that is linked with the entire digital banking strategy should be designed. This should contain a path for migrating from conventional to digital procurement procedures, as well as identifying key stakeholders, developing performance measures, and establishing governance structures.

Use digital procurement tools: Using digital procurement tools can help expedite the purchase process, eliminate manual labour, and boost productivity. eProcurement software, electronic catalogues, digital marketplaces, and eSourcing platforms are some of the instruments that may be used.

Place a premium on supplier collaboration: Supplier collaboration is important to the success of digital banking. Early in the process, procurement teams should interact with suppliers to build collaborative roadmaps and identify the innovation potential. Collaboration may also aid in cost reduction, quality improvement, and risk mitigation.

Emphasis on data and analytics: Data and analytics may assist in driving procurement choices as well as identifying potential for cost reductions and process improvements. Data analytics should be used by procurement teams to acquire insights into supplier performance, check compliance, and detect patterns.

Promote an innovative culture: Procurement teams should promote an innovative culture by fostering new ideas and methods. Working with suppliers to find new goods and services, establishing new procurement methods, and embracing new technology are all examples of this.

6. Develop procurement talent: It is critical to develop procurement talent to ensure that the procurement function is prepared to manage the transition to digital banking. This might include training, mentoring, and coaching, as well as hiring employees with necessary digital procurement expertise.

First Bank can achieve a seamless transition from traditional to digital banking by using these procurement management practices. This can help to increase efficiency, lower costs, and improve the customer experience.

Cost Optimization

Cost is one of the most important considerations that customers and organisations make. For any organisation to attain its goals, resources must be sacrificed. The second objective aims to evaluate procurement cost optimization and how it relates to project performance and all the research offered here looks at different areas of procurement cost optimisation and how it relates to the project or organisational success.

Studies reviewed (Mwangi, 2021; Musau 2019; Mwansokole and Maagi 2020; and Gachora *et al*., 2014) emphasise the importance of procurement cost optimisation for organisational performance and suggest that various strategies, such as supplier development efforts, e-procurement, and strategic procurement practises, can be effective in achieving cost reduction and improved performance. While the studies reviewed may not directly relate to First Bank Nigeria's operations, the conclusions can nevertheless be applied to the bank's procurement practices. First Bank Nigeria, as a financial institution, has a variety of procurement requirements, including the acquisition of equipment, software, and services, among others. As a result, using efficient procurement cost optimisation measures can assist the bank in achieving cost reductions and improving overall performance. For example, the bank may investigate the use of e-procurement technologies, which have been found to increase procurement performance while lowering costs. The bank can also invest in supplier development activities to foster strong connections with suppliers, resulting in more beneficial procurement terms and circumstances. Adopting strategic procurement practices, such as creating a cost-cutting plan, can also help the bank get more bang for its buck.

Procurement and supply management cost optimisation can be critical in assisting a bank's transition from traditional to digital banking. Here are some examples of how cost optimisation might help:

Look for cost-cutting opportunities: Procurement and supply management teams can uncover inefficiencies or overspend in the traditional procurement process and hunt for cost-cutting opportunities. Banks, for example, can save money on procurement-related expenses such as paper-based processes, manual labour, and supplier management costs by leveraging digital procurement tools such as eSourcing platforms, electronic catalogues, and digital marketplaces.

Negotiate better pricing and terms: By employing data and analytics to get insights into supplier performance, market trends, and benchmarking data, procurement teams may negotiate better pricing and terms with suppliers. Banks can negotiate better pricing and terms if they have a better awareness of supplier performance and market conditions.

Reduce waste and enhance efficiency: Cost optimisation in procurement and supply management may assist banks in reducing waste and improving procurement efficiency. Banks may remove waste, improve cycle times, and lower total procurement costs by deploying digital procurement solutions and automating manual operations.

Enable digital technology investment: By reducing procurement costs, banks may free up resources to invest in digital technologies that will aid in the transition to digital banking. Banks, for example, may invest in digital channels such as mobile and online banking and digital payment systems to improve customer experience, decrease costs, and drive revenue growth.

Reduce risk: Effective cost optimisation in procurement and supply management may assist banks in reducing risks connected with the digital banking transformation. Banks can lower the risk of supply chain interruptions and ensure the quality of products and services bought by having a better understanding of supplier performance.

Procurement and supply management cost optimisation is important to a bank's move from traditional to digital banking. Banks may execute a successful transition to digital banking while maintaining solid financial performance by finding cost-saving possibilities, negotiating better pricing and conditions, eliminating waste and enhancing efficiency, allowing investment in digital technology, and managing risk.

5. Conclusion And Recommendations

The main objective of this work is to evaluate how procurement and supply strategies put in place should lead to the smooth running of the organization and this study is necessary to ascertain its effect on the performance of projects First Bank, Nigeria, with specific objectives aimed to critically analyse how Strategic Sourcing and development affect Project performance and to evaluate procurement cost optimization and how it relates to project performance. To tackle the problem review of secondary data in the form of publications in reputable journals was used to help the researchers gather the necessary information concerning the problem and these articles were carefully selected to achieve the desired quality of data which were incorporated into the main findings of this study. The study established that Strategic sourcing and development are critical to the success of FirstBank's procurement efforts. The empirical research reviewed in this study indicates that efficient procurement management, which includes strategic sourcing, supplier assessment, and procurement project management, may improve supply chain and organizational performance, resulting in cost savings, enhanced efficiency, and more customer satisfaction. FirstBank can adopt various procurement management strategies and practices, such as developing a digital procurement strategy, adopting digital procurement tools, building strategic supplier relationships, and implementing supplier assessment programs.

Recommendations

i. The following suggestions are made based on an examination of First Bank of Nigeria Limited's procurement and supply chain management:
ii. First Bank Nigeria should develop a digital procurement strategy that is consistent with the entire digital banking strategy, including the identification of key players, the establishment of performance criteria, and the establishment of governance structures.
iii. Adopt digital procurement tools: To increase efficiency and streamline the procurement process, First Bank Nigeria could consider utilising digital procurement methods such as e-sourcing, e-auctions, and e-catalogues.
iv. Strengthen supplier ties: Strong supplier relationships may increase cooperation, communication, and performance. To guarantee that it is dealing with high-quality suppliers, First Bank Nigeria should consider instituting supplier assessment programmes.
v. Invest in staff training: Proper employee training and development may enhance procurement and supply chain management abilities, resulting in improved performance and cost savings.

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Macroeconomic determinants of Foreign Portfolio Investments: An Analysis of Causality and Volatility[1]

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Abstract

The current study was carried outto isolate and empirically investigate macroeconomic determinants of foreign portfolio investments, causation and volatility in Nigeria which consequently involves test of relevant theories. Using annual data (1986-2021) from a secondary source made available in the statistical bulletin of Central Bank of Nigeria, the research involved a time series analysis by deploying popular Autoregressive Conditional Heteroskedasticity (ARCH) augmented by Generalized Autoregressive Conditional Heteroskedasticity (GARCH) and Granger Causality test techniques. Among the findings is that exchange rate had negative coefficient on foreign portfolio investment entry but unidirectional causality is observed running from inflation to foreign portfolio inflow. However, interest rate shows no causal effects on foreign portfolio. Foreign portfolio investments causally determine gross domestic products. ARCH effects are detected. However, despite higher interest rates, foreign portfolio inflows decline in Nigeria. Conclusively, exchange rate remains a core determinant input for foreign portfolio investments. Interest rates

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and gross domestic product are major determinants of foreign portfolio inflows. For policy's sake inflation could be managed until it substantially declines to minimum level through encouragement in the production of basic domestic items through massive investments in the real sector.

Keywords: Macroeconomic Determinants, Foreign Portfolio Investments, Causality.

Introduction

It is a common knowledge that every country desires steady inflow of foreign capital of which foreign portfolio investment constitutes a significant source. International finance theory shows that FPI flows are inevitable for economies and investors diversifying risks (Garg & Dua, 2014). Many economies especially developed and developing countries (Büberkökü, 1997) for decades proceeded to double their efforts in creating decent climate guaranteeing consistent foreign portfolio inflow and to sustain. A handful of information on the determinants of foreign portfolio investments generate diverse perspectives. For instance, Ahmad *et al.* (2015) explored the Chinese economy to argue that GDP growth, market efficiency and higher earnings expectations play a vital role in attracting consistent and smooth foreign investment. Ekeocha *et al.* (2012) extensively report the usefulness of market capitalization, real exchange rate, real interest rate, real gross domestic product and trade openness in the Nigerian situation. Ogundipe *et al.* (2019) present evidence of exchange rate volatility and shocks in market capitalizations in the Nigerian stock market as core determining conditions. Notable conditional factors of inflation rate, real exchange rate, index of economic activity and the share of domestic capital market in the world stock market capitalization are Asian states recognized variables seen to be statistically significant movers of foreign portfolio investments in the region (Agarwal, 1997).

Conversely, Rai and Bhanumurthy (2004) acknowledge the role of risk, returns and the place of inflationary spirals in influencing non—resident decision to move portfolios into a distant economy. It is apparent that numerous studies have sought to discuss the real determinants of foreign portfolio and generally foreign capital inflow into distant economies. What seems to be consistent in the literatures is the complex mixture of core macroeconomic factors (Raghavan & Selvam, 2016; Tsaurai, 2022) and those fully operating in the capital markets of nations (Chakrabarti, 2001; Gupta &Ahmed, 2020) of which risk-returns and market capitalizations are largely known (La Porta *et al.,* 1997; La Porta *et al.,* 2000; La Porta *et al.,* 2008; Giofré, 2014). Latter studies seem to follow the footprints in the insightful views presented in seminal works of Grubel (1968) and almost instantly in the future pioneering contribution of Lee (1969) by acknowledging mean-variance analytical conditions. Doukas (1985) argues that under mean-variance decision criteria to invest abroad, the higher the expected returns in a given country the greater would be the proportion invested there.

Macroeconomic variables are enormous and could jointly influence major investments in the economy, especially foreign portfolio investments. The impact of these elements exerts a strong force that either causes a positive influence in the area of economic development or acts as limiting frictional force of economic recession. Nevertheless, macroeconomic variables might appear uniform but could vary in magnitude on their capacity to attract or repel foreign direct investments inflows. A lot has been written on macroeconomic variables from different authors. In the literatures what constitute macroeconomic variables are vast so also is factors that respond to their effects. For instance, studies by Gay (2008) relates effects of macroeconomic variables on stock returns in four emerging economies of Brazil, India and China. Evidence of what constitutes macroeconomic determinants of FPI across economies continues to divert from each other. For instance, Abbas *et al.* (2022) argues on the import of human capital element in the determinant of foreign direct investments. Betarelli and Resmini (2022) shows the place of local policies in driving foreign direct investments. The current paper deviates from existing conclusions on macroeconomic determinants by evaluating exchange rates, inflation and interest and their corresponding volatility effects on foreign portfolio. We create the following hypotheses to guide our investigation:

1. Exchange rate (EXR) does not cause or drive foreign portfolio investment (FPI) inflows to Nigeria, in the long- and short-run.
2. Does inflation (INF) significantly affect foreign portfolio investment (FPI) inflows to Nigeria, in the long-run and short-run.
3. Interest rate (INT) does not significantly influence foreign portfolio investment (FPI) inflows to Nigeria, in the long-run and short-run.
4. The level, state, or rate of economic growth (RGDP) does not strongly impact foreign portfolio investment (FPI) inflows to Nigeria, in the long-run and short-run.

We split the paper into sections. section 2 is literature review. section 3 provides empirical specifications and methods of data analysis. Section 4 presents results and discussions and lastly, the paper ends 5 as conclusion and recommendations.

2 **Literature Review**

2.1.1 Conceptual Framework of Foreign Portfolio Investment

According to Chen and Scott (2021) foreign portfolio investment (FPI) consists of securities and other financial assets held by investors in another country. Generally foreign portfolio investment (FPI thereafter) can be conceptualized from the perspective of investment in debts and equity instruments by non-residents into a host economy. Company equities and traded debt instruments represent represents claims on the profits and assets of target companies in recipient countries. a combination of foreign company stock purchased by the nationals of another country with the debt stocks whether of corporate organizations and the government constitutes in aggregation the FPI stock available to an economy. the decision to invest in stocks oversea is driven by the need to obtain a well- diversified portfolio given their classes of risk-return relationships. Pala, Orhan and Orgun (2015) conceptualized FPI from two constructs perspective of equities and debts. Other studies add prestigious American Depository Receipts (ADR for short) to the class of FPI constructs developed for US investors. In a more elaborate way, FPI holdings can include stocks, ADRs, GDRs, bonds, mutual funds, and exchange-traded funds. For instance, Alsayed and McGroarty (2011); Jayaraman, Shastri and Tandon (1993) incorporated the ADRs as part of FPI. ADRs are a dollar-denominated representation of ownership in a non-US company. However, and for the purpose of this study we conceptualize FPI from the standard constructs of foreign equities and debts which constitute the assets value of non-residents in foreign economy.

Simply put, foreign portfolio investment (FPI) involves holding financial assets from a country outside of the investor's own. The IMF (1993) defines foreign portfolio investment as equity and debt issuances including country funds, depository receipts, and direct purchases by foreign investors of less than 10% control. Thus, it occurs when investors purchase non-controlling shares and acquires non-controlling interests in foreign companies or buy foreign corporate or government bonds, short-term securities, or notes (Oladejo, 2016). Foreign portfolio investment is a form of investment that a foreign investor has abroad in either of bonds, stocks, or cash equivalents; and which can be managed by financial experts or directly held by the investor (The Investopedia Team, September 2021). Along with foreign direct investment (FDI), FPI is one of the common ways for investors to participate in an overseas economy, especially retail investors.

2.1.2 Macroeconomic Determinants and Foreign Portfolio Investments

Understanding the channel through which macroeconomic determinants influence foreign portfolio investments is not explicitly straightforward, but by experience both constructs appear to complement each other due to potential feedback effects. By intuition or documented empirical findings and theoretical background knowledge it is possible to observe or create and infer such relationships. To this effect few studies channel empirical efforts to that. For instance, Ibrahim (1999) prepared a causal nexus between macroeconomic determinants and foreign portfolio investments. The author isolated dynamic interactions between these two constructs in a bivariate causality test framework. Few macroeconomic variables of interest in the study largely indicate that the lagged changes in macroeconomic variables have no significant predictive ability for the movements in stock prices. The empiric further observed that money supply, exchange rates and industrial productions exhibits predictive capacity in the movement of stocks prices.

Furthermore, from the perspective of international finance theory there is a dual relationship that could be indirect. Mangal and Liu (2020) investigation reveals that macroeconomic determinants and foreign portfolio investments illustrates reasons why international investors consider investing in cross-border firms. On the other hand, foreign portfolio investments also help in balancing a gap between saving and investment across different countries such that interest rate is affected. If viewed from the perspective of Jothirajan (2018), macroeconomic determinants are equated to the transfer of wealth. However, the target beneficial effects depend on whether the observed variables of interests are moving in a direction warranting attraction capital inflow or in the opposite direction. Similarly, the OLI (Ownership, location and Internalization) paradigm developed by Dunning explains foreign portfolio investments.

Nevertheless, discerning the relationship and dynamic interaction between our two analytical constructs can be isolated from an experience and common knowledge. Doukas (1985) in reference to Miller and Whitman (1970) asserts that diversification from international investors cause such massively capital flows. Thus, the perverse movement implies that based on interest rate differentials growth in rate of interest contemporaneously leads to growth in the expected inflow of foreign portfolio investments and remains vice versa when the rate declines to the disadvantage of non-resident investors. This line of reasoning is validated in the OLI paradigm where the locational advantage of the acronym implies that better interests, dividend and capital appreciation reflects likely opportunities of reaping good rate of returns on invested capital.

2.2 Review of Past Studies

Meftah and Nassour (2019) using the vector error correction model and Granger causality conduct research to examine what factors influence foreign direct investments in Turkey. Findings indicates that in the short term no variable affected FDI however, only gross domestic product has a running causality to FDI, yet a long- term causality is found between exchange rates and inflation rates.

Vasa and Angeloska (2020) analyze the correlation and significant degree to which the examined variables are associated with each other. The economic variables cover 12 years (2007-2018). The examined variables are industrial growth, unemployment rate, employment from age 15 to 65, foreign trade balance, foreign direct investments inflows, foreign direct investments outflows, GDP growth, and the share of value-added products in the exports. Findings show there is a very weak correlation between foreign direct investments inflows and the unemployment rate.

Okafor (2012) answers the question on if domestic macroeconomic variables for foreign direct investment inflows. using empirical analysis to respond to the question addresses the role of

key domestic macroeconomic variables on foreign direct investment in Nigeria using the Ordinary Least Square (OLS) estimation technique. The result shows that real gross domestic product, interest rate, and real exchange rate are key determinants of foreign direct investment in Nigeria. The result suggests that these domestic macroeconomic variables are critical to foreign direct investments inflow. Adebayo *et al.* (2020) used ARDL combined with Dynamic Ordinary Least Square and FMOLS technique to capture the linkages between foreign direct investments inflows and its determining indicators. The findings from the ARDL long-run estimate reveal that exports and trade openness exert positive impact on FDI inflows. The findings from the FMOLS and DOLS backed ARDL results. Enu *et al.* (2013) research to find out the major macroeconomic determinants of foreign direct investment in Ghana between the periods 1980 to 2012. All the variables estimated were integrated at first order, as a result the Johansen's cointegration approach was used and the result showed that the variables were not cointegrated. The result showed that the first past year of foreign direct investment, the last two years of exchange rate and trade openness were statistically significant.

In an exploratory research Adi *et al.* (2022) explore the influence of electricity consumption, electricity price, inflation and interest rate on GDP and investments in Indonesia in the period 2001-2018. Using Structural Equation Modelling (SEM) finding from the study indicates that electricity consumption has a significant positive effect on gross domestic product and electricity price. Gross domestic product has a significant positive effect on electricity consumption but insignificant on investment and inflation. Investment has an insignificant negative effect on electricity consumption and inflation. Pinjaman and Kiong (2019) in an ASEAN countries investigation on government stability variables employed panel data analytics with the exception to government effectiveness, the remaining government stability variables that are significant show positive relationship with the inflow of capital where an increase in political stability and control of corruption lead to a higher level of foreign investment.

Varshney (2018) paper explores the determinants of foreign direct investment in service sector of India by applying multiple regression. The result of empirical analysis reveals that manufacturing FDI, GDPGR and openness are the significant determinants of foreign direct investments in service sector while external debt, exchange rate and inflation are insignificant. Study suggest that efforts should be made by government for attracting higher inflow to manufacturing sector.

Uwubanmwen and Ajao (2012) paper examines the determinants and impact of FDI in Nigeria from 1970 through 2009. The study utilizes the Vector Error Correction Model to examine this issue. Granger causality methodology was used to analyze and establish the nature of relationship between FDI and its determinants on one side and economic development on the other. empirical analysis reveals that macroeconomic variables (exchange rate, interest rate, inflation) and openness of the economy are among the major and important factors that determine the inflow of FDI into Nigeria during these periods. GDP and government size have no significant effects on FDI. It also revealed the presence of a long-run equilibrium relationship between FDI and GDP, but foreign direct investments does not have any significant effect on the growth as well as the development of Nigeria economy during this period.

Amal *et al.* (2010) estimates a panel data model of economic and institutional determinants of foreign direct investments in eight Latin American countries, within the period 1996-2008. The empirical results support the hypothesis that FDI in Latin America is positively correlated to economic stability, growth, and trade openness, and also to the improvement in the institutional and political environment. Evidence indicates that Multinational Companies are developing market and efficiency seeking strategies in the region.

Onyeiwu and Shrestha (2004) use the fixed and random effects models to explore whether.

the stylized determinants of FDI affect FDI flows to 29 African countries in conventional ways. the paper identifies the following factors as significant for FDI flows to Africa: economic growth, inflation, openness of the economy, international reserves, and natural resource availability. Conversely and contrary to conventional wisdom, political rights and infrastructures were found to be unimportant for foreign direct investments flows to Africa.

Anoshkina *et al.* (2020) analyze the differences between the influence of the FDI on the economic growth in the developed and developing countries. For the model of the gross domestic product on the foreign direct investments for the developing countries the following data are used: observations for the 11 countries during 1994-2013. Investigators conclude that the influence of the foreign direct investments on the economic growth has the positive effect in both cases.

Many studies conclude discussions on variables that influence foreign portfolio investments entry into the economy of nations. Some of the conditions are aggregated into pull and push factors (Tripathi, *et al.* 2015). Institutional perspectives have been determined (Anoshkina *et al.* 2020). Accumulated macroeconomic evidence identified factors of inflation, exchange rate and rates of inflation (Onyeiwu & Shrestha, 2004; Enu *et al.* 2013). We vastly rely on extant literature to isolate causal conditional impacts of oil gas exports, stock market performance and institutional quality but precisely of government quality expounded by Laporta *et al.*(1999a); Laporta *et al.*(1999b); Laporta *et al.* (2000); Laporta *et al.* (2002); Laporta *et al.* (2004); Djankov *et al.* (2008) interlinked.

The review of related literature shows that while a number of studies has been conducted on the determinants of foreign portfolio investments, only a few have pushed their analysis up to analysis of volatility implications of FPI and macroeconomic factors. It was only one study that attempted that. Even the so-called attempt is in combination with other foreign capital sources. There is no single study, to the best of the researcher's knowledge, that attempted a comprehensive investigation of causation and volatility effects in one study. Neither is there any other study that combined the relevant tools of causations in the long- and short-run, ARCH/GARCH volatility analysis, and the VAR with impulse response and variance decomposition analysis in one study. It will be an amazing discovery how these will fit together as one complex whole of a study.

3 Methods

The secondary data employed in the study were sourced and extracted from various issues of the Central Bank of Nigeria (CBN) Statistical Bulletins and the Organization for Economic Cooperation and Development Statistics. The data relate to foreign portfolio investment inflows (FPI) to Nigeria as a ratio of GDP, exchange rate (EXR proxied by the official Naira/Dollar exchange rate), inflation (INF) measured as the changes in composite consumer price index, interest rate (INT) proxied by the maximum average bank lending rate, and index of economic activity or performance proxied by real economic or GDP growth rate (RGDP). The data period is from 1986 through 2020, a 35-year period classified as the post-structural adjustment program era in Nigeria economic history. Thus, the study focuses on annual Nigeria data for 35 years. Our study investigates potential causation existing amid study constructs hence it is essential to implement Causal analytical study design. Statistical explanation of causality is seen in the pioneer studies of Granger (1969). We deploy Granger framework of causality to estimate likely causal influence inherent in macroeconomic variables that predicts entry of foreign portfolio investments to draw confident inferences in the analysis. This study uses causal research design which enables us to measure the effect or relationship between dependence variable and explanatory variables using time-series secondary data. The sources of data are the World Bank and Central Bank of Nigeria. The study population covers the all-time records of governance quality indicator (operationally measured as government effectiveness), Crude oil price and stock market size (operationally measured as market capitalization).

we combine the functional model relationship into multiple structural relations expressed in the following econometric equation.

$$LnFPI_t = \beta_0 + \beta_1 LnEXR_t + \beta_2 LnINF_t + \beta_3 LnINT_t + \beta_4 LnGDP_t + \mu_t \qquad (1)$$

By the equation (5) statistical expectation following theoretical or empirical *a priori* rule of thumb is that $\beta_1 < 0$ when the US dollar more than appreciates significantly than the Naira or the where the Nigerian currency depreciates against the US dollar as it's the current situation in the country. $\beta_2 < 0$ because inflation suggests high economic instability and uncertainty. Investors are expected to massively withdraw capital from the foreign market when the value of local currency weakens in an unexpected magnitude.

$\beta_3 > 0$ this expected to be positive based on international arbitrage from higher interest rates in Nigeria. $\beta_4 > 0$ implies positive *a priori* because level of productive activities in the real sector indicates positive investment prospect to foreign and local investors if we consider neoclassical model views.

On volatility or autoregressive conditional heteroscedasticity (ARCH) model describes the variance of the current error term or innovation as dependent on the actual sizes of the previous time periods' error terms; often the variance is related to the squares of the previous innovations (Wikipedia (2021). This study considers the ARCH model plausible, for the purpose identified earlier, when the error variance in a time series follows an autoregressive (AR) model; and "if an autoregressive moving average (ARMA) model is assumed for the error variance, the model is a generalized autoregressive conditional heteroskedasticity (GARCH) model". ARCH models are commonly employed in modeling financial time series that exhibit time-varying volatility and volatility clustering, i.e., periods of swings interspersed with periods of relative calm. ARCH-type models are sometimes considered to be in the family of stochastic models, although this is strictly incorrect since at time, *t,* the volatility is completely pre-determined (deterministic) given previous values." (Engel, 1992; Engle & Ng, 1993; Bollerslev, 1986; Bollerslev, Russell, &Watson, 2010).

This study utilized the ARCH models to analyze the effects of volatility in the variables and their imperatives. The models took the form expressed in Engle (1982) and as generalized as GARCH (Generalized ARCH) by Bollerslev (1986). The study complied with the requirements of providing three distinct specifications—one for the conditional mean equation, one for the conditional variance, and one for the conditional error distribution (Eviews, 2021). The study simply specified that

$$Y_t = X_t'\theta + \epsilon_t \qquad (2)$$

and $$\sigma_t^2 = \omega + \alpha\epsilon_{t-1}^2 + \beta\sigma_{t-1}^2 \qquad \textbf{(3)}$$

Where, σ_t^2 is the one-period ahead forecast variance based on past information, it is called the *conditional variance, which is* a function of three terms. The first is the constant term, ω. The second is news about volatility from the previous period, measured as the lag of the squared residual from the mean equation:$\in_{t-1}^2$ (the ARCH term). The third is last period's forecast variance: σ_{t-1}^2 (the GARCH term). The (1, 1) in GARCH (1, 1) refers to the presence of a first-order autoregressive GARCH term (the first term in parentheses) and a first order moving average ARCH term (the second term in parentheses). An ordinary ARCH model is a special case of a GARCH specification in which there are no lagged forecast variances in the conditional variance equation—*i.e.,* a GARCH (0, 1). This specification is often interpreted such that the weighted average of a long-term average is the constant term. The forecasted variance from last period is the GARCH term, while the information about volatility observed in the previous period is the ARCH term. This model is also consistent with the volatility clustering, where large changes are likely to be followed by further large changes.

4 Result and Discussions

Table 1: VEC Granger Causality/Block Exogeneity Wald Tests

Dependent variable: D(FPIR)			
Excluded	Chi-sq	Df	Prob.
D(EXR)	4.828633	1	0.0280
D(INF)	5.663148	1	0.0173
D(INT)	0.067725	1	0.7947
D(GDP)	18.15851	1	0.0000
All	30.53863	4	0.0000

The study checked whether or not causality flowed from the independent variables of EXR, INF, INT, and RGDP to the dependent FPI, in the short-run as they do in the long-run. Use was made of the VEC Granger Causality/Block Exogeneity Wald Tests. The results are summarized on Table 1. From the Table, the VEC Granger causality/block exogeneity Wald tests reveal that all the independent variables jointly Granger-cause foreign portfolio investment in the short-run. This is clear from the chi-square of 30.53 that posted a probability of 0.0000, which is far less than the default critical alpha probability of 0.10. Individually, exchange rate granger-cause FPI in the short-run (chi-sq. = 4.829, prob = 0.028) in the short-run. Inflation (INF) also granger-causes FPI in the short-run (chi-sq. = 5.663, prob = 0.017). Equally, the rate of growth of the economy (GDP) granger-causes FPI in the short-run (chi-sq. = 18.158, prob = 0.0000). These are in view of their probabilities being less than the default alpha probability. Conversely, interest rates (INT) do not granger-cause FPI (chi-sq. = 0.0677, prob = 0.795), since the attendant probability is greater than the alpha probability of 0.05. Thus, individually, EXR, INF, and RGDP cause FPI, in the short run, while INT does not. However, all the explanatory variables jointly cause FPI in the short run.

Table 2: Results of the Estimation of ARCH model relating the Variables.

Dependent Variable: ΔFPI

Method: ML ARCH - Generalized error distribution (BFGS / Marquardt steps)

Variable	Coefficient	Std. Error	z-Statistic	Prob.
ΔEXR	-0.011834	0.009790	-1.208819	0.2267
ΔINF	0.216731	0.073647	2.942846	0.0033
ΔINT	0.929868	0.235363	3.950787	0.0001
ΔGDP	-0.436409	0.221499	-1.970250	0.0488
C	-18.99265	4.843663	-3.921135	0.0001
ΔFPI (-1)	-0.183960	0.228752	-0.804189	0.4213
	Variance Equation			
C	54.47133	104.2165	0.522675	0.6012
RESID (-1)^2 (α)	-0.073284	0.051708	-1.417265	0.1564
GARCH (-1) (β)	0.572967	0.914493	0.626541	0.5310
GED Parameter	0.675773	0.266117	2.539380	0.0111

R-squared	0.340616	Mean dependent var	-0.194506
Adjusted R-squared	0.208739	Durbin-Watson stat	2.125464

The current study investigates macroeconomic determination of foreign portfolio investment, causation, volatility, and shocks. We commence our discussion from the results on causation and dynamic equilibrating relationships. While there is clear statistical confirmation of at most one cointegrating equation as produced by the Johansen the implication is that all tested determinants of foreign portfolio investment ranging from inflation, interest rates, exchange rates, to gross domestic product all have long run equilibrating relationship. This supports Ezeanyeji and Ifeako (2019) finding.

Table 3: Residual Heteroskedasticity Test: ARCH

F-statistic	0.827993	Prob. F(1,28)	0.3706
Obs*R-squared	0.861655	Prob. Chi-Square (1)	0.3533

There are clear implications in the respective signs of the coefficients. First, exchange rate has a negative coefficient indicating declining foreign portfolio. The negative result does not support Deol (2016) who found positive coefficient. This can be explained via experience in Nigerian currency. Which could be case that loss in the value of USD/NAIRA to implies that foreign investors move their investments away from an economy with weak currency as their value is bound to depreciate relative to investments in other stronger currencies. A rational investor prefers more to less as it is assumed in Modern Portfolio Theory (MPT) such that risk aversed investors would prefer higher returns as compensation for Nigerian currency depreciation and where such is speculated to be unavailable the portfolio is adjusted by moving to other regions. On the other hand, this finding partially supports Purchasing Power Parity (PPP) since the rate of Nigerian inflation has been high over time. Interest rate movements can causally predict changes in foreign portfolio investment and explain why foreign capita flights take place in developing countries. Weak currency leads to losses to foreign portfolio investments in Nigeria. This finding corresponds to Mustafa and Hamid (2021) negative coefficient on exchange rates. However, it is proper to fully understand the effect of negative exchange rate on foreign portfolio investment by joint consideration of inflation. Under PPP exchange rate endogenously relates with rate of inflation. Inflation in the finding has positive causal influence on foreign portfolio investments. Therefore, the negative effect of exchange rate is as a result of exchange rate, and this confirms PPP used in this study. While policymakers may think that inflation has positive effects on foreign portfolio investments, the *gain* if there be any is erased from negative exchange rate to maintain equilibrium at the detriment of the economy. It rather represents bad economic factors. Chishimba (2021) already established that bad economic and institutional factors from high inflation, weak exchange rates and low political stability are significant determinants of the flow of foreign portfolio investments in Sub Sahara Africa.

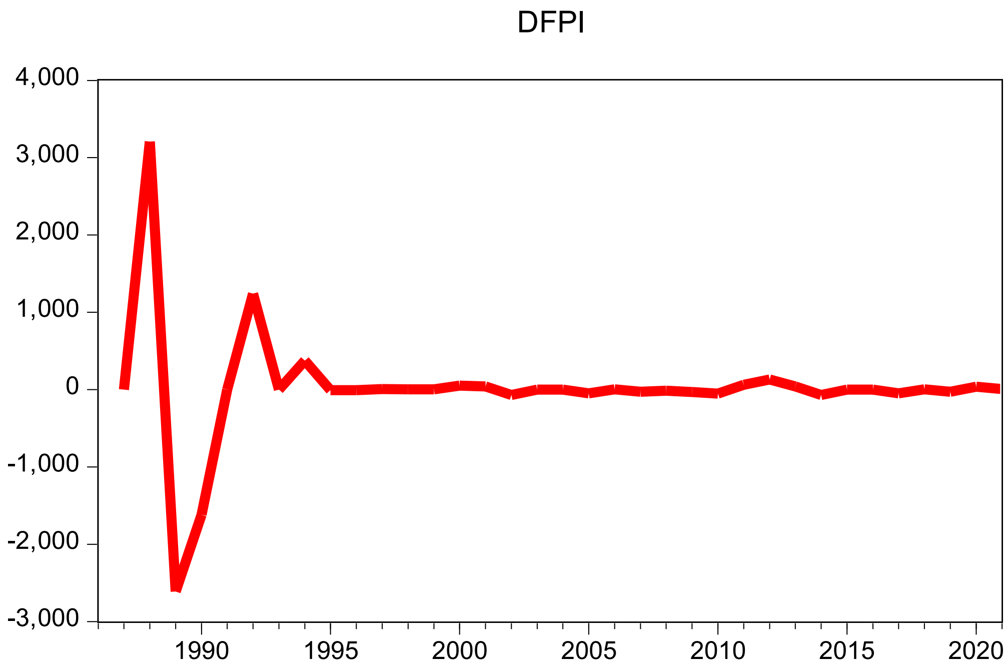

Figure 1: Modelled Volatility in Foreign Portfolio

For further information on various residuals based on pictorial representation please figure 1 above. The volatility exhibit above is conditional on time passage as explained in Engle (1982) using inflation in the UK. As observed in the figure the trend progressed from a zero mean of the residual with upward amplitude before making a return to the downward direction such that the corresponding forward and downward plots cancel each other at equal magnitude (3000). Period of high (1986) is followed by periods of high (1990); and period of low (1995) is followed by period of low (2020). This indicates nonconstant variances or unequal variances.

5 Conclusion and Recommendations

An analysis of macroeconomic determinants of foreign portfolio shows the individual and joint relevance of selected macroeconomic indicators in attracting or repelling foreign portfolio entry into Nigeria. First, we confirmed Solow Theory which makes capital as part of theoretical model of growth. Confirming Purchasing Power Parity theory using exchange rate only obscures significant analytical information unless inflation rate is jointly considered due to their simultaneous relationship. Exchange rate vastly shows that it remains a core determinant input for foreign portfolio investments. The weak volume of foreign portfolio is explained from the weakness of the Nigerian currency relative to the US dollar or cross rates. Brining the import of inflation which shows positive relationship brings confusion that can adversely influence policy. Positive coefficient of inflation shows that loss of foreign portfolio via exchange has underlying causal inflation factor. Therefore, economic instability makes the law of one price valid because price of the same commodity differs across countries. A weak country with weak exchange spells more risk to financial worth or security of value to the investor. Finding proves invalid parity theory of interest because given the higher interest rate in Nigeria, a negative relationship with foreign portfolio is evident. But rather confirms uncovered parity theory where it is argued that country with higher interest would show signs of depreciating currency that affects market value of its currency in the forex market. Gross domestic product is supported by foreign portfolio investments which theoretically appropriate.

Causal estimates confirmed mutual predictive role of inflation and foreign portfolio investments. This indicates bidirectional causal effects existing between the two variables. A unidirectional causation runs from interest rate to foreign portfolio investment. Gross domestic product causes foreign portfolio investments whereas exchange rate and foreign portfolio are neutral, hence there is no causal information. Furthermore, the graph indicated volatility clustering behaviour in the foreign portfolio. volatility in foreign portfolio investment is a natural spillover of volatility from the exchange rate of the Nigerian currency against the naira. From the finding volatility clustering observed in exchange rate is reflected in the patterns of swings seen in foreign portfolio investments which makes exchange rate a strong macroeconomic determinant of foreign portfolio investment in Nigeria.

For policy's sake consider the unexpected outcome of interest rate in the country which by default ought to provide useful reason for massive entry of foreign capital into the Nigerian capital market. Higher interest rates vis-à-vis other economies is a sign of greater returns due to international arbitrage opportunity. But the finding clearly defeats this fundamental truth. The following recommendations are hereby made.

1. It is therefore necessary to strengthen the institutional quality of Nigeria of which political is necessary to generate domestic and international confidence in the economy. La Porta et al had written extensively on the need for nations to promote their institutional quality, especially legal institution. The Nigerian case might reasonably be beyond or different from the targeted institution advised by La Porta.

2. Confidence in the Nigerian economy and long-term assurance of investment safety is necessary and are factors to encourage inflow of capital while at the same time discouraging capital withdrawal due to speculated uncertainty.
3. Building and maintain an adequate level of foreign reserves to intervene in the market when the exchange rate becomes volatile.
4. Adaptation of responsible fiscal policies to control budget deficits and reduce reliance on borrowing, which can impact the exchange rate.
5. Promotion of exports and discouraging imports through incentives and tariffs respectively, to influence trade balance and the demand for the national currency.
6. Diversification of the economy by reducing the dependence on oil exports, which improve foreign exchange earnings and reduce exchange rate volatility.
7. Enhancing the regulatory framework, transparency, and efficiency of the financial markets to attract foreign investment and boost confidence in the economy.
8. Implementation of stable and predictable monetary and fiscal policies to reduce uncertainty and increase investor confidence.
9. Reduction of bureaucracy. Streamlining regulatory processes and reducing bureaucratic obstacles will make it easier for foreign investors to enter and exit the market.

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Domestic Investment and Nigeria Output Growth; An Empirical Consideration of Causality and Shock Effects (1986-2021) By Eyong Joesph Ubi

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Abstract

The study examined the possible impacts of Domestic investment on Nigerian output growth with additional consideration to the causality and shock effects. Domestic investment was captures using Stock market performance (SMP) and Gross Capital Formation (GCF) while Nigerian Output growth was captures using Gross Domestic Product (GDP). The study uses secondary data collected from the Central Bank of Nigeria Statistical bulletin from 1986 to 2021. The aggregated data are analyzed using various statistical methods ranging from conventional Augmented-Dickey Fuller, Johansen Cointegrating procedure and Granger causality. The outcome of the analysis on relationship revealed that there is positive and significant relationship between GCFR and GDPR (α = 2.77E-06 and P-value = 0.0000), and positive and insignificant relationship between SMPR and GDPR (α = 3.72E-06 and P-value

0.0844). The causality analysis results revealed that significant causality flows from GCFR to GDPR (P-value = 0.0014). This implies that GCFR causes GDPR in Nigeria, and that significant causality does not flow from SMPR to GDPR in Nigeria ((P-value = 0.11). which means that SMPR does not cause GDPR in Nigeria during the period covered in this study. The shock analysis revealed that both SMPR and GCFR have positive and significant shock on GDPR. It was then recommended that the economy managers in Nigerian government should ensure that there is appropriate link existing between the stock market and capital formation in the real sector because increase productivity through domestic investment will aid the reduction in shocks to gross domestic product.

Keywords: Domestic Investment, Nigerian Output Growth, Causality Analysis.

Introduction

The economies of different countries around the world, including Nigeria, are assessed based on various indicators, one of which is the output levels of economic transactions. An increase in output levels indicates economic growth in these countries. Therefore, measuring the rate of growth in gross domestic output or gross national income is an accurate way to determine the progress of a particular economy. Typically, an increase in gross domestic product (GDP) is equivalent to an increase in the overall national output. Today, gross domestic output is a standard measure of a nation's economic health and describes the total value of goods and services produced in an economy. According to Investopedia (2022), Gross domestic product (GDP) is the total market value of all finished goods and services produced within a country's borders during a specific period. When gross domestic products (GDP) growth is reasonable, the country experiences increased well-being and welfare. Consequently, countries strive to increase their output levels or gross domestic products (GDP) to improve the well-being of their citizens (Fernando, 2022).

Domestic investments naturally initiate and maintain the nation's productive processes. Then, the international complements and enter into the economic scene augment the domestic efforts. There are a number of forces in the domestic economy that could mitigate, control, or intervene to boost the impact of domestic investments on the growth of the economy. few of such factors

are financial market environment and gross capital formation The performance of the capital market, for instance, may have a direct or indirect effect on the effect of domestic investments in causing real growth in the economy. It is thus, a proper thing to attempt investigating the influence of the domestic investment captured using gross capital formation and financial market in economic causation of developed countries, such as Nigeria. Given the above positions, it is easy to see that output growth should be positively influenced by the collective forces of domestic investments, It becomes the cardinal objective of this research activity to unravel the extent and direction to which these forced of domestic investment outlets and environments have caused real output growth of the Nigerian economy,, therefore, the aim of this study is to ascertain the impact of domestic investment on Nigerian output growth considering the causality and shock effects and the specific objectives are

1. To ascertain how domestic investments, represented by the gross fixed capital formation, affects the growth in real gross domestic product (GDP) of Nigeria considering causality and shock effect
2. To determine how financial market environment, represented by the capital market performance, influences the growth or real aggregate output in Nigeria considering causality and shock effect

2.1 Literature Review

2.1.1 Concept of Economic Growth or Output Growth

Economic growth is the rise or improvement in the market value of the commodities and services generated by an economy within a given fiscal year, having been adjusted for inflation. Statisticians typically gauge this expansion by looking at the real GDP (or short for gross domestic product) percent rate of growth. Simply put, a country's gross domestic product is the market value of the commodities and services it generated over a specific time period. In order to remove the inflationary distortion on the pricing of produced items, growth is typically assessed in real terms, or terms adjusted for inflation. Economic growth has both the benefits and disadvantages of GDP growth since it is calculated as the yearly percent change. The ratio of GDP to population is a typical metric used to compare the economic growth rates of different nations (or the per-capita income). The geometric yearly rate of GDP growth between the first and final year during a period of time is referred to as the "rate of economic growth." By ignoring any variations in the GDP around the trend, this growth rate indicates the trend in the average level of GDP across the time period. (Wikipedia, 2022). For the purposes of this Thesis, growth in aggregate output is used as the measure of economic growth.

According to Investopedia (2022), economic growth is defined as an increase in an economy's total output, which often manifests as a rise in national income. Gains in overall production frequently, but not always, correspond with higher average marginal productivity. Economic growth is a rise in the production of goods and services on a comparative basis between two periods of time. It can be calculated in nominal or real (inflation-adjusted) terms. Although other measures are also employed, gross national product (GNP) or gross domestic product (GDP) are the most common ways to quantify overall economic growth. Economic growth may be influenced by changes in capital goods, labor force, technology, and human capital. Using estimates like the GDP, economic growth is frequently calculated as the rise in the total market value of newly created products and services. Expansion, peak, contraction, and trough are the four stages of economic growth. (Investopedia, 2022).

2.1.2 Concept of Domestic Investment

The Cambridge Dictionary defined domestic investment as investment in the companies and products of someone's own country rather than in those of foreign countries.

Countries of the globe are increasing in their attempts to use domestic capital for the purposes of their economic growth. For instance, China depends more on domestic investment and consumption than on exports to fuel its growth, according to the Cambridge Dictionary, which defined domestic investment as investment in home enterprises and goods rather than those of foreign nations. Gross private domestic investment, which would include replacement purchases plus net additions to capital assets plus investments in inventories, is defined by Wikipedia (2018) as the physical investment used in computing the GDP when accounting for the nation's economic activity. It serves as a predictor of the future productive capacity of the given economy. Depreciation is removed from gross investment to produce net investments. Gross private domestic investment, according to Mattews & Robert (2012), "is an important component of GDP since it gives an indicator of the future productive capability of the economy." It is made up of (a) non-residential investment, which represents business investments in capital goods like factories, commercial real estate, equipment, and tools. (b) Residential investment, which consists of the costs incurred by landlords who own and rent out residential (real estate) structures and residential equipment. (c) change in inventories, which depicts the evolution of a firm's stockpiles (inventories) over a certain time period. (Ezirim et al, 2019).

The qualifying criteria in this sentence are "gross," "private," and "domestic," where "gross" denotes the sum of all capital goods produced, including replacements for depreciated capital or assets. Private and domestic imply that the investments are made by the economy's private sector and that they are for capital goods utilized in the relevant domestic economy, respectively. Gross private domestic investment is made up of these changes in private inventories of completed goods, intermediate goods, raw materials, and other inputs used by enterprises, as well as fixed capital investments of both non-residential and residential types (Wikipedia, 2019; Mattews, & Robert, 2012).

As in Oyedokun and Ajose (2018), real domestic investment is a cost incurred to raise the economy's overall capital stock. By purchasing additional capital-producing assets and assets that may provide revenue inside the domestic economy, this is accomplished. Particularly physical assets contribute to the overall capital stock. Higher economic growth rates are required for economic development than savings can offer. Bank loans and household savings make up the remaining two thirds of the financing for investment, which is provided in part by the business sector. Savings are no longer a barrier to investment demand as a result. Lower interest rates cause asset values to tend to grow, always reflecting the discounted worth of such assets, which accelerates their acquisition and investment, raising aggregate demand. Therefore, investment is more restricted by domestic interest rates than by total savings.

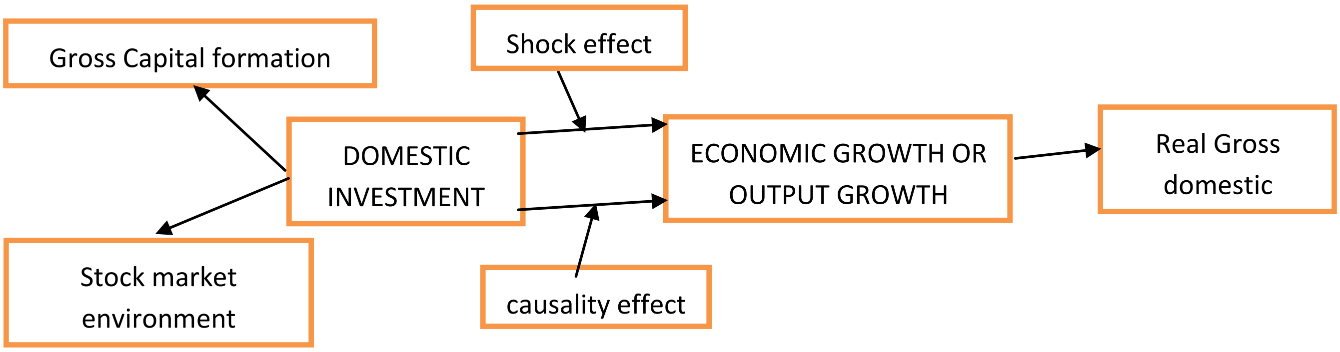

Figure 2.1 Conceptual Framework

2.2 Theoretical Framework

2.2.1 Classical theory of investment

Given the three main elements of cost, return, and expectations, company investments are a function of three main components, according to the classical theory of investment. The amount of investment spending by the business or nations would depend on the cost implications or magnitude of the required outlay of the investment venture. Businesses would select whether or not to invest based on the returns and projected returns from the investment's operations. This comes after a cost-benefit analysis has been conducted. In addition, the eventual cost of borrowing impacts the amount of the accompanying borrowing when there is a lack of cash. Due to the anticipated impact of lower firm profitability, there is a tendency for investment commitments to decrease when borrowing costs are high. The conventional method of making investment decisions is as described (Ezirim, 2019). this theory is directly linked to the current study because it explained the relationship between the intension of any business to invest and possible return from the investment which is the connections between investment for any nation and possible corresponding economic growth, this implies that one should expect that increase in domestic investment would results to corresponding increase in economic growth.

2.3 Empirical Review

Ogunjinmi's (2022) study on the impact of GDI GDP growth of Nigeria employed ARDL model to find absence of long-run relationship between domestic investment and economic growth for the 1981-2019 period. Quite in agreement, Kobilov (2020) discovered positive dual-causality between domestic investment and economic growth using the Uzbekistan data. In the study, specifically, the causal relations between FDI, GDP and DI were explored using Johansen cointegration, VECM, and Granger-causality against Uzbekistan quarterly data from 2010 - 2019. Long-run cointegrating relations were found to exist among the three variables. Positive and significant dual-causality existed between GDP and DI. GDP actually Granger-causes FDI, indicating the less importance of FDI compared to DI in Uzbekistan's output growth.

Mkadmi, Bakari and Msai, (2021) used cointegration the Johansen technique applied against Tunisian data, during the period 1995 – 2020, to uncover the existence of vital long-run equilibrium relations between domestic investment (DI), tax revenue (TAX) and economic growth (GDP). The effect of DI on GDP was positive. It was also shown that tax revenue had the potentials of enhancing the contribution of DI as a growth-stimulator of the Algerian economy.

Anwar and Elfaki (2021) employed ARDL against annual Indonesian data from 1965 through 2018, with their study underscoring that domestic investment (DI) positively affected output growth and was negative in its effect on environmental degradation. This was found in their study of relationships between energy consumption, economic growth, environmental degradation, trade openness and domestic investment in Indonesia.

Ewubare and Worlu (2020) researched on the nexus between gross domestic investment (GDI) variables and aggregate output growth (GDPG) using Nigerian data. The Least Squares (LS), Johansen cointegration, and Error Correction Model methods were utilized to analyze the annual Nigerian data. The period covered spanned from 1990 through 2017. The study documented a negative relationship subsisting between domestic GDI and GDP growth, in the long run. Bakari and Bouchoucha's (2021) study found negative effect of GDI on GDP growth of Tunisia in the long-run for the period ranging from 1976 to 2017. The explanation offered by the study was not unconnected with perceived lack of transparency and preponderance of corruption besieging the Tunisian State. Bakari (2020) in their analysis the same variables confirmed the Bakari and Bouchoucha's (2021) study on Tunisia.

3.1 Research Methodology

The current study conservatively adopts a sample of 35 years data points (1986-2001) based on the time series nature of our study. This sample size is theoretically sufficient for robust analysis. The sampling technique is convenience as the researcher subjectively picks candidates of the study sample. Secondary data, were sourced and extracted from various issues of the Central Bank of Nigeria (CBN) Statistical Bulletins and the World Bank Development Statistics. Data include real GDP and its growth, foreign direct investment ratio, domestic investment ratio or the gross capital formation ratio, the foreign portfolio investment ratio, and the capital market performance ratio. It was needful to cast the collected data into ratios or rates of change in order to reduced possible econometric or finametric problems.

Analytical methods start with the stationarity properties of the variables checked using the ADF procedure. Fourthly, the estimations of relevant equations are done using the OLS generalized linear model that followed the Newton-Raphson / Marquardt steps. Depending on the results of the estimation, the study would follow up analysis that would either cover the ARDL approach to co-integration and error correction model or the Johansen approach. the study conducts the pairwise Granger tests to determine the variables that are causally prior, causally superior or causally inferior to meet the dictates of the research bias and objectives.

Functional significant relationships are expected to subsist between real GDP (economic) growth rate (REGR or RGDP) and each of domestic investment ratio (DIR or gross capital formation ratio, GCFR and capital market performance ratio (SMPR). The functional relation can be expressed as:

RGDP = f (GCFR, SMPR) (1)

Explicitly,

$RGDP = \Omega_0 + \Omega_1 GCFR + \Omega_2 SMPR + \mathcal{З}_t$ (2)

Where, Ω_0 = Intercept or constant term

Ω_1 = Parameters or coefficients for GCFR Ω_2 = Parameters or coefficients for SMPR $\mathcal{З}_t$ = Stochastic error term

RGDP is real gross domestic product; GCFR is gross fixed capital formation; SMPR is capital market performance. RGDP is real gross domestic product; GCFR is gross fixed capital formation.

By *a priori* GCFR and SMPR are theorized to make a positive contribution to the growth of the country's total output, since it represents an addition to aggregate economic activity and financing. Thus, it is expected to have a direct or positive relation with real GDP growth rate. Thus, $\partial RGDP/\partial GCFR > 0$; or $\beta_1 > 0$. $\partial RGDP/\partial SMPR > 0$; or $\beta_1 > 0$.

However, if the arguments of the critics of GCFR and SMPR are usually insignificant and weak, therefore might not make any notable impact economy being that domestic investors do not have much capital to invest, then the relations would not be significant, and this is where their positive contributions becomes far less than their harmful activities. In that case, ∂RGDP/ GCFR, SMPR < 0; or $\beta_1 < 0$.

This goes on to suggest that GCFR and SMPR effect can be positive and significant or insignificant, depending of the magnitude of its contribution to the economy. That will suggest that ∂RGDP/ GCFR, SMPR > < 0; or β_1 > < 0

For typical dual causation hypothesis, two of the following equations apply to each of the nominated dependent and independent variables respectively. Thus, for the causal relation between RGDP and GCFR, SMPR it is expressed as follows For the causal link between RGDP and GCFR, it can be written

$$RGDP_t = \rho_1 GCFR_t + \rho_2 RGDP_{t-1} + U_6 \; ; \; \rho_1, \rho_2 > 0$$
(7)

$$GCFR_t = \sigma_1 RGDP_t + \sigma_2 GCFR_{t-1} + U_7 \; ; \; \sigma_1, \sigma_2 > 0$$
(28)

And for causal link between RGDP and SMPR, it can be written

$$RGDP_t = \rho_1 SMPR_t + \rho_2 RGDP_{t-1} + U_6 \; ; \; \rho_1, \rho_2 > 0 \quad (9)$$

$$GCFR_t = \sigma_1 RGDP_t + \sigma_2 CMPR_{t-1} + U_7 \; ; \; \sigma_1, \sigma_2 > 0 \quad (10)$$

The above equations can be used to determine the causality imperatives between the dependent and independent variables, in terms of which of them is causally prior. Secondly, the study specifies the combined causality model. Thus, using the Granger modeling procedure, the study specifies a generalized causality model as follows

$$RGDP_t = \sum_{j=1}^{m} \Upsilon_j RGDP_{t-j} + \sum_{j=1}^{m} \Phi_j GCFR_{t-j} + \sum_{j=1}^{m} \S_j SMPR_{t-j} + \varepsilon_{t-j}$$

The study utilizes the Augmented Dickey-Fuller (ADF) stationarity models and estimation to test the existence or otherwise of unit roots among the variables. The ADF is based on the hypothesis of $\delta_o = 0$ against the alternative of $\delta < 1$ and is given as:

$$\Delta X_t = \beta 0 + \beta 1t + \delta 0\, Xt - 1 + \sum_{t=1}^{p} Yt\, \Delta X_{t-1}\, \varepsilon t; \; t = 1, 2 \; \ldots . T \quad (2.21)$$

swhere ΔX_t is the first difference operator, β_0 denotes the inclusion of an intercept, X_{t-1} is the lag of the dependent variable while ΔX_{t-1} is the difference of the lagged dependent variable, Y_t is a vector of the independent variable and t a time trend, ε_t is the error term and p is the optimal lag lenght. The ADF incorporates lagged values of the dependent variable in the regression model to ensure that the error term (u_t) is not autocorrelated. This also ensures that u_t is a white noise process. The Akaike Information Criteria is used to select the maximum lag length.

The rule is such that if all the variables are integrated at level data, i.e., at order zero, then it is taken that the resultant OLS results are reliable and can be interpreted as if they are causal. This will surely augment the results of the generalized linear model or the regression model. If they are all at order 1, then cointegration and error correction manipulations would be indicated. Such cointegration tests would include the Johansen test. But if they are integrated at different order then such manipulation as the ARDL or VAR is used. Since we are not sure of the order of the variables, we assume that they have different order and thus specify the ARDL model a below:

4.1 Result and Discussion

4.1.1 Result of Unit Root test (ADF)

Table 1: Unit root test (ADF)

Variable	Level t-stat	Level Probability	1st Diff t-stat	1st Diff Probability	Inference
GCFR	-1.477809	0.5318	-5.786596	0.0000	I (1)
SMPR	-2.573305	0.1088	-5.556095	0.0001	I (1)
GDPR	-1.822146	0.3640	-1.967286	0.0483	I (1)

In all cases since the observed probability is far lower than the default probability of 0.10, the study rejects the null hypothesis of ‘no stationarity at first-difference. Rejecting the null hypothesis automatically translates to accepting the alternative that says, the variable, SMPR, GDP, GCFR are all stationary at first-difference.

Table 2: Johansen test

Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

Hypothesized		Max-Eigen	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.623152	84.75196	69.81889	0.0020
At most 1 *	0.602190	54.49865	47.85613	0.0105
At most 2	0.433719	25.92342	29.79707	0.1310
At most 3	0.230857	8.294782	15.49471	0.4344
At most 4	0.005083	0.157965	3.841466	0.6910

The current study analyzes domestic and foreign investments vis-à-vis the output of Nigeria. The findings are insightful. From the ADF univariate test on each variable the estimation and by the non-acceptance of the null of unit root influence the acceptance of the alternative hypothesis suggesting absence of unit roots in the series. All the variables are stationary after first differencing or integrated uniformly at order one I(1). The serial integration suggests the application of Johansen system of cointegration methods to detect potential long run relationship. The trace statistics in the none cointegration and at most one cointegrating equation are largely greater than corresponding critical values whereas the Eigen statistics are lower. Based on the trace statistic confirmed (table 3 column 1 panel A) by the *Max*-eigen statistics, both statistical parameters support at most one cointegrating equation but beyond which the trace statistic coefficient fell below the critical value estimates as hypothesized, thus cointegrating equation did not extend beyond a maximum of one cointegrating equation. The Cholesky IRF (Impulseresponse function) indicates shocking response of gross domestic product to changes to self. We find other variables according to Cholesky ordering to be neutral shocks.

4.1.2 Relationship between Domestic investment and Output Growth

Analysis in this sub-section can be christened the domestic investment ‘effect’. In model (2), growth in real output (GDPR) is postulated to be a positive function of GCFR and SMPR. This model expresses the domestic investment – output relations, under the controls of the capital market environment represented by the SMPR. Note that domestic investment is strictly represented by the GCFR; but is said to arise within the capital market environment. This justifies the inclusion of SMPR in the model. Using the GLM estimation tool, the study examined the attendant domestic investment – output relations. Estimation results of the model is depicted in Table 3. From the summarized results, GCFR posted a beta coefficient of 2.77E-

06 and standard error of 4.86E-07. These gave rise to z-stat of 5.695, which recorded a probability of 0.0000. The observed z-stat probability is less than the critical alpha probability of 0.05. This suggests a rejection of a null hypothesis than GCFR, in the midst of controlling interaction of the capital market environment, does not relate strongly with growth in aggregate output of Nigeria. The observed relation is found to be positive and thus, upholds the *a priori expectation* that was expressed in part 3.

Table 3

Variable	Coefficient	Std. Error	z -Statistic	Prob.
C	-3.48 E-05	7.84 E-06	- 4.441833	0.0000
GCFR	2.77E-06	4.86E-07	5.695610	0.0000
SMPR	3.72E-06	2.16E-06	1.725567	0.0844

Estimation of Model (2.4) – GDP = f (GCFR, SMPR)

Source: Estimation results from Eviews 10 Software

A critical look at the SMPR controlling variable, indicates that SMPR posted a beta coefficient of 3.72E-06 and standard error of 2.16E-06. These produced a z-stat of 1.725, which possessed a probability of 0.0844. The probability revealed is less than the alpha probability at 5% performance level of 0.05. Invariably, a null hypothesis proposing that SMPR, while intervening in the interaction with GCFR and GDPR, does not relate strongly with output growth in Nigeria cannot be rejected. This simply interprets that financial or capital market variables of SMPR did not strongly associate with GDPR in Nigeria during the period of analysis. The capital market performance has not significantly related with output growth in Nigeria. Noteworthy is that the observed relation is however, positive and confirms the *a priori* expectation that SMPR should ordinarily move in the same direction with GDPR.

In the case of GCFR, its relation with GDPR is inferred as strong associations existing between them. This may preempt a quick interpretation tending to possible significant causation of economic growth in Nigeria. Whatever it is, however, in their associations, investment is leading output growth; being significant statistically. However, it is too early to make final conclusion of this until causality analysis is undertaken. Invoking causality on results of the regression generalized linear model (as shown in Table 4.3) would be premature. On the other hand, that there is weak association between SMPR and GDPR indicates that capital market is not leading growth in the country as would be anticipated. Again, there is need to check out the causality implications of the variable, at least, before this conclusion can be made.

4.1.3 Causality Results

The Granger causality test results showed a bidirectional causal flow between foreign direct investments and gross domestic product. We find similar result between foreign portfolio investments and foreign direct investments. As expected, foreign portfolio investment causally supports gross domestic product. Like foreign portfolio the causality test shows same evidence where causality flows from gross fixed capital ratio to gross domestic product but when gross domestic product is examined with stock market performance ratio there is clear neutrality. However, gross fixed capital formation ratio is observed to granger cause foreign direct investment inflow into Nigeria. Moreover, the stock market performance ratio causes inflow of foreign direct investment. Stock market performance is influenced by foreign portfolio.

Table 4: Causality result

Hypothesis (in Null):	Number of obs.	Fisher's F-Stat	Probability.
GCFR not causing GDP	31	12.5843	0.0014
GDP not causing GCFR		0.21433	0.6470
SMPR not causing GDP	31	2.72408	0.1100
GDP not causing SMPR		0.01935	0.8904

Our statistical estimations and corresponding analysis yielded significant information about the causality and nexus of the constructs in the research so far. These have theoretical and economic meaning in diverse ways. Beginning with Johansen co-integration framework the estimations shows that there is at most one cointegrating equations on causality, and shocks between foreign and domestic investments and Nigeria's output growth. Antwi and Zhao (2013) had in the past reported similar findings in the study of Ghana economy. Also, the pair-wise granger causality finding generated great results.

For possible causal relations between GCFR and GDPR, in row 2 of Table 4, GCFR is revealed to have an F-stat of 12.58 with probability of 0.0014. Observed probability is less than the default probability of 0.10. Thus, the suggestion is a rejection of non-causality hypothesis that GCFR does not cause GDPR. The study, therefore, asserts that significant causality flows from GCFR to GDPR. This implies that GCFR causes GDPR in Nigeria. It is only proper to agree that domestic investments will boost output growth. This is also in agreement with theory of investments. On the other hand, the same conclusion cannot be reached concerning the flow of causality from GDPR to GCFR in row 3. The results (F-stat = 0.214; prob = 0.0647) cannot provide sufficient evidence to allow the study to reject the null hypothesis no significant causality. This if in view of the fact that the observed probability is less than the default probability of 0.10. Thus, GDPR does not Granger-cause GCFR. This is, equally, another case of uni-directional causation; where domestic investment (DI) leads and causes real growth, while growth simply follows DI or GCFR. Growth does not significantly attract GCFR, domestically.

Results of Causality tests between SMPR and GDPR is posted on the 4th row of Table 3. From the Table 3, SMPR is revealed to have an F-stat of 2.724 with probability of 0.11. Observed probability is greater than the default probability of 0.10. Thus, the suggestion is a non-rejection of non-causality hypothesis that SMPR does not cause GDPR. The study, therefore, asserts that significant causality does not flows from SMPR to GDPR in Nigeria. In other words, SMPR does not cause GDPR in Nigeria during the period covered in this study. It is only proper to worry about this grave condition where the financial market that ought to operate in such ways as to boost output growth fails to do. This is not in agreement with theory of capital markets and investments. Similarly, the same conclusion can be made concerning the flow of causality from GDPR to SMPR in row 5. The results (F-stat = 0.019; prob = 0.8904) cannot provide sufficient evidence to allow the study to reject the null hypothesis of 'no significant causality'. This is in view of the fact that the observed probability is greater than the default probability of 0.10. Thus, GDPR does not Granger-cause SMPR. This is case of non-directional causation; where none of the variables leads or follows the other. Neither the capital market nor economic growth significantly attracts the other in the domestic setting of Nigeria.

4.1.4 Analysis of Effects of Shocks (Unexpected Changes)

Shocks or unexpected impulses and changes in one variable, say Domestic Investment, could precipitate changes or responses in another variable, say Economic growth. To handle the effects of such sudden changes and associated responses, this study employed the impulse-response function analysis and the variance decomposition procedure. This sub-section follows the prescriptions of Davies (2021) in how impulse response and variance decomposition should be interpreted. It also follows the analytical procedure and example in Ezirim and Ezirim (2022). Following the position of Davies, impulse response functions are explained as something like "a one-standard-deviation-shock to an explanatory predictor (domestic investment) causes significant increases (or in certain cases, decreases) in the explained predicted variable (economic growth) for given (m) periods. This m-periods are "determined by the length of period for which the SE bands are above 0 or below 0 in case of decrease, after which the effect dissipates" (Davies, 2021).

Impulse response is basically, the 'response' of a particular variable given an impulse or shock in another variable. It should be noteworthy that during the first period of innovation, all the shock on Y-variable, for instance, is attributable to own shock. But as time passes, the effects of the shock continue to decays toward 0. Variance decomposition underscores how much a shock to one variable impacts the (variance of the) forecast error of a different variable. "The variance in the forecast error of all other variables is completely explained by the variable alone". This is another way of saying that "the orthogonal shocks to other variables in the system do not increase the variance of the forecast error" (Erica, 2021; Davies, 2021).

For the purposes of this work, the researcher examined the shocks to the variables and how they affect the explained variable; and also, how the affected variable responds to such shocks. How for instance, do the receiving variable, in this case GDPR (which represent economic growth), respond to the shocks or impulses from another variable, say GCFR, or SMPR 9which represent domestic investment).

The shock can even come from the variable itself. For instance, how would GDPR respond to unexpected changes or occurrences to itself? The results of the impulse response estimation are depicted in and Figure 2. The first plot or chart from the left side displays the response of GDP to shock in itself, otherwise known as own-shock. The direction, trends and magnitude of the observed shocks are captured by the curve that lies with a band of one-standard-deviation. Herein, the blue lines that lie in-between the red lines, that represent the one-standard deviation band. As is evident in the first chart, own shock was positive all through the period of innovation. The resulting curve never went toward the zero line; instead, it was above the line, all through. The resulting curve never approached the zero line; instead, it was up above the line, all through. This would be interpreted that. all through the innovation period, unexpected changes in GDPR produces a positive effect on and at the same time elicited positive response by GDPR variable. This can be re-casted to mean that (SMPR and GCPR) shocks produced a positive effect on GDPR. It had to make GDPR to elicit positive responses from its residuals. Own-shocks or unanticipated sudden increases caused GDPR to be affected positively.

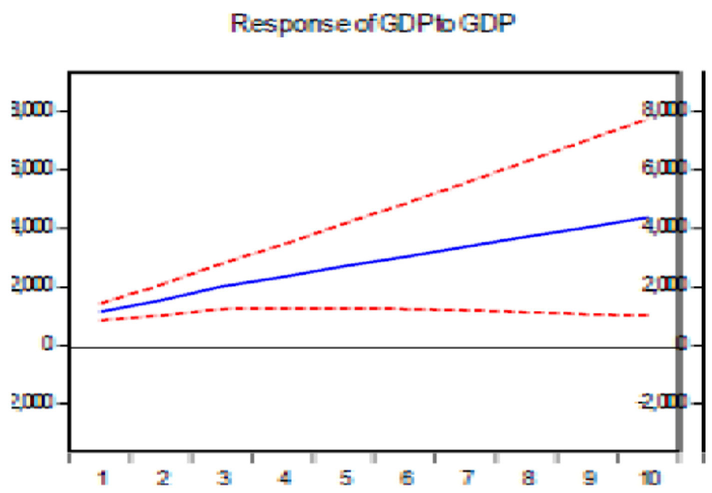

Figure 2
Shock of GDP
**on itself **

Figure 3 displays the response of GDPR to shock in GCFR. The direction, trends and magnitude of the observed shocks are, equally, captured by the curve that lies within the two bands representing a band of one-standard-deviation. Herein, the blue line or curve that lie in-between the red lines show the responses of GDPR to shocks. As is evident in the third chart of Figure 3, shocks to GCFR produced zero and negative effects, all through the period of innovation. The resulting curve approached the zero line and continue below the zero line. It remained below the line for all the periods of innovation. This would be interpreted that, all through the innovation period, unexpected changes in GCFR positively affected GDPR, and equally elicited or produced a negative response by GDPR variable. This can be re-casted to mean that GCFR shocks produced negative effect on GDPR. It had to make GDPR to elicit negative responses from its residuals. GCFR shocks or unanticipated sudden increases in GCFR, for instance, caused GDPR to reduce. To say it in more plain manner, GCFR shocks caused decline in aggregate output.

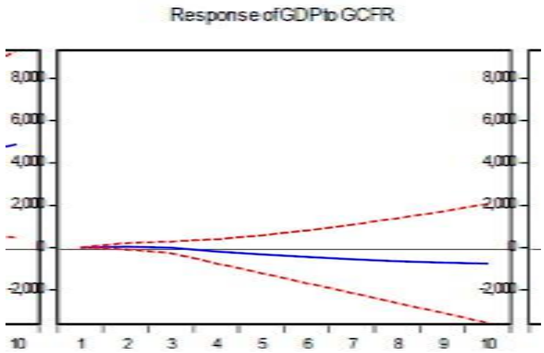

Figure 4 Shock of GCPR on GDPR

Figure 4 display response of GDPR to shocks in SMPR. The direction, trends and magnitude of the observed shocks are captured by the curve that lies within a band of one-standard-deviation. Herein, the blue lines that lie in-between the red lines, that represent the one-standard deviation band, show the responses of GDPR to the SMPR shocks. As is evident in the Figure 4, shocks to SMPR produced positive effects, all through the period of innovation. The resulting curve started from the zero line in period one; and continue on an upward trend till the end of the chosen ton periods of innovation. It remained up above the line, all through. This would be interpreted that. all through the innovation period, unexpected changes in SMPR positively affected GDPR and equally elicited or produces a positive response by GDPR variable. This can be re-casted to mean that SMPR shocks produced a positive effect on GDPR. It had to make GDPR to elicit positive responses from its residuals. SMPR-shocks or unanticipated sudden increases, caused GDPR to be affected positively. To say it in more plain manner, SMPR shocks caused growth in aggregate output.

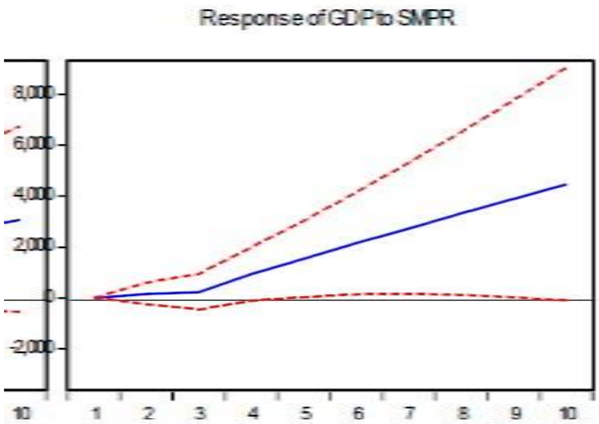

Figure 4 Shock of SMPR on GDPR 5 Conclusion and Recommendation

From the findings of this study, it was concluded that; There is a positive and insignificant relationship between stock market performance and economic growth in Nigeria. and there is positive and significant relationship between gross capital formation. This imply that stock market activities are impacting less in the real sector of the economy despite the consistent open stock market that attracts large foreign capital resources which capital formation activities are impacting more in the real sector of the economy. On the causality analysis, Gross domestic product and stock market performance do not support each other given the absence of causality between these two constructs. On the Shock analysis, the result revealed that domestic investment (stock market performance and gross capital formation) has positive shoch on real sector of the economy which means that sudden change in increase in domestic investment create increase in economic growth (GDP)

Therefore, it was recommended that the economy managers in government should ensure that there is appropriate link existing between the stock market and capital formation in the real sector. Increased productivity will aid the reduction in shocks to gross domestic product. Similarly, it expected that gross fixed capital supports rate of productivity in the economy.

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CUSTOMER RELATIONSHIP MANAGEMENT AND CLIENT SATISFACTION OF DEPOSIT MONEY BANK SERVICES IN PORT HARCOURT

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Abstract
This study empirically investigated the relationship between customer relationship management and client satisfaction of deposit money bank services in Port Harcourt. The study adopted the cross-sectional survey method. Data were collected from 196 respondents using questionnaire. All one hundred and ninety-six (196) copies of the questionnaire were administered, retrieved, and properly filled. In testing the hypotheses, Spearman's rank correlation coefficient was used to test the relationship between variables. The results show that there is a significant positive relationship between customer relationship management and satisfaction of deposit money banks services in Port Harcourt. Based on this, the researcher concluded that customer focus and service quality influence customer satisfaction to a great extent. In view of the conclusion, the researcher recommended that banks should build upon these two most esteemed elements of customer relationship management to enhance customer satisfaction, which will in turn lead to repeat purchase and referral.

Keywords: Customer Relationship Management, Client Satisfaction, Deposit Money Bank.

1.0 Introduction

To gain competitive advantage in a fast-changing environment, firms must continuously adjust their business strategies to fit that environment. One important strategy is to maintain good customer relationships through customer satisfaction (Gwinner et al.., 2008; Storbacka et al., 2004). A good way to ensure customer satisfaction is to provide what customers really need and want. But customer's needs and wants change over time. For a service firm, it is critical to cope with this problem. Satisfaction reveals a person's comparative judgments resulting from a product's perceived performance (or outcome) in relation to his or her expectations. If the performance falls short of expectations, the customer is dissatisfied and disappointed. If the performance matches the expectations, the customer is satisfied. If the performance exceeds expectations, the customer is highly satisfied (Kotler, 2006). Keeping current customers satisfied is just as important as attracting new ones (if not more important) and a lot less expensive (Lamb, 2000).

Customer relationship management (CRM) has come to represent more balanced emphasis on continuing relationships rather than simply having individual transactions. The higher the rate an organization practices good customer relationship, the higher would be the rate of customer loyalty to its brands or products. Ragins and Greco (2003) noted that CRM offers organizations' several advantages and benefits. They opined that a committed customer has an emotional attachment to the seller.

The banking industry over the years has gone through various evolutions. In the early years, banking activities were characterized by seat-tight customer management and manned by poorly experienced officers, the bulk of the customers then walked into the bank and relationship was rarely solicited.

Most studies on customer relationship management focused on developed countries. Thus, on point of departure, in this study, is to extend the existing literature on customer reactions to customer relationship management to a developing country, like Nigeria, under the moderating effect of customer value creation.

Statement of the Problem

Huge financial investments, from both local and foreign investors, are imperative in the banking sector for its survival. Nevertheless, the survival of the banks depends on the returns they make from customers. Yet, client returns are based on how successfully banks manage their relationships with consumers to their satisfaction. The efforts of the banks toward satisfying their customers are being hindered by various seatbacks, which include poor infrastructures, mismanagement, poor network connection and the global financial crisis which started in 2008 and affected all economics of the world, both developed and developing economies (Goncharuk, 2012). However, the researcher posits the conceptual framework to prefer solution to the identified problems. The conceptual framework, as displayed in Figure 1.1, clearly illustrates the elements of customer relationship management that banks may use to achieve the required level of client satisfaction in terms of repeat business and referrals.

The researcher proposes that customer relationship management (CRM) is veritable strategy for banks to earn the patronage of their customers, as well as receiving free publicity from the satisfied customers, as they spread good news about the banks to their family and friends. Most banks now see customer relationship management as a competitive tool in the banking sector (Halloweu, 1996).

However, we recall that there have been numerous complaints by bank customers on the quality of satisfaction and hence poor services that deposit money banks deliver. These complaints range from poor network service which is at times occasioned by the incompetence of the technical team, difficulties in getting the attention of bank staff when the ATM operation is pitiable, poor service delivery, existence of long queues mostly induced by very few number of staff attending to customers and even where they are many, tend to display a carefree and lackadaisical attitude towards the need and aspirations of customers, expensive charges without due communication to the customers, insecurity in the use of ATM and the fact that banks do not consider it necessary to attach a relationship officer to each customers and even where they are attached, the customers are not duly informed of the necessary avenues to channel their grievances whenever they are dissatisfied.

This study, therefore, comes handy as it focuses on solving or minimizing the foregoing problems through customer relationship management for increased customer satisfaction. The dimensions of customer relationship management as used in this study are customer focus and service quality, while the measures of customer satisfaction are repeat purchase and referral.

Aim and Objectives of the study.

This research sought to pinpoint the trends in the correlations involving customer relationship management and customer satisfaction of deposit money banks in Port Harcourt. However, the objectives that guided the researchers are, to:

i. Establish a pattern for the link between customer focus and repeat business with Port Harcourt's deposit money institutions.
ii. Analyze how deposit money banks in Port Harcourt relate to their customers in terms of referrals.

Research Hypotheses

The hypotheses established based on the research objectives are as follows:

H01: There is no significant relationship between Consumer focus and repeat business of deposit money banks Port Harcourt.

H02: there is no significant relationship between Customer focus and referrals of deposit money banks in Port Harcourt.

H03: there is no correlation between service quality and repeat business of deposit money banks in Port Harcourt.

H04: there is no significant relationship between Service quality and referrals of deposit money banks in Port Harcourt.

Significance of the Study

By giving educated recommendations to relevant stakeholders and creating value to the marketing discipline where the research is being done, this study seeks to prefer a remedy for the issues that have been found. The study's findings will aid in better informing bank employees that keeping current clients is more beneficial than acquiring new ones. Thus, the recommendations of the study, if adhered to, would help banks in managing their existing customers happing, who would in turn become agents to spread favourable words about the banks.

Students, academics, and upcoming researchers will find the study's findings beneficial. Furthermore, it will encourage employers and employees and other stakeholders to appreciate the need for relationship management of customers, which will enhance the banks market share and impact positively on the attainment of the organization objectives.

LITERATURE REVIEW

Expectancy Disconfirmation Theory

The expectancy disconfirmation theory is a cognitive theory developed from series of research conducted by Richard L. Oliver in 1977. The theory posits that an individual develops expectations from a product prior to purchase and compares the product performance with his preconceived expectations, and then forms subsequent attitudes and intentions. The theory seeks to explain satisfactions as a function of expectation, perceived performance, and disconfirmation (Oliver, 1980). It argues that satisfaction is associated with the size and direction of the disconfirmation experience the customers get via comparison of perceived value relative to the level of the discrepancy (Kinci & Sirakaya, 2004).

Customer Relationship Management

Relationship marketing is a fundamental change in marketing from the conventional commercial viewpoint to forging strong connections with parties such as suppliers, customers, the media, the government, and distributors. Customer relationship management (CRM) is a broad spectrum of organizational and operational business strategy that provides overall integration of all areas of business (marketing, production, finance, personnel, etc.). It affects the customer through the integration of people, process, and technology to optimize customer satisfaction with a view of identifying, retaining and achieving organizational objectives. Dyche (2010) defines CRM as an infrastructure that allows an increase in customer value, and the correct means by which to motivate valuable customers to remain loyal.

Customer Focus

Customer focus refers to putting the customers at the heart of a business through enquiring from them what they want and how they want it. This will result in giving the customers their expectations from the business, which will make the customers to be loyal to business that will result in improved profit for the firm involved. Consumer focus is used as a marketing tactic more often in the promotion of commodities than in the promotion of services. This is since, in the case of purchase, the evidence received from customers is directed toward developing high-quality goods that will match the customer's expectations. In the service marketing mix, the services provided are not the sole factor in deciding whether the consumers' expectations are met. For instance, a customer will not deem satisfied, no matter the quality of service received if the process of rendering the service is full of errors. Thus, in marketing of service, the process of rendering the service is as important as the service being rendered since production and consumption of service cannot be separated (Chadha, 2002).

Service Quality

The ability of a product to efficiently serve the needs of consumers has been defined as quality (Beverly et al., 2002). One organizational process that businesses use to increase profitability, gain better access to the market, and increase customer happiness and loyalty is customer service. This is because of the growing competition in the market (Calif, 1987). Customer service is crucial because, according to Goofin and Price (1996), it results in higher product quality, a comparative advantage, online income, and ultimately more sales and earnings. As shown in the following figure, according to Newby and McManus (2000), providing excellent customer service depends not only on an individual's knowledge and skills but also on how the organization, from top management on down, pulls in the same direction and conveys a clear, affirmative information to the buyer.

Service quality (SQ) is defined as the difference betwixt expectations of customers and perception regarding services provided by the firms. Service quality can be clarified as how well the services are provided to the consumer’s desires. Customer satisfaction and service quality are interconnected (Shi and Su, 2007).

Customer Satisfaction

Customer satisfaction is the consequence of a customer's impression of the access to funds or relationship, where value is determined by the perceived value of the services in relation to the expense and the cost of acquiring new customers. (Hallowell, 1996; Heskett et al., 1990; Blanchard & Galloway, 1994). Customer satisfaction can be interpreted as the feeling that an individual experiences when an offered service come across to their expectations. Customer happiness, according to Kotler et al. (2000), depends on how well goods and services match or exceed consumer expectations. According to Deng et al. (2009), a service provider's capacity to provide high levels of customer satisfaction is important for product uniqueness and for building trusting relationships with clients. Mohsan et al. (2011) demonstrate that customer satisfaction plays a very critical part for their retention, but it does not guarantee repeat purchase.

Repeat Purchase

The worst likely outcome in any connection is when a customer terminates the engagement abruptly, without notifying the service provider, and then persistently and persuasively spreads a bad word-of-mouth message to numerous other potential clients over an extended period. Every relationship has the potential to end, according to Egan (2008). No business can afford to take the stance that every consumer will remain a client for life. As a result, one of the results of trying to attract and keep happy, loyal consumers is client retention. But the importance of repeat business or post-purchase sets in. In the competitive, global environment of today and the financial meltdown, the capacity to keep clients is a crucial survival strategy. According to Homburg et al. (2001:43), nearly all firms depend on repeat customers. Especially in the luxury goods industry and the financial sectors, repeat purchases have now become a crucial issue for marketers. As contrast to acquiring new clients, repeat business reduces expenses and boosts sales. Researchers from the past and the present have been interested in learning what motivates customers to make additional purchases.

In order to increase client retention, Duffy (2005) asserts that customer-focused thinking initiatives work to build customer loyalty. Many businesses are beginning to place a higher priority on keeping existing customers than finding new ones, as per De Torcy (2002). In the HEI setting, pleased clients or students are easily persuaded to enroll for another certification (specifically in the off-campus programmes where additional qualifications are automatically linked to promotions and pay increases). Keeping current consumers is quite profitable, according to Hill et al. (2006) (just as winning new customers is very costly). When a customer is typically pleased with the company and is at the end of the consumer buying process, they will typically decide to make a repeat purchase (Kotler & Armstrong, 2016).

Referral

Customer referral programs are a form of stimulated word-of-mouth that provides incentives to existing customers to bring in new customers. An important requirement for such programs is that individual purchase or service histories arc available so the firm can ascertain whether a referred customer is indeed a new rather than an existing or a former customer (Philipp, Bemd & Christophe. 2018). Referral programs have three distinctive characteristics. First, they are deliberately initiated, actively managed, and continuously controlled by the firm, which is impossible or very difficult with organic word-of-mouth activities such as spontaneous customer conversation and blogs. Second, the key idea is to use the social connections of existing customers with noncustomers to convert the latter. Third, to make this conversion happen, the firm offers the existing customer a reward for bringing in new customers.

Although leveraging the social ties of customers with noncustomers to acquire the latter is not unique to customer referral programs, the three distinctive characteristics of these programs set them apart from other forms of network-based marketing. Unlike organic word-of-mouth. the firm actively manages and monitors referral programs. Unlike most lom1s of buzz and viral marketing. the source of social influence is limited to existing customers rather than anyone who knows about the brand. Unlike multi-level marketing. existing customers are rewarded only for bringing in new customers. They do not perform any other sales function and do not generate any income as a function of subsequent sales. Consequently, referral programs do not carry the stigma of exploiting social tics for mercantile purposes as multiple level marketing docs (Biggart, 1989).

Customer Relationship Management and Customer Satisfaction

Relationship marketing is an act of ensuring that the contact betwixt a firm and its customers does not and at the point of sell. It focuses on the continuity of the relationship even after the sales had taken place. Achieving this requires certain activities like personalization of services, addition of new and or improved services, and customization of a firm's offering to suit customers with special needs. Since one of the major objectives of being in business is to make profit. Firms, these days, go all out in achieving that; and such goal would require that the firm does everything within its reach to make its customers happy.

Three options are available for a firm in achieving its desired profit. They are (a) bringing in new customers who had never used the product before, (b) encouraging existing customers to buy more of the goods, and (c) implementing plans to ensure that the existing clients would continue to use the work for a long period. The implication of the three strategies is that no firm can do without the customers, as profits are derived from the purchases made by the customers. Of course, satisfying the customers is the only guaranteed means of ensuring that they buy the product offered for sale (Hsu et al., 2015).

Thus, any firm that goes beyond what the products of its competitors offer would ordinarily earn the patronage of the consumers. Achieving this requires knowing one's customers better, as well as what to do to keep the business relationship intact. This is where customer relationship management is of essence (Lee, 2000).

Studies on CRM abound. Some Scholars view CRM as an act of establishing an enduring win-win business relationship with the customers (Berry, 1983), while some view it as the process of developing continuous cooperative and collaborative relationship with customers (Gronrous, 1990). It has also been described, defined, and conceptualized in several ways, reflecting a variety of viewpoints of different authors which include, an act, an orientation, a policy and a competitive tool (Zablah et al., 2004).

Based on the above literature, the framework as shown in Figure 1 was developed.

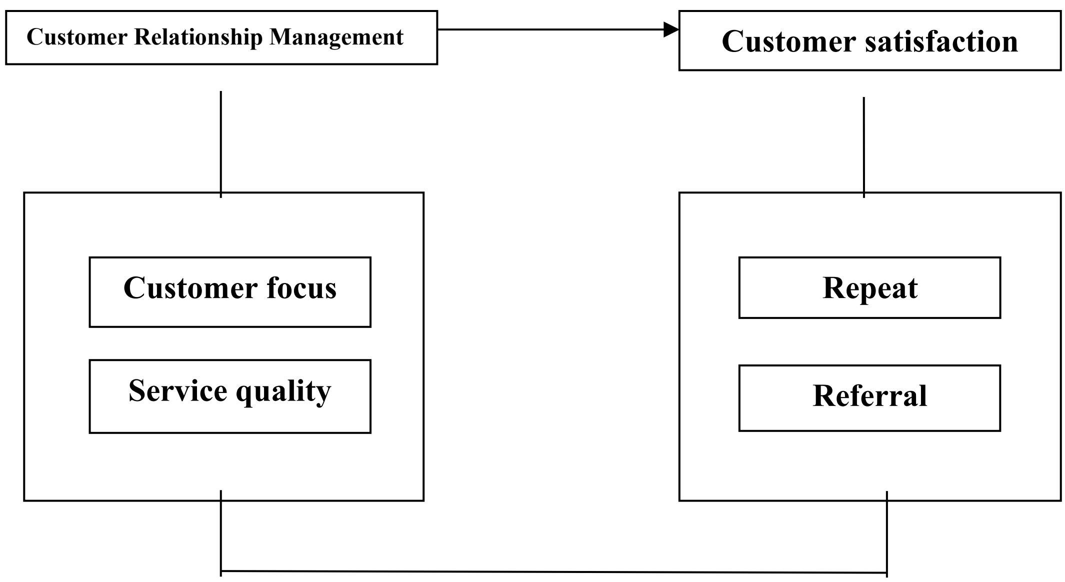

Figure 1.: Framework of Customer Relationship Management and Customer Satisfaction of Deposit Money Banks in Port Harcourt.

Source: Researcher's Review of Relevant Literature, 2023.

3.0 Methodology

The researcher used survey method of investigation in this study. Survey design was employed because of its descriptive nature and causal relations in drawing inferences from particular to general using statistical control and appropriate test statistic (Ezejelue, Ogwo & Nkamenebe, 2008).

For the current study, our population of interest includes all customers of the four (4) deposit money banks that operate in the Abuja Campus of University of Port Harcourt. The banks are UBA, Fidelity Bank, Access Bank, and Zenith Bank. The selection of the bank is for the purposes of convenience.

Due to the unwillingness of the four banks selected for study to disclose the number of their customer base, during our preliminary enquiry, the researcher used judgment method, which is a non-probability sample size determination method, in determining the sample size. In view of the foregoing, the researcher settles for 196 as the sample size of the study, at the ratio of 49 customers per bank.

For this research, secondary data provided an understanding of the context and defined the main issues addressed in the questionnaire; also, primary data were obtained from a sample of customers of the four deposit money banks that operate in the Abuja Campus of the University of Port Harcourt.

The research instrument used in this study were designed using the established guidelines of questionnaire design, given by Ezejelue et al., (2008), to maximize both the reliability and validity and quality of response. Both the independent and dependent variables were measured using a 5-point Likert scale of "strongly agree" (5), "agree" (4), "Neutral" (3), "disagree" (2) and "strongly disagree" (1).

Data analysis was done using descriptive and inferential statistics in Statistical Package for Social Sciences (SPSS), version 21. For descriptive statistics, percentage, mean, tables and figures were used. For test of hypotheses, Spearman's rank correlation coefficient was used.

4.0 Results

Test of Hypotheses

Test of Hypotheses One

Ho: Customer focus has no significant relationship with repeat purchase of deposit money banks in Port Harcourt.

H_A: Customer focus has a significant relationship with repeat purchase of deposit money banks in Port Harcourt.

Table 4.1: Result of the Relationship between Customer Focus and Repeat Purchase

Correlations

			Customer Focus	Repeat Purchase
Spearman's rho	Customer Focus	Correlation Coefficient	1.000	.926**
		Sig. (2-tailed)	.	.000
		N	196	196
	Repeat Purchase	Correlation Coefficient	.926**	1.000
		Sig. (2-tailed)	.000	.
		N	196	196

**. Correlation is significant at the 0.01 level (2-tailed).

Source: SPSS Output, 2023.

The test of hypothesis one, as shown in Table 4.1, shows that the correlation coefficient of the relationship between customer focus (x) and repeat purchase (y) is 0.926. Also, the p-value (0.000) is less than the significant level (0.01), leading to the rejection of the null hypothesis, and the acceptance of the alternate hypothesis. This result, therefore, shows that customer focus has a significant relationship with repeat purchase of deposit money banks in Port Harcourt.

Test of Hypothesis Two

Ho: Customer focus has no significant relationship with referral of deposit money banks in Port Harcourt.

H_A: Customer focus has a significant relationship with referral of deposit money banks in Port Harcourt.

Table 4.2: Result of the Relationship between Customer Focus and Referral

Correlations

			Customer Focus	Referral
Spearman's rho	Customer Focus	Correlation Coefficient	1.000	.795**
		Sig. (2-tailed)	.	.000
		N	196	196
	Referral	Correlation Coefficient	.795**	1.000
		Sig. (2-tailed)	.000	.
		N	196	196

**. Correlation is significant at the 0.01 level (2-tailed).

Source: SPSS Output, 2023.

The test of hypothesis two, as shown in Table 4.2, shows that the correlation coefficient of the relationship between customer focus (x) and referral (y) is 0.795. Also, the p-value (0.000) is less than the significant level (0.01), leading to the rejection of the null hypothesis, and the acceptance of the alternate hypothesis. This result, therefore, shows that customer focus has a significant relationship with referral of deposit money banks in Port Harcourt.

Test of Hypothesis Three

Ho: Service quality has no significant relationship with repeat purchase of deposit money banks in Port Harcourt.

H_A: Service quality has a significant relationship with repeat purchase of deposit money banks in Port Harcourt.

Table 4.3: Result of the Relationship between Service Quality and Repeat Purchase

Correlations

			Service Quality	Repeat Purchase
Spearman's rho	Service Quality	Correlation Coefficient	1.000	.953**
		Sig. (2-tailed)	.	.000
		N	196	196
	Repeat Purchase	Correlation Coefficient	.953**	1.000
		Sig. (2-tailed)	.000	.
		N	196	196

**. Correlation is significant at the 0.01 level (2-tailed).

Source: SPSS Output, 2023.

The test of hypothesis three, as shown in Table 4.3, shows that the correlation coefficient of the relationship between service quality (x) and repeat purchase (y) is 0.953. Also, the p-value (0.000) is less than the significant level (0.01), leading to the rejection of the null hypothesis, and the acceptance of the alternate hypothesis. This result, therefore, shows that service quality has a significant relationship with repeat purchase of deposit money banks in Port Harcourt.

4.4.4 Test of Hypothesis Four

Ho: Service quality has no significant relationship with referral of deposit money banks in Port Harcourt.

H_A: Service quality has a significant relationship with referral of deposit money banks in Port Harcourt.

Table 4.4: Result of the Relationship between service quality and Referral

Correlations

			Service quality	Referral
Spearman's rho	Service Quality	Correlation Coefficient	1.000	.858**
		Sig. (2-tailed)	.	.000
		N	196	196
	Referral	Correlation Coefficient	.858**	1.000
		Sig. (2-tailed)	.000	.
		N	196	196

**. Correlation is significant at the 0.01 level (2-tailed).
Source: SPSS Output, 2023.

The test of hypothesis four, as shown in Table 4.3, shows that the correlation coefficient of the relationship between service quality (x) and referral (y) is 0.858. Also, the p-value (0.000) is less than the significant level (0.01), leading to the rejection of the null hypothesis, and the acceptance of the alternate hypothesis. This result, therefore, shows that service quality has a significant relationship with referral of deposit money banks in Port Harcourt.

DISCUSSION OF FINDINGS

Customer Focus has a Significant Relationship with Repeat purchase of deposit money banks in Port Harcourt (HA_1)

The result of the test of H_{01} shows that customer focus has a significant correlation coefficient of 0.926 and $p<0.01$. Since the p-value (0.000) is less than the critical value (0.01), H_{01} was rejected and H_{A1} accepted. The acceptance of H_{A1} implies that customer focus as a significant relationship with repeat purchase. Thus, any deposit money bank that focuses its attention on its customer reaps the fruit of being patronize often by the customers. This finding is supported by Agbor (2011) that finds that adequate attention on customers enhances their patronage of the firm involved.

Customer focus has a significant relationship with referral of deposit money banks in Port Harcourt (H_{A2}).

The result of the test of H_{02} shows that customer focus has a significant correlation coefficient of 0.795 and $p<0.01$. Since the p-value (0.000) is less than the critical value (0.01), we rejected H_{02} and accepted H_{A2} which implies that customer focus has a significant relationship with referral of deposit money banks in Port Harcourt. The implication of this finding is that customer focus influences consumers' word-of-mouth, as consumers talk good of firms that give adequate attention to customers. This finding is supported by extant studies that suggest that customer focus impact positively on word-of-mouth (Anderson & Sullivan, 1993), and generate free publicity and public awareness for the firm concerned (Churchill & Surprenant, 1982).

Service quality has a significant relationship with repeat purchase of deposit money banks in Port Harcourt (H_{A3}).

The result of the test of H_{03} shows that service quality has a significant correlation coefficient (0.953, $p<0.01$. Since the p-value (0.000) is less than the critical value (0.01), we rejected H_{03} and accepted H_{A3}. The implication of this finding is that service quality influences consumers' repeat purchase, as consumers can use their buying power to reward a firm's interest in managing its relationship with its customers through service quality. This finding supports some studies that demonstrate that service quality can lead to customer repurchase behaviour (Agbor, 2011; Brady, Robertson & Cronin, 2005).

Service quality has a significant relationship with referral of deposit money banks in Port Harcourt (H_{A4})

The test of H_{04} shows that service quality has a significant correlation coefficient (0.858, $p<0.01$. Since the p-value (0.000) is less than the critical value (0.01), we rejected H_{04} and accepted H_{A4}. The implication of this finding is that service quality impacts positively on consumers' word-of-mouth, as consumers often make favourable statements about a firm with excellent service quality. This finding is supported by the finding of Cronin, Brady and Hult (2000) that consumer often persuades others to patronize a firm that has attractive service quality, and often disagree with those who talk ill of such a firm (Lee, 2000).

5.0 CONCLUSION AND RECOMMENDATIONS

Conclusion

The conclusion of this study is based on the findings from the test of hypotheses. In view of the findings, the researcher concludes that customer relationship management has significant positive relationship with customer satisfaction. Thus, effective customer relationship management has positive effect on customers' response in terms of repeat purchase and word-of-mouth.

Recommendations

The main aim of this study, as stated in section 1.3 of Chapter One, was to ascertain the nature of the relationship between customer relationship management and customer satisfaction of deposit money banks in terms of repeat purchase and referral. Thus, based on the findings and conclusion of the study, the following recommendations are made:

i. Deposit money banks should put in place appropriate customer relationship management and marketing strategies, especially customer focus and service quality to keep their customers.

ii. Deposit money banks should ensure that their staff is customer friendly. This could be attained through training and re-training of staff.

iii. Customer complaints should be handled appropriately and on time too.

iv. Deposit money banks should ensure that their guiding principles should be marketing-oriented, where customers will be treated as Kings.

vi. Deposit money banks should ensure that their customer relationship management programmes are well published so that their customers will be aware of the existence of such programmes. For this purpose, the effective use of media (electronic, print, and face-to-face) will be appropriate.

vii. Deposit money banks should develop a customer relationship management programme that will be easy and or fun for customers to participate in. this is necessary as active involvement of customers will enable banks get the needed feedbacks from customers.

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Perceived organizational Prestige and marketing performance of Alcoholic Beverage Firms in Port Harcourt

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Abstract

This study was aimed at determining the extent to which Perceived organizational Prestige can influence marketing performance of alcoholic beverage firms in Port Harcourt. Perceived organizational prestige was used as the independent variable, while brand awareness and profitability were used to measure marketing performance. A survey design was used in this study. While data for the study was collected via questionnaire distributed to 103 respondents which formed the population of the study, the study adopted Pearson product moment correlation coefficient in testing the two hypotheses formulated for the study. The findings of the study include there is a strong positive relationship between Perceived organizational Prestige and brand image of alcoholic beverage firms in Port Harcourt. The researcher concludes that Perceived organizational Prestige has a positive influence on marketing performance of alcoholic beverage firms, and therefore recommends, among others, that alcoholic beverage firms should adopt good image that emphasizes on corporate reputation to provide their organization with optimum performance.

Keywords: Perceived Organizational Prestige, Marketing Performance, Alcoholic Beverages Firm.

Introduction

The attainment of excellent business results requires the utilization of various organizational and managerial proficiencies that effectively leverage market opportunities. A viable approach involves the adoption of a market orientation strategy that effectively synchronizes the organization's capacity for responsiveness with the prevailing business conditions, as posited by Kohli and Jaworski (1990) and Narver and Slater (2000). The objective of adopting a market-oriented approach is to attain a durable competitive edge by crafting and managing an organization's identity that resonates with stakeholders and inspires their confidence. Consequently, this leads to a favourable market image, thereby establishing the organization's trustworthiness and setting it apart from its primary rivals in the perception of its interested parties. Considering the importance of strategic positioning, the development and continuous dissemination of a targeted corporate image should not be entrusted solely to market forces.

Developing strategic visions that place firms in a favourable light in the eyes of their customers is crucial to their continued success. As an example, Hax (2010) said that many companies have embraced strategies including strategic alliances, diversification, mergers, and acquisitions, suggesting that more and more business leaders are starting to think along these lines. To consolidate market, competition, and segment analysis with internal company analysis, corporate reputation plays a crucial role, as indicated by Simiyu and Makhamara (2020). Successful contemporary companies rely heavily on strategic positioning and positive brand reputation. Customers would be more likely to return if the company had a remarkable reputation of strong marketing culture that valued customers' satisfaction (Aline, Irechukwu & Henry, 2019; Ries & Trout, 2000). Alcoholic beverage firms have a lot to gain by adopting the appropriate strategies to improve their brand reputation, and this research aims to blaze that path.

The existing literature on marketing performance highlights the pressing need for a comprehensive system that integrates nonfinancial metrics with traditional financial ones. Clark (1999) proposes that instead of creating new measures, it would be more effective to optimize the utilization of the current measures for evaluating marketing performance, as there is no universally applicable tool for this purpose. Based on the existing body of literature, it can be inferred that the assessment of marketing performance is contingent upon five key dimensions, namely market share, customer satisfaction, customer loyalty/retention, brand equity, and innovation.

Marketing performance, according to Homburg (2007), is the efficacy and efficiency of an organization's marketing efforts in terms of market-related objectives such as revenues, growth, and market share. Corporate reputation as seen by management for one stakeholder group, namely consumers, and if this assessment relates to salient metrics of market success, namely market share or profit? These metrics are significant since it is thought that business reputation increases market value (Christopher & Gaudenzi, 2009).

Numerous researches have been carried on Perceived organizational Prestige (Klaavu, 2009; Taghian, D'souza & Polonsky, 2012; Chun, 2005), and also on market performance (Morgan, 2012; Gao, 2010; Beukes & Wyk 2016). However, only few researchers had done studies on the relationship between Perceived organizational Prestige and marketing performance, especially in alcoholic beverage firms in Port Harcourt. Therefore, this study comes handy in bridging the gap.

Statement of Problem

The forward-thinking businesses of today understand that their reputation is an asset that requires constant care and attention. These businesses have also understood the significance of its role to the success of marketing. Because of the increased level of scrutiny that modern businesses must operate under as well as the increased quantity of information that is in the hands of customers and other members of the public, a company's reputation has become a very valuable asset, and in certain fields, it is the single most important asset. It takes 20 years to develop a reputation, but it only takes five minutes to destroy one, as stated by Warren (2014). If you give it any thought, you'll find that your actions are altered.

Situations such as unethical business practises, dissatisfied labour forces, and environmental violations are examples of what might undermine an organization's image. According to Gunderson (2008), the consequences on a business's or industry's reputation might be unique depending on the firm or the sector. When the interests of a business's stakeholders are not served by the acts of the firm, the stakeholders of that company might become irate and hostile towards the organisation. It may also result in poor marketing performance, in which customers decide not to purchase the things that are being offered for sale by the firm. A poor reputation may even influence the dedication of your employees, which will, in turn, influence sales. According to Gunderson (2008), it is very difficult to recover from a damaged or destroyed reputation. According to Alsop (2004), the process of getting back on your feet may be laborious and time consuming. Given that every reputation and issue is unique, it is difficult to provide an accurate prediction on how long it could take.

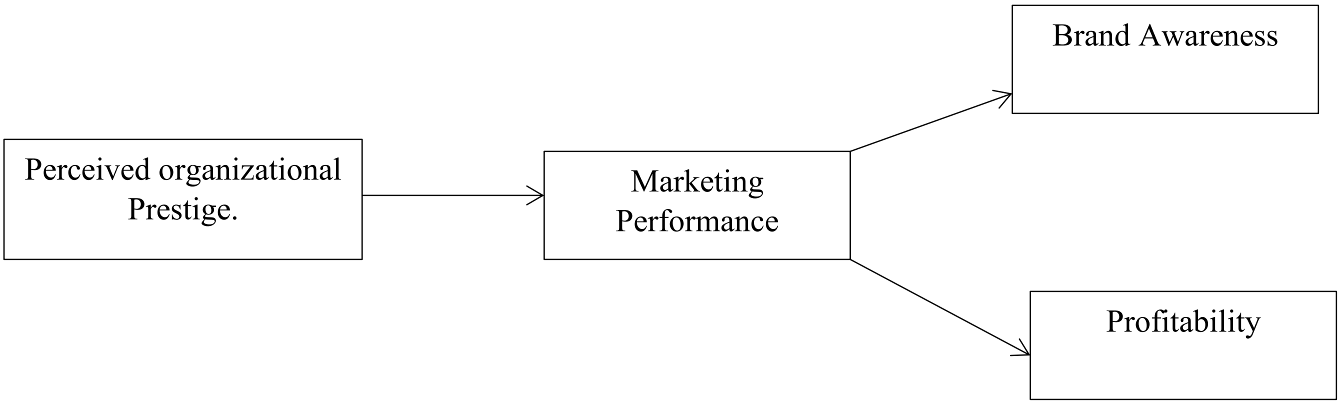

Fig.1: Conceptual Framework of the relationship between Perceived organizational Prestige and marketing performance

Source: Researchers Review of Relevant Literature, 2023.

Aim and Objectives of the Study

The main aim of this study is to determine the nature of the relationship between Perceived organizational Prestige and marketing performance of alcoholic beverage firms in Port Harcourt.

Other specific objectives include:

i. To ascertain the nature of the relationship between perceived organizational prestige and brand awareness of alcoholic beverage firms in Port Harcourt.
ii. To ascertain the nature of the relationship between perceived organizational prestige and profitability of alcoholic beverage firms in Port Harcourt.

Research Hypotheses

In line with the research objectives and questions, the following hypotheses were developed:

H_{01}: There is no significant relationship between perceived organizational prestige and brand awareness of alcoholic beverage firms in Port Harcourt.

H_{O6}: There is no significant relationship between perceived organizational prestige and profitability of alcoholic beverage firms in Port Harcourt.

Literature Review

Social Comparison Theory

Festinger (1954) formulated the Social Comparison Theory to elucidate the process by which individuals assess their opinions and abilities in the absence of objective benchmarks, through comparative analysis with others. Festinger's theory has been extended to encompass various personal attributes, as demonstrated by Wood (1989), thereby rendering it pertinent to the conceptualization of organisational reputation, beyond the scope of "opinions and abilities." According to Festinger's (1954) social comparison theory, individuals possess an innate motivation to assess themselves by engaging in comparisons of their attributes, abilities, and opinions with those of others. This comparison process occurs across various domains, including appearance, intelligence, achievement, and social status. The theory explores how individuals assess their own abilities, opinions, and beliefs by comparing themselves to others. The social comparison theory offers valuable insights into how individuals and organisations evaluate themselves and their social world through comparisons with others.

Self-Regulation Theory

Self-regulation, also known as self-control, refers to the conscious exertion of individuals to modify their own reactions, encompassing their attitudes and actions (Baumeister, Heatherton, & Tice, 1994). The act of initiating, terminating, modifying, or replacing a procedure or result to attain or fulfill a certain criterion is referred to as response modulation. The origins of the study of self-regulation can be traced back to systems or control theory, as proposed by Carver and Scheier in 1982. Self-regulation theory provides a psychological framework that explores individuals' ability to control and direct their thoughts, emotions, and behaviors towards achieving desired goals. This paper presents an overview of self-regulation theory, including key concepts such as goal setting, monitoring and feedback, self-evaluation, self-control, and motivation. The implications and applications of self-regulation theory in academic achievement, health behavior change, emotional regulation, impulse control, and productivity are also discussed. The theory emphasizes individuals' active role in managing their thoughts, emotions, and behaviors to achieve desired outcomes.

Concept of Reputation

According to Britannica's definition in 2009, the term 'reputation' refers to the general quality or character that is perceived or evaluated by the public. It also denotes the acknowledgement of certain traits or skills by other individuals. According to Bromley (1993), reputation pertains to the overall perceptions or convictions of an entity, or its assessment. Individuals and organisations possess significant and esteemed reputations. The extent and content of a reputation can differ. Individuals may acquire reputations based on a multitude of factors, including their actions, behaviours, or a combination thereof. Bromley (1993) asserts that there exist various categories of reputations, all of which are vulnerable to being manipulated.

The notion of reputation pertains to the organization-centric construct that centres on the level of esteem and dependability that the entity garners from its stakeholders. The notion is impacted by a multitude of elements, encompassing not solely the management of personnel, the resolution of ethical dilemmas, and the dedication to ecological concerns, but also the governance of the enterprise, its fiscal achievements, and its capacity for originality (Ettenson & Knowles, 2008). The status of reputations is inherently dynamic, subject to variability contingent upon the prevailing conditions (Bromley 199). According to Ettenson and Knowles (2008). The success of any enterprise is fundamentally reliant on goodwill, thus establishing a strong reputation is of utmost importance. The likelihood of individuals engaging in commercial transactions with a firm is dependent on its standing within the market (Ettenson & Knowles, 2008). Furthermore, it exerts an impact on the conduct of individuals in accordance with their convictions and perceptions (Bromley, 1993).

The Seven Elements of Corporate Reputation (Brady 2005, 12.)

1. Expertise and knowledge: A company's employees are the key to its success, therefore it's important to put their talents to good use.
2. Emotional ties: If no one cared about a company's goods or services, there wouldn't be much of a difference between competing brands.

3. Thirdly, management, vision, and desire: organisations with great vision and desire are associated with high value. In addition to having visions, businesses should actively pursue them.
4. Fourth, quality is essential, since businesses must reliably satisfy their clientele.
5. Financial credibility is the most often used metric for assessing a company's success. Firms that can demonstrate a history of healthy profitability to interested parties seem more credible.
6. Sixth, trustworthiness in the eyes of the public is boosted when businesses do good for the community.
7. To maximise profit, businesses should be ecologically responsible and take into account their carbon impact.

Perceived Organizational Prestige (PEP)

The way people feel about a company and how prestigious they think the company is may be influenced by the company itself (Smidts, Pruyn, & Van Riel, 2001). How highly employees within an organisation hold the institution in both absolute and relative terms is what Mael and Ashforth (1992) call its "perceived organisational prestige" (PEP). Perceived organisational prestige is defined by Smidts et al. (2001) as an employee's opinion of how the organisation is seen from the outside. Some academics (Dutton et al., 1994) use the terms interpreted external image and organisational prestige interchangeably, implying that they relate to the same set of ideas.

PEP is different from organisational image or reputation since it describes how workers feel outsiders see their organisation, whereas organisational image or reputation describes how outsiders really perceive an organisation. According to Dutton and Dukerich (1991), those inside and beyond an organisation evaluate the same facts through different lenses because they have access to different data. Consequently, there is a disparity between PEP and organisational image or reputation, even though the inside and outside pictures may be identical. This is because most organisations are unable to completely align the views of outsiders about an organisation with the readings of these ideas by those inside the organisation (Dutton & Dukerich, 1991). Because PEP is about how people see the organisation based on their own experiences (Smidts et al., 2001), it is often viewed as a variable at the individual level.

Employees' emotional engagement to their work, job satisfaction, and general happiness are all linked to PEP (Carmeli & Freund, 2002; Herrbach & Mignonac, 2004). Organisational citizenship acts, also known as extra-role performance behaviours (Organ, 1988; Organ & Ryan, 1995), have been shown to be a frequent behavioural result of these positive affective states (Meyer, Stanley, Herscovitch &Topolnytsky, 2002; Organ & Ryan, 1995). For instance, Dutton et al. (1994) and Cialdini et al. (1976) argue that employees are more likely to cooperate with one another and to act as good citizens of the organisation if they believe that outsiders have a favourable impression of it. When members have a poor impression of the organisation, they may feel depressed or stressed, withdraw from their responsibilities within the group, or even consider leaving.

Organisations may aim to influence prestige to get high levels of engagement and organisational citizenship behaviours because of the favourable links linked with such perceptions.

Some of the ways in which organisations might affect PEP include by achieving their goals and being more well-known in the community (Fuller et al., 2006; March & Simon, 1958). These processes, representing emblems of accomplishment, are likely to boost not just external but also internal perceptions of prestige, resulting in a higher rate of return. For instance, companies may put money into their image by growing their corporate marketing and commercials (Fuller et al, 2006; Smidts et al, 2001) and other forms of external communication.

However, due to the complexity of issues involved and the resources required, boosting goal attainment and visibility of the organisation may be hard to execute. Fortunately, there are other channels via which businesses may affect their workers' estimations of the company's esteem while expending just a moderate amount of effort and money. An organisation may boost its reputation by publicising its successes and those of its employees via internal communications such as emails, memorandums, award ceremonies, and the corporate website, as recommended by Fuller et al. (2006).

By publicising organisational and staff achievements within the framework of recruitment, training, and socialisation initiatives, businesses may raise awareness of their successes (Fuller et al., 2006).

Concept of Marketing Performance

Marketing, as defined by Ambler and Robert (2008), include all company's efforts to increase its stock price for the benefit of its shareholders. Thus, it is not the success or failure of any one department or marketing activity, but rather the total success and accomplishments of the organisation, that constitutes marketing success.

Key terms like marketing efficiency, marketing productivity, marketing performance, and marketing metrics are often used interchangeably and in disagreement with one another, as shown by a survey of the relevant literature. There has been a lot of uncertainty about the core ideas since they have been used so loosely. Weber (2002), for instance, attributes efficacy-oriented motivations to the idea of "marketing productivity," whereas Clark (2000) and Morgan et al. (2002) attribute efficiency-oriented motivations to the same term. The phrases "marketing efficiency" and "marketing effectiveness" are sometimes used interchangeably, as pointed out by other academics (e.g., Connor & Tynan, 1999). The principles are evaluated and analysed to improve clarity and accuracy of use and to clarify how the word "marketing performance" is used.

Marketing effectiveness: According to Drucker (1974), efficiency is always acting morally. In the literature on organisations, "effectiveness" is measured by how well it helps the company reach its objectives (Clark, 2000). Equally, "marketing effectiveness" is defined as "the degree to which marketing activities have contributed to the achievement of the organization's business goals" (Ambler, Kokkinaki, Puntoni, & Riley, 2001).

Both academics and business leaders have shown a keen interest in the topic of marketing's efficiency (see, for example, Appiah-Adu, Fyall, and Singh (2001), Dunn, Norburn, and Birley (1994), Ghosh, Schoch, Taylor, Kwan, and Kim (1994), Homburg, Grozdanovic, and Klarmann (2007), Kotler (1977), and Vorhies and Morgan (2003)). Most studies of marketing's efficacy, say Connor and Tynan (1999), have used one of three methods pioneered by Kotler (1977), Hooley and Lynch (1985), and Carson (1990).

Marketing efficiency: Effectiveness is the basis for success, whereas efficiency is the bare minimum for continuing to exist after success has been attained, as Drucker (1974, p.45) explains. Doing things properly is key to efficiency. Doing the correct things is what leads to effectiveness. According to Walker and Ruekert (1987), efficiency is measured by comparing the results of business programmes to the resources used to carry them out.

To be more precise, marketing efficiency is concerned with optimising the output (results) of marketing in proportion to the input (work and resources used) (Bonoma & Clark, 1988).

Many different input (such as marketing costs, knowledge and technology, man-hours), and output (such as sales, profit, services, and cash flow) metrics are used across the relevant literature.

Marketing productivity: Sevin (1965) was an early proponent of the notion of "productivity" in the field of marketing. The concept of "marketing productivity" is derived from the realm of fundamental physics, where "productivity" is defined as the "effect yielded divided by the energy expended." From a marketing viewpoint, marketing productivity is defined as "the ratio of sales or net profits (effect produced) to marketing costs (energy expended) for a specific segment of the businesses" (Sevin, 1965).

Brand Awareness

Brand awareness, one of the two components of brand knowledge, may be described as the capacity of a consumer to accurately identify and describe a brand within a certain product category, to the extent that they are motivated to make a purchase (Percy & Rossiter, 1992).Brand awareness, as defined by Gargi and Ankur (2018), pertains to the degree to which consumers possess the ability to remember or identify a certain brand. The concept of brand awareness has significant importance in the realms of consumer behavior, advertising management, brand management, and strategy creation. In a comparable context, it is characterized as the state in which a prospective customer has knowledge or recollection that a certain brand belongs to a particular product category. This notion suggests that awareness signifies the brand's influence on the consumer, as stated by Aaker (1991, 1996). The recognition or recall of a brand by consumers plays a pivotal role in the process of making purchase decisions. The act of making a purchase is contingent upon the customer possessing prior knowledge of both the product category and the specific brand associated with such category. According to Gargi and Ankur (2018), consumer awareness does not just include the ability to remember a particular brand name. Rather, it requires the capacity to recall distinctive attributes that are enough for the customer to progress with the purchase process.

Various categories of brand awareness have been discovered, namely brand recall and brand recognition. The various forms of awareness function in distinct a manner, which has significant consequences for both the consumer's decision-making process and marketing communications. It is widely thought that consumers typically include a range of three to seven brands in their consideration set when evaluating various product categories. Typically, consumers choose to select one of the three leading brands from their range of options under consideration for purchasing. The level of brand awareness serves as a significant metric for evaluating a brand's competitive performance in the market (carkmark, 2016; Gargi & Ankur, 2018).

Due to the significant influence of brand awareness on consumer buying behavior, marketers have devised many metrics aimed at assessing brand awareness and other indicators of brand well-being. The metrics referred to as Awareness, Attitudes, and Usage (AAU) metrics are a set of measurements used jointly. In order to guarantee the market success of a product or brand, it is essential to effectively manage levels of awareness over the whole of the product life-cycle, spanning from the initial product introduction to the eventual fall in the market. Brand awareness is enhanced by repeated exposures, leading to increased familiarity. These repetitions contribute to improved recognition and recollection, which may be facilitated through consumption, purchase, or association with a certain product category (Carkmark, 2016; Keller, 1993)

Profitability

The significance of profitability has been extensively emphasised in the literature pertaining to finance and accounting. Hifza (2011) asserts that profitability is a crucial objective in financial management, as it aligns with the goal of maximising the owners' wealth. Furthermore, profitability serves as a significant indicator of performance. The viability of a business is contingent upon its profitability. On the contrary, a business that exhibits high profitability possesses the capacity to remunerate its proprietors with a substantial yield on their invested capital. Therefore, the primary objective of a commercial organisation is to generate revenue to ensure the viability of the enterprise in the current market environment. According to Pandey's (1980) definition, profitability refers to the capacity of a business to generate profit in relation to other factors. The term profit is interpreted within this context. A thorough analysis of the factors that influence profitability is imperative in comprehending the financial mechanisms employed by corporations to sustain their business activities. The attainment of a financial advantage occurs when the revenue generated from a commercial undertaking surpasses the costs, expenditures, and taxes required to maintain the said undertaking. The process of profitability analysis involves categorising and evaluating metrics that gauge the performance of a company with respect to the profits it generates. This evaluation can be conducted in relation to the investment made by shareholders, or the capital employed in the business, or with respect to sales, profit, or loss. Considering that the primary objective of most entrepreneurs is to generate a profitable return on their investment, the quantifiable gains obtained by a business can serve as a metric for evaluating the efficacy of said investment.

The term profitability is commonly employed to refer to the total revenue generated by a company. The assessment of a firm's efficiency and marketing performance is commonly conducted using profitability as a metric. This approach is often employed in the context of financial analysis, as noted by Alloy and Velnampy (2014).

Corporate Reputation and Marketing Performance

Fombrun and Rindova (2001) posit that corporate reputation management strategies encompass a collection of competitive tactics devised by organisations to fulfil stakeholder expectations and augment the likelihood of positive stakeholder attitudes towards the company's activities and outcomes. According to Dukerich and Carter (2000), the notion of corporate reputation pertains to the comprehensive perception of an organization's activities by its stakeholders. Lebans and Euske (2006) define performance as the extent to which an organisation achieves its pre-established goals and objectives.

The study conducted by Nyakondo (2010) aimed to examine the motivating factors that prompt the banking sector to implement strategic reputation in mobile banking. The present study is illustrative of the numerous research endeavours that have investigated the impacts of strategic positioning on organisational performance. The study revealed that certain financial institutions have implemented mobile banking to a limited degree, with a focus on utilising it as a strategic instrument for generating revenue, improving corporate image, and increasing customer contentment.

The evaluation of a company's reputation has become imperative due to the highly competitive business environment and the need to improve organisational performance by increasing market share (Liengjindathaworn, Saenchaiyathon & Hawat, 2014). The proposition posits that a corporation's understanding of the expectations and needs of its stakeholders results in an improvement in the quality of the corporation's engagements with them. Roberts and Dowling's (2002) study revealed a direct association between a firm's corporate reputation and its financial performance, indicating that a favourable reputation can lead to increased profitability. Lange, Lee, and Dai (2011) argue that the significance of corporate reputation cannot be overstated, as it serves as a key factor in the attraction of prospective employees and customers. Currently, corporations participate in both direct and indirect transactions with various individuals, groups, and enterprises (Dukerich & Carter, 2000). According to Schultz, Hatch, and Larsen (2000), for an organisation to achieve favourable outcomes, it is imperative that its engagement with stakeholders is sustained over time.

Methodology

The research employed survey design due to its descriptive nature. Furthermore, the methodology utilised in this research is exemplary in the context of correlational studies, aiming to determine the fundamental nature of the relationship between corporate reputation and marketing effectiveness. The present study employed a cross-sectional survey design as its research methodology. The investigator administered a survey to multiple alcoholic beverage corporations in Port Harcourt through the dissemination of questionnaires to pertinent staff members within the establishments.

The research sample consists of high-ranking executives, departmental leaders, and personnel employed by the selected alcoholic beverage enterprises in Port Harcourt. There exist solely two alcoholic beverage enterprises located in Port Harcourt namely Pabod Brewery with 66 staff strength and Haastrup industry having 47 staff strength. The entire population of the study was considered for the study since the population of the study is relatively small and respondents are within the reach of the researcher. Thus the study comprised 103 respondents from the two firms which formed the total population for the study.

Results and Discussion

Correlations

		Perceived Organizational Prestige	Brand Awareness	Profitability
Perceived Organizational Prestige	Pearson Correlation	1	.887**	.906**
	Sig. (2-tailed)		.000	.000
	N	103	103	103

**. Correlation is significant at the 0.01 level (2-tailed).

Source: SPSS Output, 2023.

The result table shows that the correlation coefficient (r) and p values for brand awareness are 0.887 and 0.000, respectively, at 2-tailed test. Since the p value (0.000) is less than the alpha value (0.01), we reject the null hypothesis and accept the alternate hypothesis that there is a significant relationship between perceived organizational prestige and brand awareness of alcoholic firms in Port Harcourt.

The result also shows that the correlation coefficient (r) and p values for profitability are 0.906 and 0.000, respectively. Since the p value (0.000) is less than the alpha value (0.01), we reject the null hypothesis and accept the alternate hypothesis that there is a significant relationship between perceived organizational prestige and profitability of alcoholic firms in Port Harcourt.

Discussion of Findings

A noteworthy correlation has been observed between the perceived prestige of an organisation and the brand awareness of alcoholic companies in Port Harcourt (H_{A1}).

The results of the H_{01} test indicate a statistically significant correlation coefficient (0.887, $p < 0.01$) between perceived organisational prestige and the variable being studied. As a result, H_{O1} was invalidated and H_{A1} was subsequently affirmed. The findings indicate that the perceived level of organisational prestige has a significant impact on consumer behaviour, specifically their decision to patronise a particular firm. As a result, this can lead to an increase in the firm's brand awareness. The assertion that a socially responsible firm is likely to attract consumer patronage is corroborated by the studies conducted by Shabbir et al. (2010) and Thomas et al. (2011).

The study reveals a noteworthy correlation between the perceived prestige of an organisation and the profitability of alcoholic beverage companies in Port Harcourt (H_{A2}).

The statistical analysis of H_{O2} indicated that there was a significant correlation coefficient (0.906, $p < 0.01$) between the perceived prestige of the organisation and the outcome variable. The outcome of this finding resulted in the null hypothesis H_{O2} being refuted, and the alternative hypothesis H_{A6} being subsequently accepted. The findings suggest that there is a positive correlation between perceived organisational prestige and profitability, as it leads to an increase in market share (Shabbir et al., 2015; Thomas et al., 2011). This perspective aligns with the results obtained from the present investigation.

Conclusion

Based on the findings of the study, the researcher concludes that perceived organizational prestige has a positive relationship with marketing performance. This is because of the positive relationships that were established from the analyses involving the various measures of marketing performance (brand awareness and profitability). Therefore, perceived organizational prestige is a critical marketing factor for alcoholic beverage firms.

Recommendations

The study's conclusions and findings led to the formulation of the following recommendations:

i. Alcoholic beverage firms should continuously improve on their corporate reputation in other to improve brand awareness.

ii. Alcoholic beverage firms should ensure that they engage in good causes in long-term bases. This will help in demonstrating their true goodwill to the society.iii. Companies in the alcoholic beverage industry would be wise to gather feedback from their clientele in order to gauge how they feel about the company's reputation; if the results are favourable, the business should work to keep it that way. But if the story is unfavourable, we must work to alter it.

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AUDITING EFFECTIVENESS AND ACCOUNTABILITY IN PUBLIC SECTOR GOVERNANCE OF NIGERIA

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Abstract

This study investigated auditing effectiveness and accountability in public sector governance in Nigeria. There are allegations and cases of corruption, falsification of financial statements even in the face of auditors, accounting standards and financial regulations.The purpose of these study are to ascertain effectiveness of auditing that will aid informed economic decisions and allocation of resources which enhance efficiency and accountability in public sector governance in Nigeria.Six objectives, six research questions and six hypotheses were raised and addressed for this study.The study is anchored on the theory of Reasoned Action. The population comprises 420 employees of five Federal agencies. The unit of analysis was at the organizational level as the study was a macro study. The sample size for this study was 201,using the Krejcie and Morgan table. The random sampling technique was used. Data were primarily gathered to measure the variables. The research instruments were analysed using mean and standard deviation while the null hypotheses were tested with multiple regression (SPSS version 23). The findings revealed a positive and significant relationship between the variables of auditing effectiveness and accountability in public sector governance in Nigeria. In conclusion all hands must be on desk to ensure proper accountability. Following the findings and conclusion, the study recommends that government should strive to encourage managers and directors in public sectors and by extension all other federal establishment, to adopt, invest and improve in auditing effectiveness and its principles in order to enhance accountability through audit independence, audit reform, qualified audit personnel, also to be adopted are: auditor's integrity and internal control system in public sector governance in Nigeria.

Keywords: Auditing Effectiveness, Accountability, Public Sector Governance.

Introduction

Public sector audit has expanded worldwide due to changes in government structures and a growing emphasis on accountable and transparent governance (Sikka, 2018). Pallot (2019) stated that the expansion in public sector audit is driven by an increase in the number and complexity of financial reports, which has led to a higher demand for accountability (Dowdall, 2003). Public sector accounting differs significantly from commercial accounting in objectives, revenue sources, recording accounts, responsibility, and accountability. Public audit encompasses various aspects, including certifying accounts and evaluating economy, efficiency and effectiveness, applying to nearly all public sector entities.

According to Appah.Onowu and Adamu (2021) and Gokul and Isanzu (2020), public sector audit involves assessing the performance of the public sector, covering financial operations and government activities, both organizational and administrative. Similarly, Appah (2017) defines public sector auditing as examining financial and non-financial reports of public sector entities required to undergo audits. The audit function and reporting methods tend to reinforce traditional accountability to elected representatives rather than establishing new forms of accountability.

Okoh and Ohwoyibo (2009) emphasized that accountability in the government and its agencies is essential for serving the public effectively and in accordance with the laws of the land. Appah (2010) pointed out the increased demand for accountability in the public sector due to the rise in activities and monetary value. Achua (2009) highlighted the need for governments to be more accountable for their vast investments in resources. Government spending is a significant concern, and the public wants to know if it is being utilized wisely for public interests.

However, Effective governance requires the establishment of clear policies and procedures, the provision of adequate resources, and the adoption of effective monitoring and evaluation mechanisms. Effective governance also requires the use of qualified personnel who possess the necessary skills and knowledge to manage public resources effectively (Adeyemi &Salawu, 2018).

Audit independence is even more critical as it provides assurance that public resources are being used efficiently and effectively (Adeyemi, 2019).The audit provides independent assurance that public resources are managed efficiently, effectively, and in accordance with established regulations and policies. The audit also contributes to effective governance by promoting transparency, accountability, and efficiency in the management of public resources (Alao& Oluwole, 2019).

Atanda& Akinyemi (2020) sees the relationship between audit independence and effective governance in the public sectors of Nigeria as crucial. Audit independence ensures that auditors provide an objective and accurate assessment of the financial status of an organization. This, in turn, promotes transparency and accountability, which are essential components of effective governance (Atanda& Akinyemi, 2020).Independence as an auditor's asset is the fundamental concept underlying the audit work as it permits the auditor to render an impartial and unbiased judgments essential to the proper conduct of audit, in drawing conclusion about the financial statement of an enterprise. Thus, the auditor needs to be independent in order that he may be objective in his judgments since the general public relies on him to maintain the credibility of financial information.

Appah (2017) stated that the audit function and the form in which audit results are reported tend to reinforce the traditional line of public sector accountability to elected representatives rather than establish new forms of accountability.

In (2006), the United Nations Convention discloses some progressive reforms that took place from 1890 up to 1920's in order to promote accountability and good governance through standardized approaches such as constitutional amendment in areas of fiscal issues concerning audit, procurement policies and others. (Allan, 2006). Audit reform is crucial for improving the effectiveness and efficiency of auditing in the public sector. It involves examining financial records, systems, and controls to ensure accuracy, reliability, and compliance with laws and regulations. In Nigeria, audit reform has been addressed through the Public Procurement Act (PPA) of 2007, which introduced measures like e-procurement and the adoption of international financial reporting standards (IFRS) to enhance transparency and accountability.

Susana (2020) sees an institution's autonomy as the capacity to make its own choices, considering its objectives and mission. Adding that, the reforms implemented in Higher Educational Institutions have led to increased control of public expenditure, institutions being held more responsible and more flexibility in their relationship with the Government and society in general.

The United Nations report of the experts group meeting (2006) on ethics, integrity and accountability disclosed that; 'Over the past three to four decades, governments in different parts of the world have instituted a variety of measures aimed at reforming and revitalizing the public sector. They have done so to respond to the demands for changes, unleashed by the forces of globalization, democratization and liberalization among others. These measures include; re-defining the role and sharpening the focus of government, enhancing the service delivery capacities of public agencies, incorporating private business ethos and techniques in decision-making processes, applying modern information and communication technologies in public management processes, reviewing procurement and financial management systems with a view to promoting transparency and accountability, and investing in human and institutional capacity-building' (Allan, 2006).

Statement of the Problem

Public sectors are not immune to corruption and incompetence, there are also disorganized systems of fiscal oversight at the federal, state, and local levels that are prone to book keeping delays and lack a variety of internal control; including barriers to prevent corruption of public bidding process. Beyond the general criticism of how the public sector manages it accounts, also identified were sloppy procedures for handling cash transactions, gaping holes in the protection of electronically stored information and deficiency in the collection and recording of property, sales and taxes and fines. There is the problem of inadequate policies, procedures and related internal control to prepare accurate and complete financial statements in the three tiers of government. However, the fiscal relationships between the Federal and State governments are of vital importance in the design of the public sector, especially in terms of revenue or expenditures involved (Musgrave, 2005). Institute for government (2021) stated that even when failures are clearly attributed to ministries, many are not held to account for their decisions and reasons for opting to untimely and wasteful approaches. In the same vain Tapang and Ibiam (2019) stated that the cases of bribery, misappropriation of public funds and theft of government properties have been recorded to be in the order of the day in public sector entities. Nigeria being richly endowed with mineral deposits, is the eight biggest oil producer in the world. An important supplier to the united states because of its high gasoline contents and has attracted billions of dollars of investments from the world's top companies. Yet poverty is rising as a result of corruption. Out of the vast amount of resources available to governments and their agencies in Nigeria to finance the cost of their various expenditure programmes, only little can show for such purpose of allocation. Experts in accounting and financial issues have blamed this situation on poor financial management and weak application of appropriate financial and operational control systems. Consequently governments and their agencies have constantly been accused of unabated corruption with high evidence of financial malpractices resulting in diverting of public funds. Two recent audits in NDDC and NNPC of the oil industry reviewed by Reuters shows billions of dollars in irregularities despite, years of government promises to clean it up. The reviewed copy lists discrepancies and billions of dollars missing from Nigerian's oil revenues. Thus, getting a clear picture of how much Nigeria has lost to corruption over the years. Corruption has left oil-depended Nigeria unable to cater for its basic health, infrastructure or education needs. Thus the system is hemorrhaging cash in so many places that accountants often struggle to make sense of it all.

Many government establishments across the state, finds it difficult to produce reliable account in a timely fashion. However, with the aid of information technology system based international accounting standards, government should be able to provide their accounts within short term period of the year end. Accounts within each ministry and agencies in the state can also be supplied within the period by the same integrated system. Accountability as well as Transparency and governance cannot be adequate without the use of globally accepted and understood standards implemented in the ministries and agencies through automated system. That reliable internal control should be based on standards, because evasion of control and misused of government money/funds is a constant theme of audit report in many countries, states and local government. Cultures of impunity occur within some government administrations and public money is often not well monitored. But use of appropriate standards and internal control practices will make such evasion more difficult. Appah, Onowu and Adamu (2021) highlighted the level of public sector fraud and misappropriation of funds in many government entities which   have necessitated various governing and monitoring tools including financial auditing systems. Richard (2019) observed that public sector audits have become a necessity for public sector entities to prevent and detect the level of financial and economic crimes committed by public sector employees and politicians. That at the long run the financial performance of the government and public sector organizations are affected due to the level of financial and economic crimes prevalent.

Aim and Objectives of the Study

The aim of this study is to determine the relationship between auditing effectiveness and accountability in public sector governance in Nigeria, specifically the study is set to:

i. ascertain the relationship between audit independence and effective governance in public sectors of Nigeria.

ii. evaluate the relationship between audit reform and effective governance in public sector of Nigeria.

Research Questions

The following questions were addressed in line with the objectives stated above.

i. What is the relationship between audit independence and effective governance in public sectors of Nigeria?

ii. What is the relationship between audit reform and effective governance in public sector of Nigeria?

Hypotheses

The following null hypotheses were tested in this article:

Ho_1: There is no significant relationship between audit independence and effective governance in public sectors of Nigeria.

Ho_2: There is no significant relationship between audit reform and effective governance in public sector of Nigeria.

METHODOLOGY

Research Design

The study used a descriptive study that is concerned with finding out the what, where and how of a phenomenon. Thus, the study sought the opinions of accountantsworking in selected Federal Parastatal in Rivers and Bayelsa State, who are familiar with the process of adoption of Auditing Effectiveness and Accountability in Public Sector Governance.Hence, descriptive survey is deemed appropriate.

Population for the Study

The population of this study comprised all officers with job titles such as regional manager, station manager, operations managers, heads of departments, unit heads and duty managers or supervisors. All the staff within these categories constituted the elements of our study population. Following the records sourced for from the human resource departments of these agencies such as the Niger Delta Development Commission (NDDC), Independent National Electoral Commission (INEC), Niger Delta River Basin Development Authority of Nigeria (NDBDA), National Emergency Management Agency (NEMA) and National Population Commission (NPC). The population comprises of all establishment under investigations. (Sourced from the Human Resource Depts, 2022). However, there are several Federal Agencies in Rivers and Bayelsa State but the study targets five Federal Interventionists agencies with a view to generalizing the inference drawn from the study to other federal agencies that are not captured in the study.

Table 3.1: Population Distribution table of Staff of Agencies according to rank

S/N	Managerial Cadre	NDDC	INEC	NDBDA	NEMA	NPC	Total
1.	High Management cadre	15	13	17	20	11	76
2.	Middle cadre	29	34	24	28	21	136

3	Low cadre	41	48	38	44	37	208
	Total Population Size	**85**	**95**	**79**	**92**	**69**	**420**

Source: Extract from the agencies Human Resource Departments, 2022

Sample Size and Sampling Techniques

The sample size for the study is made up of 201 staff of five federal Government agencies in Rivers and Bayelsa state. Since the population is an heterogeneous type, the sample size for this study was determined using the Krejcie and Morgan (1970) table of the given Population. From the above table 3.1, the corresponding sample size for the population of 420 staff was 201 using Krejcie and Morgan table. Thus, the study selected five Federal agencies for the study using convenient and judgmental techniques of sample selection.

Nature/Sources of Data

The research instrument for this study was researcher's structured questionnaire titled: "Auditing Effectiveness and Accountability in Public Sector Governance in Nigeria". It was classified into two section A and B, section A; deals with demographic information about the respondent while the other clusters seek to provide data for the research questions and hypothesis. However, the instrument was developed on five point's Likert's scale of very high extent (VHE), High extent (HE), Undecided(U)low extent (LE), and very low extent (VLE). Hence, the questionnaires were itemized with options intended to elicit information from the respondent that reflected their opinions and perception about the study.

Methods of Data Collection /Instrumentation

Data were collected primarily through questionnaires. The instrument used for this study was administered personally by the researcher and two research assistances in the various federal government agencies offices during working hours. Thus, the instruments were administered to the respondent with the express permission from the agencies directors and branch managers.

However, for the purpose of confidentiality and freedom of expression, names of the respondents were not required on the instrument. The respondents were requested to tick (√) in the appropriate column corresponding to the choice or option that suite their opinion.

Validity/Reliability of Instrument

The instrument was subjected to a critical assessment by the researcher's supervisor and two other experts in the Department of Accounting, to ensure that the contents of the instrument are in line with the purpose of the study. Hence, the procedure included content, criterion-related face, concurrent and constructs validity.

Reliability of Instrument

In testing the reliability of the instruments, the researcher adopted the test-retest method. Pearson Product Moment, correlation (PPMC) analysis was used to estimate reliability co-efficient to check whether it yielded an acceptable reliability co-efficient for the study.

Method of Data Analysis

Mean and standard deviation was used to answer the research questions while multiple regression statistics was used test the research Hypotheses at the 0.05 level of significance in order to arrive at an appropriate decision.

RESULTS AND DISCUSSION

Audit Independence

Table 4.1: Descriptive Statistics on Audit Independence

S/No	Item(s)	VHE	HE	U	LE	VLE	N	Sum	$\bar{x}$	Std. Dev.
1.	Reliable and relevant information are produced for	9 (45)	102 (408)	39 (117)	24 (48)	17 (17)	191	635.	3.325	1.051

	decision making in public sector audit.									
2	There are adequate measures for the collection and recording of properties, sales, taxes and fines	13 (65)	111 (444)	35 (105)	16 (32)	16 (16)	191	662.	3.466	1.030
3	Adequate procedures are put in place to enhance accountability	18 (90)	105 (420)	37 (111)	15 (30)	16 (16)	191	667.	3.492	1.051
4	Relevant audit tests are properly conducted	14 (70)	111 (444)	30 (90)	20 (40)	16 (16)	191	660.	3.456	1.055
5	Ethically sound audit gives the establishment credibility	24 (120)	95 (380)	35 (105)	21 (42)	16 (16)	191	680.	3.560	1.737
	Grand Mean								**3.460**	**1.185**

Source: Field Data (2023)

Table 4.1 contains the results of the descriptive statistics on audit independence. From the results of the analysis respondents confirmed that reliable and relevant information are produced for decision making in public sector audit and the responses of the respondents were rated on a mean score ($\bar{x}$) of 3.325. Similarly, respondents were of the view that there are adequate measures for the collection and recording of properties, sales, taxes and fines and this was confirmed on a mean score ($\bar{x}$)of 3.466. Furthermore, it was revealed from the respondents responses that adequate procedures are put in place to enhance accountability and this was confirmed on a mean Score ($\bar{x}$) of 3.492. In like manner, it was also confirmed that relevant audit tests are properly conductedwhich is revealed on a mean score ($\bar{x}$)of 3.456. Also, it was revealed that ethically sound audit gives the establishment credibility. This is revealed on a mean score ($\bar{x}$)of 3.560. Generally, it can be concluded to a high extent that audit independence enhance accountability in public sector governance. This is associated with audit effectiveness such that the degree of associationwere rated on a mean score ($\bar{x}$)of **3.460**.

4.2 Audit Reform

Table 4.2: Descriptive Statistics on Audit Reform

S/No	Item(s)	VHE	HE	U	LE	VLE	N	Sum	$\bar{x}$	Std. Dev.
1.	Public sector auditors have creative capabilities..	17 (85)	102 (408)	39 (117)	15 (30)	18 (18)	191	658.	3.445	1.074
2	Auditing reforms increases the credibility of financial report.	16 (80)	96 (384)	47 (141)	15 (30)	17 (17)	191	652.	3.414	1.052
3	Audit reform creates' room for innovative ideas in the public sector.	19 (95)	93 (372)	50 (150)	12 (24)	17 (17)	191	658.	3.445	1.054
4	Reforms are organized to review the public sector for possible change.	23 (115)	89 (356)	43 (129)	19 (38)	17 (17)	191	655.	3.429	1.107
5	Public interest and trust in the public sector can be built through audit reform.	12 (60)	94 (376)	48 (144)	21 (42)	16 (16)	191	655.	3.429	1.700
	Grand Mean								**3.432**	**1.197**

Source: Field Data (2023)

Table 4.2 shows the results of the descriptive statistics on audit reform. The results of the analysis confirmed that public sector auditors have creative capabilities and the responses of the respondents were rated on a mean score ($\bar{x}$) of 3.445. Similarly, respondents were of the view that auditing reforms increases the credibility of financial report. This is confirmed on a mean score ($\bar{x}$) of 3.414. Furthermore, it was also revealed from respondents responses that reform creates' room for innovative ideas in the public sector and this was confirmed on a mean Score ($\bar{x}$) of 3.445. In like manner, it was also confirmed thatreforms are organized to review the public sector for possible change. This is revealed on a mean score($\bar{x}$)of 3.429. Also, it was revealed that public interest and trust in the public sector can be built through audit reform.This is revealed on a mean score ($\bar{x}$) of 3.429. Generally, it can be concluded that to a high extent audit reform enhance accountability in public sector governance. This is associated with audit effectiveness such that the degree associated was rated on a mean score ($\bar{x}$) of **3.432**.

Test of Hypotheses

For the hypotheses **one and two** multiple regression analysis technique was adopted as reported in table 4.3 and 4.4 refers to appendix below for comprehensive data set used for the study.

Table 4.3: Multiple Linear Regression Coefficients

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.860	.348		5.349	.000
	AI	.084	.079	.078	1.053	.294
	AR	.595	.111	.400	5.386	.000

a. Dependent Variable: EG

Source: SPSS Statistics 23.0 Output from study data, 2023

Table 4.3 present the coefficients of the explanatory variables. The results show that Accountability in Public Sector Governance (APSG) vis-à-vis Audit Independence (AI) and Audit Reform (AR) has a positive relationship on Effective Governance (EG) with the coefficient of AI and AR having 0.17% and 0.60%respectively. This implies that an increase in percentage of the relationship between auditing effectiveness and accountability in public sector governance in Nigeria, as a result of Audit Independence (AI) and Audit Reform (AR) led to increase in Accountability in Public Sector Governance (APSG) with a measure of 17% and 60%respectively in the understudy areas. Furthermore, all the predictors standard error values is less than beta values, likewise all the t-test value is greater than standardized coefficients (beta) value with the Sig value of 0.000 less than 0.05 significant level at 95% confident level suggests that Accountability in Public Sector Governance (APSG) vis-à-vis Audit Independence (AI) and Audit Reform (AR) have statistically significant relationship on the Effective Governance (EG). The next Table 4.4 present the analysis of variances (ANOVA) in which all overall model is adjudged using the estimation of F-value statistics.

Table 4.4: Analysis of Variances (ANOVA)

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	10.469	2	5.234	15.371	.000[b]
	Residual	64.359	189	.341		
	Total	74.828	191			

a. Dependent Variable: EG

b. Predictors: (Constant), AI

Source: SPSS Statistics 23.0 Output from study data, 2023

The ANOVA Table 4.4 results present the F-test which explained the joint relationship of the predictor variables on the dependent variable. The F-value of 15.371 with significance value of 0.000[b] less than 0.05 level of significance indicated that the overall model is statistically significant in explaining the relationship between the dependent and independent variables. The next Table 4.5 the multiple regression model summary.

Table 4.5: Multiple Regression Model Summary

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.734[a]	.640	.631	.58355

a. Predictors: (Constant), AI

Source: SPSS Statistics 23.0 Output from study data, 2023

Table 4.5 present the multiple regression model summary. The result shows that R-square is 0.640 and Adjusted R-square is 0.631. The R^2 of 0.855 calculated points to the fact that about 86 percent variation in the accountability in public sector governance in understudy areas of the relationship between auditing effectiveness and accountability in public sector governance in Nigeria is explained by the regressors. That is, 86% increase in the accountability in public sector governance can be explained by increase in Accountability in Public Sector Governance (APSG) vis-à-vis, Audit Independence (AI) and Audit Reform (AR) while the 14% remained can be explained by others factor outside this model. The coefficient of multiple determinations, that is, the adjusted R^2 is also very strong at 86%. This showed a very strong explanatory power of the regressor in explaining changes in the dependent variables. Thus, following the foregoing multiple regression coefficient results and their significant values at 5% the hypotheses one, two, three, four, five and six can be restatement as follows,

Discussion of Findings

Test of Hypothesis (Ho_1)

Ho_1. stated that audit independence does not have any significant relationship on effective governance in public sector of Nigeria. However, at 5% level of significant, the p-value is of audit independence vis-à-vis effective governance in public sector of Nigeria is 0.000 less than 0.05 level of significance. Therefore, the study reject the null hypothesis three stated earlier, and did not reject the alternative hypothesis which state otherwise, that there is positive significant relationship between audit independence and effective governance in public sector of Nigeria. An empirical study conducted by Kouadio, Brou and Kouakou (2017) study found a positive relationship between audit independence and effective governance in public sectors in Cote d'Ivoire. Specifically, the study found that audit independence positively and significantly influences effective governance in public sectors in Cote d'Ivoire. Ahmed and Mohamed (2019) study found a significant positive relationship between audit independence and effective governance in public sectors in Djibouti. Specifically, the study found that audit independence had a significant impact on accountability, transparency, and efficiency in the public sector.

Test of Hypothesis (Ho_2)

Ho_2. stated that audit reform does not have any significant relationship on effective governance in public sector of Nigeria. However, at 5% level of significant, the p-value is of audit reform vis-à-vis effective governance in public sector of Nigeria is 0.000 less than 0.05 level of significance. Therefore, the study reject the null hypothesis four stated earlier, and did not reject the alternative hypothesis which state otherwise, that there is positive significant relationship between audit reform and effective governance in public sector of Nigeria. This finding is in agreement with findings of Mabaso and Mamba (2018) findings of the study revealed that audit reform had a positive impact on effective governance in the public sector in Eswatini.

However,Auditing Effectiveness refers to the extent to which an audit process or activity achieves its intended objectives and goals.

Summary of Findings

Based on the empirical study, model specification, data collected and analysis of result, the major findings of this study revealed that; There is positive and significant relationship between auditors independence ,audit reform and effective governance in public sector of Nigeria.

Conclusion

Based on the findings, the result in hypothesis one revealed that there is positive significant relationship between audit independence and effective governance in public sector of Nigeria. While the resultin hypothesis two also showed a positive significant relationship between audit reform and effective governance in public sector of Nigeria. Although, the most important facts about the results obtained in this study was the empirical justification for the existence of positive and significant association between auditing effectiveness and accountability in public sector governance in Nigeria being mediated by control accounting system. This contention has both theoretical and practical underneath, which constitutes the basic drive of the next two phases of this study. Hence, all hands must be on desk to ensure proper accountability that will in turn boost the Nigerian economy in terms of developmental goals.

Recommendations

Following the implications as a result of the study outcome, the study therefore put forward the following recommendations for considerations**.**

1.There is need for Accounting Officers working within the public sector to be independent, reliable, ethically sound and credible toensure public trust and accuracy of resultsin order to uphold the integrity of the accounting profession by making sure that financial activities are properly done within government policies, rules and financial regulations.

2.The government should put in place sound reform systems that will enhance accountability and consequently foster proper developmental goal of the Nation.

3.Government should put in place more accountability measures that will stiffen corrupt practices in the ministries and agencies. Directors and managers should be encourage to adopt, invest and improve in auditing effectiveness and its principles through auditors independence and reforms in order to enhance accountability in public sectors in Nigeria.

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TIMELY AUDIT CONTRIBUTION AND ACCOUNTABILITY IN PUBLIC SECTOR GOVERNANCE IN NIGERIA

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Abstract

This study investigated auditing effectiveness and accountability in public sector governance in Nigeria. Using NDDC, INEC, NDBDA, NEMA and NPC in Rivers and Bayelsa State. There are allegations and cases of corruption, falsification of financial statements even in the face of auditors, accounting standards and financial regulations.The purpose of this study are to ascertain effective auditing that will aid informed economic decisions and allocation of resources which enhance efficiency and accountability in public sector governance in Nigeria.two objectives,two research questions andtwo hypotheses were raised and addressed for this study. The study is anchored on the theory of Reasoned Action. The population comprises all the employees according to the human resource departments made up of top, middle and low-level management staff of five Federal agencies.The unit of analysis was at the organizational level as the study was a macro study. The sample size for this study was201, using the Krejcie and Morgan table. The random sampling technique was used. Data were primarily gatheredto measure the variables. The research questions were answered using mean and standard deviation while the null hypotheses were tested with multiple regression(SPSS version 23). The findings revealed a positive and significant relationship between the variables of auditing effectiveness and accountability in public sector governance in Nigeria. In conclusion all hands must be on desk to ensure proper accountabilitythat will in turn boost the Nigerian economy. Following the findings and conclusion, the study recommends that government should strive to encourage managers and directors in public sectors and by extension all other federal establishment, to adopt, invest and improve in auditing and its principles to enhance accountability through timely audit contribution, qualified audit personnel and internal control system in public sector governance in Nigeria.

Keywords: Timely Audit, Accountability, Public Sector Governance.

Introduction

Accountability is a fundamental value for any political system. However, Benoit, Julian and Marcus (2018) opined that the system of accountability is not meeting up to the realities of modern government which has led to repeated failures that can harm the public and undermine trust in institutions which can as well lead to wider failures in the public services. Igbokwe-Ibeto, Osakede, and Nwobi (2020) argue that for Nigeria to match forward, there is need to employ effective, efficient, patriotic and committed public servants, who should be accountable for their stewardship.

Consequently, recent studies on Timely Audit Contribution and Effective Governance in the Public Sector of Nigeria have highlighted the importance of timely audit contribution in promoting effective governance in the public sector of Nigeria. Adetayo and Adegbite (2018) stated thattimely audit contributed to increased transparency, accountability, and efficiency in the public sector.The relationship between timely audit contribution and effective governance in Nigeria's public sector is crucial. Ahmed and Bala (2019)sees timely audit contribution as crucial to effective governance and as such is considered to be prioritized by management. However,Timely audit reports play a significant role in providing essential information on the performance of government agencies, including financial management practices, procurement processes, and compliance with regulations. This information is vital for decision-making, policy formulation, and enhancing service delivery. Furthermore, timely audit contribution enhances transparency and accountability within the public sector. By revealing how public resources are used, audits help prevent and detect fraud, waste, and abuse. They also assure citizens that their taxes are utilized appropriately and that public officials are held accountable for their actions. Hence, the effectiveness of audit contribution in promoting governance in Nigeria depends on various factors. These include the quality and independence of auditing institutions, as well as the government's commitment to implementing audit recommendations. In Nigeria, the quality of audit reports has been criticized for being inadequate in detecting and preventing fraud, waste, and abuse. Challenges faced by the auditing institutions, such as inadequate staffing, funding, and training, have resulted in delays in submitting audit reports, poor quality reports, and insufficient implementation of audit recommendations. Addressing these challenges is essential to strengthen the relationship between timely audit contribution and effective governance in Nigeria's public sector (Adeyemi, 2021).

Dauda and Ezuwore (2021) found that audit quality is positively related to good governance and that improving audit quality can enhance the effectiveness of governance in the public sector. Adelakun et al. (2022) found that audit plays a crucial role in promoting accountability but identified the need for stronger legal frameworks and enforcement mechanisms to ensure that audit recommendations are implemented.The presence of qualified audit personnel is crucial for effective governance in the public sector. These professionals possess the necessary skills and knowledge to conduct audits efficiently, identify weaknesses, and propose corrective measures. Their technical expertise provides valuable insights into managing public resources. In Nigeria, where corruption, mismanagement, and inefficiency have been significant challenges, the utilization of qualified audit personnel becomes essential. By employing such personnel, transparency, accountability, and efficiency can be promoted, thereby addressing the existing governance issues. The relationship between qualified audit personnel and effective governance in Nigeria is explored in the following sections (Babatunde, Akinwale& Adebayo, 2019).

Audit independence is crucial for accountability and transparency in Nigeria's public sector. It allows auditors to assess financial information impartially, ensuring accurate evaluations of an organization's financial status. In the public sector, audit independence is especially vital as it assures efficient use of public resources. Achieving this independence involves appointing independent auditors, granting them decision-making autonomy, and avoiding conflicts of interest. The Auditor-General for the Federation (AGF) in Nigeria is responsible for appointing auditors fairly, enabling them to perform their duties without fear of reprisals. Effective governance is essential for providing efficient and effective public services which depends on sound policies and programs that meets the needs of the population (Adeyemi, 2019).

Appah, Onowu and Adamu, (2021) sees public sector audit as the audit of the public sector's performance that covers specific financial operations and all government activities, both organizational and administrative systems. In the same vein, Appah (2017) stated that public sector auditing entails the examination of public sector entities financial and non-financial reports that are required to have been audited. Thus, the audit function and the form in which audit results are reported tend to reinforce the traditional line of public sector accountability to elected representatives rather than establish new forms of accountability. However, ICAN accountability index of 20l7 recommended timely contribution in management of public finance in order to improve process of accessing accountability.

Okoh and Ohwoyibo (2009) opined that accountability reflects the need for government and its agencies to serve the public effectively in accordance with the laws of the land. Appah, (2010) pointed out that with the number and monetary value of public sector, activities have increased substantially. This increase in activities has brought with it an increased demand for accountability of public officers who manage these activities of the public. Achua (2009) says that serious consideration is being given for the need to be more accountable for the often vast amounts of investment in resources at the command of governments, which exercise administrative and political authority over the actions and affairs of political units of people. Government spending is a very big business and the public demands to know whether the huge outlays of money are being spent wisely for public interests.

Rafiu and Oyedokun (2007), with increasing democratization and concern about corruption, people are demanding to be informed about what their government intends to achieve and what it has actually accomplished. In other words, the public is demanding audit reports in order to access the performance of those entrusted with public sector resources.

Independence as an auditor’s asset is the fundamental concept underlying the audit work as it permits the auditor to render an impartial and unbiased judgments essential to the proper conduct of audit, in drawing conclusion about the financial statement of an enterprise. Thus, the auditor needs to be independent in order that he may be objective in his judgments since the general public relies on him to maintain the credibility of financial information.

Statement of the Problem

Public sectors are not immune to corruption and incompetence, there are also disorganized systems of fiscal oversight at the federal, state, and local levels that are prone to book keeping delays and lack a variety of internal control; including barriers to prevent corruption of public bidding process. Beyond the general criticism of how the public sector manages it accounts, also identified were sloppy procedures for handling cash transactions, gaping holes in the protection of electronically stored information and deficiency in the collection and recording of property, sales and taxes and fines. There is the problem of inadequate policies, procedures and related internal control to prepare accurate and complete financial statements in the three tiers of government. However, the fiscal relationships between Federal and State governments are of vital importance in the design of the public sector, especially in terms of revenue or expenditures involved (Musgrave, 2005). Institute for government (2021) stated that even when failures are clearly attributed to ministries, many are not held to account for their decisions and reasons for opting to untimely and wasteful approaches. In the same vain Tapang and Ibiam (2019) stated that the cases of bribery, misappropriation of public funds and theft of government properties have been recorded to be in the order of the day in public sector entities. Nigeria being richly endowed with mineral deposits, is the eight biggest oil producer in the world. An important supplier to the united states because of its high gasoline contents and has attracted billions of dollars of investments from the world’s top companies. Yet poverty is rising as a result of corruption. Out of the vast amount of resources available to governments and their agencies in Nigeria to finance the cost of their various expenditure programmes, only little can show for such purpose of allocation. Experts in accounting and financial issues have blamed this situation on poor financial management and weak application of appropriate financial and operational control systems. Consequently governments and their agencies have constantly been accused of unabated corruption with high evidence of financial malpractices resulting in diverting of public funds. Two recent audit of the oil industry reviewed by Reuters shows billions of dollars in irregularities despite, years of government promises to clean it up. The reviewed copy lists discrepancies and billions of dollars missing from Nigerians oil revenues. Thus getting a clear picture of how much Nigeria has lost to corruption over the years. Corruption has left oil-depended Nigeria unable to cater for its basic health, infrastructure or education needs. Thus the system is hemorrhaging cash in so many places that accountants often struggle to make sense of it all.

Many government establishments across the state, finds it difficult to produce reliable account in a timely fashion. However, with the aid of information technology system based international accounting standards, government should be able to provide their accounts within short term period of the year end. Accounts within each ministry and agencies in the state can also be supplied within the period by the same integrated system.

Accountability as well as Transparency and governance cannot be adequate without the use of globally accepted and understood standards implemented in the ministries and agencies through automated system. That reliable internal control should be based on standards, because evasion of control and misused of government money/funds is a constant theme of audit report in many countries, states and local government. Cultures of impunity occur within some government administrations and public money is often not well monitored. But use of appropriate standards and internal control practices will make such evasion more difficult.Appah, Onowu and Adamu (2021) highlighted the level of public sector fraud and misappropriation of funds in many government entities which have necessitated various governing and monitoring tools including financial auditing systems. Richard (2019) observed that public sector audits have become a necessity for public sector entities to prevent and detect the level of financial and economic crimes committed by public sector employees and politicians. That at the long run the financial performance of the government and public sector organizations are affected due to the level of financial and economic crimes prevalent.

Aim and Objectives of the Study

The aim of this study is to determine the relationship between auditing effectiveness and accountability in public sector governance in Nigeria, specifically the study is set to:

iii. identify the relationship between timely audit contribution and effective governance in public sector of Nigeria.

iv. ascertain the relationship between the use of qualified audit personnel and effective governance in public sector of Nigeria.

Research Questions

The following questions were addressed in line with the objectives stated above.

iii. What is the relationship between timely audit contribution and effective governance in public sector of Nigeria?

iv. What is the relationship between the use of qualified audit personnel and effective governance in public sector of Nigeria?

Hypotheses

The following null hypotheses were tested in this article:

Ho_1: There is no significant relationship between timely audit contribution and effective governance in public sector of Nigeria.

Ho_2: There is no significant relationship between the use of qualified audit personnel and effective governance in public sector of Nigeria.

METHODOLOGY

Research Design

The study used a descriptive study that is concerned with finding out the what, where and how of a phenomenon. Thus, the study sought the opinions of accountants working in selected Federal Parastatal in Rivers and Bayelsa State, who are familiar with the process of adoption of Auditing Effectiveness and Accountability in Public Sector Governance. Hence, descriptive survey is deemed appropriate.

Population for the Study

The population of this study comprised all officers with job titles such as regional manager, station manager, operations managers, heads of departments, unit heads and duty managers or supervisors. All the staff within these categories constituted the elements of our study population. Following the records sourced for from the human resource departments of these agencies such as the Niger Delta Development Commission (NDDC), Independent National Electoral Commission (INEC), Niger Delta River Basin Development Authority of Nigeria (NDBDA), National Emergency Management Agency (NEMA) and National Population Commission (NPC). The population comprises of all establishment under investigations. (Sourced from the Human Resource Depts, 2022). However, there are several Federal Agencies in Rivers and Bayelsa State but the study targets five Federal Interventionists agencies with a view to generalizing the inference drawn from the study to other federal agencies that are not captured in the study.

Table 3.2: Population Distribution table of Staff of Agencies

S/N	Managerial Cadre	NDDC	INEC	NDBDA	NEMA	NPC	Total
1.	High Management cadre	15	13	17	20	11	76
2.	Middle cadre	29	34	24	28	21	136
3	Low cadre	41	48	38	44	37	208
	Total Population Size	**85**	**95**	**79**	**92**	**69**	**420**

Source: Extract from the agencies Human Resource Departments, 2022

Sample Size and Sampling Techniques

The sample size for the study is made up of 201 staff of five federal Government agencies in Rivers and Bayelsa state. Since the population is an heterogeneous type, the sample size for this study was determined using the Krejcie and Morgan (1970) table of the given Population. From the above table 3.2, the corresponding sample size for the population of 420 staff was 201 using Krejcie and Morgan table. Thus, the study selected five Federal agencies for the study using convenient and judgmental techniques of sample selection.

Nature/Sources of Data

The research instrument for this study was researcher's structured questionnaire titled: "Auditing Effectiveness and Accountability in Public Sector Governance in Nigeria". It was classified into two section A and B, section A; deals with demographic information about the respondent while the other clusters seek to provide data for the research questions and hypothesis. However, the instrument was developed on five point's Likert's scale of very high extent (VHE), High extent (HE),Undecided (U)low extent (LE), and very low extent (VLE). Hence, the questionnaires were itemized with options intended to elicit information from the respondent that reflected their opinions and perception about the study.

Methods of Data Collection /Instrumentation

Data were collected primarily through questionnaires. The instrument used for this study was administered personally by the researcher and two research assistances in the various federal government agencies offices during working hours. Thus, the instruments were administered to the respondent with the express permission from the agencies directors and branch managers. However, for the purpose of confidentiality and freedom of expression, names of the respondents were not required on the instrument. The respondents were requested to tick (√) in the appropriate column corresponding to the choice or option that suite their opinion.

Validity/Reliability of Instrument

The instrument was subjected to a critical assessment by the researcher's supervisor and two other experts in the Department of Accounting, to ensure that the contents of the instrument are in line with the purpose of the study. Hence, the procedure includescontent,face, and constructs validity.

Reliability of Instrument

In testing the reliability of the instruments, the researcher adopted the test-retest method. Pearson Product Moment, correlation (PPMC) analysis was used to estimate reliability co-efficient to check whether it yielded an acceptable reliability co-efficient for the study.

Method of Data Analysis

Mean and standard deviation was used to answer the research questions while multiple regression statistics was used to test the research Hypotheses at the 0.05 level of significance in order to arrive at an appropriate decision.

RESULTS AND DISCUSSION

Timely Audit Contribution

Table 4.1: Descriptive Statistics on Timely Audit Contribution

S/No	Item(s)	VHE	HE	U	LE	VLE	N	Sum	$\bar{x}$	Std. Dev.
1.	There has been timely audit in the public sector	14 (70)	109 (436)	35 (105)	16 (32)	17 (17)	191	660.	3.455	1.050
2	Emphasis is placed on accountability in the public sector	7 (35)	117 (468)	35 (105)	16 (32)	16 (16)	191	656.	3.434	0.997
3	Quick provision of information to users in the public sector	7 (35)	118 (472)	37 (111)	13 (26)	16 (16)	191	660.	3.456	0.982
4	The audit process in the public sector is always quick enough for	9 (45)	116 (464)	30 (90)	20 (40)	16 (16)	191	655.	3.429	1.028

	management to take action.									
5	Time management is critical in meeting deadlines.	14 (70)	105 (420)	55 (165)	21 (42)	16 (16)	191	670.	3.508	1.707
	Grand Mean								**3.457**	**1.153**

Source: Field Data (2023)

Table 4.1 shows the results of the descriptive statistics on timely audit contribution. From the results of the analysis respondents confirmed that timely audit enhanced audit effectiveness in the public sector and the responses of the respondents were rated on a mean score ($\bar{x}$) of 3.456. Similarly, respondents were of the view that to enhance accountability in the public sector emphasis should be placed on timely audit contribution and this was confirmed on a mean score ($\bar{x}$) of 3.434. Furthermore, it was also revealed from their responses that Quick provision of information to users enhance accountability via timely audit contribution and consequently enhance audit effectiveness in the public sector and this was confirmed on a mean Score ($\bar{x}$) of 3.456. In like manner, it was also confirmed that the audit process in the public sector is always quick enough for management to take action and this was revealed on a mean score ($\bar{x}$) of 3.429. It was also revealed that time management is critical in meeting deadlines. This is revealed on a mean score ($\bar{x}$) of 3.508. Generally, it can be concluded to a high extent that timely audit contribution is associated with audit effectiveness such that the degree of association can be rated on a mean score ($\bar{x}$) of **3.457**.

Qualified Audit Personnel

Table 4.2: Descriptive Statistics on Qualified Audit Personnel

S/No	Item(s)	VHE	HE	U	LE	VLE	N	Sum	$\bar{x}$	Std. Dev.
1.	Audit process are mostly done by Certified Internal Auditor	5 (25)	102 (408)	39 (117)	24 (48)	21 (21)	191	619.	3.241	1.073
2	Auditing reporting standards in the	12 (60)	93 (372)	54 (162)	15 (30)	17 (17)	191	641.	3.356	1.025

	public sectors have been adequately kept									
3	International accounting standards are used to increase the credibility of financial report in the public sector.	14 (70)	93 (372)	50 (150)	12 (24)	17 (17)	191	653.	3.419	1.027
4	Globally accepted and understood standards are implemented in the ministries through automated systems	12 (60)	100 (400)	43 (129)	19 (38)	17 (17)	191	644.	3.372	1.048
5	Audit procedures adopted for verifications are satisfactory	19 (95)	87 (261)	48 (144)	21 (42)	16 (16)	191	662.	3.466	1.722
	Grand Mean								**3.371**	**1.179**

Source: Field Data (2023)

Table 4.2 shows the results of the descriptive statistics on qualified audit personnel. From the results of the analysis respondents confirmed that audit process is mostly done by certified internal auditor in the public sector and the responses of the respondents were rated on a mean score ($\bar{x}$) of 3.241. Similarly, respondents were of the view that auditing reporting standards in the public sectors are adequately done to enhance audit effectiveness and this was confirmed on a mean score ($\bar{x}$) of 3.356. Furthermore, it was also revealed from the respondents responses that International accounting standards are used to increase the credibility of financial report in the public sector and this was confirmed on a mean Score ($\bar{x}$) of 3.419. In like manner, it was also confirmed that globally accepted and understood standards are implemented in the ministries through automated systems and this is revealed on a mean score ($\bar{x}$) of 3.372. Also, it was revealed that Audit procedures adopted for verifications are satisfactory and this was revealed on a mean score ($\bar{x}$) of 3.466. Generally, it can be concluded to a high extent that qualified audit personnel handling auditing jobs enhance accountability in public sector governance and this is associated with audit effectiveness such that the degree associated can be rated on a mean score ($\bar{x}$) of **3.371**.

Test of Hypotheses; one and two, were tested using Multiple Linear Regression Analysis as reported in Table 4.3 as follows;

For the hypotheses one and twomultiple regression analysis technique was adopted as reported in table 4.3 and 4.5 refers to appendix below for comprehensive data set used for the study.

Table 4.3: Multiple Linear Regression Coefficients

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	2.232	.258		8.662	.000
	Time	.459	.172	.443	2.665	.000
	Quality	-.115	.178	-.108	-.648	.000

a. Dependent Variable: EG

Source: SPSS Statistics 23.0 Output from study data, 2023

Table 4.3 present the coefficients of the explanatory variables. The results show that Accountability in Public Sector Governance (APSG) vis-à-vis Timely Audit Contribution (TAC) and Use of Qualified Audit Personnel (UQAP) has a positive relationship on Effective Governance (EG) with the coefficient of TAC and UQAP having 0.46% and -0.12% respectively. This implies that an increase in percentage of the relationship between auditing effectiveness and accountability in public sector governance in Nigeria, as a result of Timely Audit Contribution (TAC) and Use of Qualified Audit Personnel (UQAP) led to increase in Accountability in Public Sector Governance (APSG) with a measure of 46% and 12% respectively in the understudy areas.

Furthermore, all the predictors standard error values is less than beta values, likewise all the t-test value is greater than standardized coefficients (beta) value with the Sig value of 0.000 less than 0.05 significant level at 95% confident level suggests that Accountability in Public Sector Governance (APSG) vis-à-vis Timely Audit Contribution (TAC) and Use of Qualified Audit

Personnel (UQAP) have statistically significant relationship on the Effective Governance (EG). The next Table 4.4 present the analysis of variances (ANOVA) in which all overall model is adjudged using the estimation of F-value statistics.

Table 4.4: Analysis of Variances (ANOVA)

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9.028	2	4.514	12.966	.000[b]
	Residual	65.800	189	.348		
	Total	74.828	191			

a. Dependent Variable: EG
b. Predictors: (Constant), Quality, Time
Source: SPSS Statistics 23.0 Output from study data, 2023

The ANOVA Table 4.4 results present the F-test which explained the joint relationship of the predictor variables on the dependent variable. The F-value of 12.966 with significance value of 0.000[b] less than 0.05 level of significance indicated that the overall model is statistically significant in explaining the relationship between the dependent and independent variables. The next Table 4.5 the multiple regression model summary.

Table 4.5: Multiple Regression Model Summary

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.547[a]	.549	.551	.59004

a. Predictors: (Constant), Quality, Time
Source: SPSS Statistics 23.0 Output from study data, 2023

Table 4.5 present the multiple regression model summary. The result shows that R-square is 0.547 and Adjusted R-square is 0.549. The R^2 of 0.549 calculated points to the fact that about 55 percent variation in the accountability in public sector governance in understudy areas of the relationship between auditing effectiveness and accountability in public sector governance in Nigeria is explained by the regressors. That is, 55% increase in the accountability in public sector governance can be explained by increase in Accountability in Public Sector Governance (APSG) vis-à-vis, Timely Audit Contribution (TAC), Use of Qualified Audit Personnel

(UQAP), while the 45% remained can be explained by others factor outside this model. The coefficient of multiple determinations, that is, the adjusted R^2 is also very strong at 55%. This showed a very strong explanatory power of the regressor in explaining changes in the dependent variables. Thus, following the foregoing multiple regression coefficient results and their significant values at 5% the hypotheses one, two, three, four, five and six can be restatement as follows,

Discussion of Findings

Test of Hypothesis (Ho_1)

Ho_1: stated that timely audit contribution does not have any significant relationship on effective governance in public sector of Nigeria. However, at 5% level of significant, the p-value is of timely audit contribution vis-à-vis effective governance in public sector of Nigeria is 0.000 less than 0.05 level of significance. Therefore, the study rejects the null hypothesis one stated earlier, and did not reject the alternative hypothesis which state otherwise, that there is positive significant relationship between timely audit contribution and effective governance in public sector of Nigeria. This finding is in agreement with findings of Bouzgarrou and Turki (2017) study found a significant positive relationship between timely audit contribution and effective governance in the public sector in Algeria. The results also revealed that timely audit contribution significantly predicted effective governance in the public sector. João (2020) findings of the study showed that timely audit contribution has a significant positive relationship with effective governance in the public sector in Angola. Furthermore, the study found that the level of compliance with audit recommendations is positively related to effective governance. However, Timely Audit Contribution is the act of giving quick and appropriate responses at the right time for public finance management in order to improve process of accessing accountability.

Test of Hypothesis (Ho_2)

Ho_2. stated that use of qualified audit personnel does not have any significant relationship on effective governance in public sector of Nigeria. However, at 5% level of significant, the p-value is of use of qualified audit personnel vis-à-vis effective governance in public sector of Nigeria is 0.000 less than 0.05 level of significance. Therefore, the study rejects the null hypothesis two stated earlier, and did not reject the alternative hypothesis which state otherwise, that there is positive significant relationship between the use of qualified audit personnel and effective governance in public sector of Nigeria. This finding is in agreement with findings of Silva and Lopes (2019) whose study found a significant positive correlation between the use of qualified audit personnel and effective governance in the public sector of Cabo Verde. The regression analysis showed that the use of qualified audit personnel significantly predicted effective governance in the public sector of Cabo Verde. Ndikum and Fombad (2017) findings revealed that there was a significant positive relationship between the use of qualified audit personnel and effective governance in the public sector in Cameroon. Specifically, the use of qualified audit personnel was found to be positively correlated with transparency, accountability, and efficiency in public sector organizations.

Conclusion

Based on the findings, the result in hypothesis one revealed that there is positive and significant relationship between timely audit contribution and effective governance in public sector of Nigeria. While hypothesis two result showed that there is positive and significant relationship between the use of qualified audit personnel and effective governance in public sector of Nigeria. Although, the most important facts about the results obtained in this study was the empirical justification for the existence of positive and significant association between timelyaudit contributionand accountability in public sector governance in Nigeria being mediated by control accounting system. This contention has both theoretical and practical underneath, which constitutes the basic drive of the next two phases of this study.

Recommendations

Following the implications as a result of the study outcome, the study therefore put forward the following recommendations for considerations**.**

The government should strive to encourage managers and directors in public sectors and by extension all other federal establishment, to adopt, invest and improve in auditing and its principles to enhance accountability through.

1.Timely audit contribution

Emphasis should be placed on timely audit contribution. To enhance effective governance, there is need for internal audit units to be timelier in audit contribution by providing information and resources to users quickly enough within the time frame to enhance accountability in public sector governance in Nigeria.

2.Use of qualify audit personnel

For effective governance, there is need for public sector to use person who is eligible for appointment as a statutory auditor under Part 42 of the Companies Act 2006. This would help them to upgrade themselves in order to meet challenges of modern internal audit and enhance accountability in public sector governance in Nigeria

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THE ANALYTICAL IMPACT OF THE NEW FISCAL SYSTEM AND INCOME ACCRUABLE TO THE FEDERAL GOVERNMENT OF NIGERIA

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ABSTRACT

The research employed a comparative analysis method to assess the impact of the Petroleum Industry Act 2021 (PIA) on the Government take (GT) from the NNPC/TOTALENERGIES Joint Venture (JV) in OML 58. It compared the fiscal treatment under the previous regime with the new fiscal system introduced by the PIA, focusing on revenue accruable to the Federal Government. The study collected and analyzed secondary data from the pre-PIA period (1965-2021) and the post-PIA period (2021-2052) to evaluate investment profitability and viability in OML 58 under both fiscal regimes. The findings indicate that the PIA's fiscal framework has the potential to reduce government revenue to attract foreign investment, requiring a careful balance between investment incentives and returns. Policymakers and stakeholders need to closely monitor the PIA's implementation to ensure sustainable growth in Nigeria's oil and gas industry amid global competition.

Key Words: Fiscal-Framework, Government-take, PIA.

1.0 Introduction

The Petroleum Industry Act 2021(PIA, 2021) was inaugurated on the 16th day of August, 2021. The Act covers all facets of oil and gas sectors, including governance, fiscal framework, administration, relations with host communities, and environmental protection. It is also anticipated to serve as the foundation for expanding the oil and gas industry (OGI) growth into other areas of the Nigerian economy (Resolution Law Firm, 2021).

Before Petroleum Industry Act was implemented, several restructuring initiatives to reform the OGI had been explored, but they were largely unsuccessful. Beginning as an omnibus measure, the Petroleum Industry Bill (PIB) was split into four separate bills before becoming a merged bill. The previous attempts to pass the Petroleum Industry Bill was known to have failed due to several reasons, including a lack of ownership, an apparent conflict between the interests of the National Assembly and the Executive, a perception that ministerial authority was being eroded, vehement opposition from the communities that host the petroleum industry, and pushback from investors regarding what they perceived to be anticompetitive provisions in the earlier versions of the Bill (KPMG, 2021). However, before it was officially signed into law, the Bill underwent several revisions to alleviate all parties' concerns.

With a known oil reserve of over 37,050 million barrels and crude exports of roughly 1,592 Kbopd, Nigeria has the greatest oil reserve in Africa (OPEC, 2021). Oil exports account for a sizable portion (90%) of the nation's foreign exchange revenues, highlighting the significance of the OGI to the Nigerian economy. Although the oil and gas sector have a strong economic position, it has been beset by "opaque licensing deals, bureaucratic barriers, and eye-watering corruption," which has led to low levels of foreign investment, severe environmental damage, and little to no economic development in Nigeria. Over the years, rather than using a single piece of legislation to control the oil and gas industry, many laws, regulations, and bodies were used. They included, among other things, the Niger Delta Development Commission, the Federal Republic of Nigeria's (FRN) 1999 constitution, and the Petroleum Act. Section 44 of the FRN Constitution gives the government control and management of the country's natural resources (FRN Constitution, 1999). The initiation of Petroleum Industry Act intends to offer integrated legislation for the whole OGI. Additionally, it also offers a structure for the growth of host communities and the Nigerian petroleum industry in terms of law, regulation, and finances. The Act's main objectives are to encourage accountability and good governance, commercialize the Nigerian National Petroleum Corporation (NNPC), and establish a favourable business climate for the expansion of petroleum operations. The Act will establish a new fiscal system and alter the taxes and royalties that OGI participants must pay (PIA, 2021).

The Nigerian Petroleum Industry structure favors a command-and-control regulation style (Dubai, 2014). The command-and-control strategy gives monitoring and compliance organizations a great deal of power when it comes to issuing specific laws and executing penalties (Baldwin et al., 2012). Despite numerous laws that established various regulatory agencies in the country's petroleum industry, including the Petroleum Price Regulatory Agency (PPRA), Petroleum Products Marketing Company, Nigerian National Petroleum Corporation, among others, the Department of Petroleum Resources (DPR) is considered to be the main regulator of activities in the upstream sector. The majority of the duties of the petroleum minister can be handled by the DPR legally (Odumosu, 2007). Setting policy, for example, to promote private sector participation and investment in the oil and gas sectors; managing government joint venture interests in the petroleum sector to maximize economic benefits obtained from Nigeria's oil and gas resources and to focus on ensuring the government's stake in all oil and gas agreements is maximized; requiring licenses for all oil and gas operations; and formulating policies to ensure growth in Nigeria's tech sector, to name a few. (Kaitah, 2021).

Nevertheless, there are sufficient precise restrictions, such as the Hydrocarbon Oil Refineries Regulation of 1965 and the Oil Drilling and Production Regulation of 1969. According to Baldwin et al. (2012), most laws and regulations need to be updated and capable of addressing the problems and circumstances of the present. Kyari (2013) identifies the regulatory flaws caused by the challenge and uncertainty in enacting specific policies and regulations that affect the industry while simultaneously fostering technological innovation. For example, the Petroleum Industry Bill has been stalled in the Senate for almost ten years. According to Baldwin et al. (2012), this resistance to change results from Nigeria's top-down control system, which has drawbacks.

In line with this, the organization of the Nigerian petroleum sector is centered upon four important parts, which include (Kaitah, 2021):

A. The Legislative Framework is regarded as the industry's major pillar.

B. The governing and administrative structures.

C. Local oil operators, non-governmental organizations, multinational oil companies (MOCs), and host communities are the oil investors.

D. The various fiscal regimes are derived from the legal and regulatory frameworks which regulate and reinforce the relationships between the parties and the functioning of the petroleum business.

In Nigeria, royalties must be paid on all petroleum output. The quantity and value of hydrocarbon resources are used to calculate the royalty. With value-based payments, the government will receive a portion of any unexpected gains from rising crude oil prices. A sliding scale royalty rate is used for petroleum production under the PIA to account for the risk brought on by the topography, the economy, and other variables. The rates range from 5 to 25%, depending on the production region. An additional sliding rate for the royalty computation is applied depending on the price of crude oil. 0 to 24 percent beginning at $70 per barrel and up to 25 percent when crude oil prices exceed $140 per barrel. Declining level royalties are more restrictive than thrusting level royalties from the perspective of IOCs. The government or contractor take data will significantly change due to the switch from the jumping scale to the sliding scale rate (Nwuke, 2021; NUPRC, 2022).

The government receives money from production bonuses at different stages of discovery and exploration. The hydrocarbon cost estimates do not include production bonuses based on production or overall production under the PIA. The determination of output bonuses may be contract-specific to attract investors.

The PIA also separates the oil and gas capital gains tax into corporate taxation and petroleum asset tax, which historically has been the main method of taxing petroleum.

All E&P companies working in the petroleum industry will now be required to pay the Corporate Income Tax (CITA), which did not apply to upstream companies before the PIA.

The PIA proposes a new tax for every firm involved in the production of hydrocarbons called the Hydrocarbon Resource Tax (NHT), similar to how it is done in many nations that produce hydrocarbons. Depending on which is higher between total profit and gross income, the NHT will be determined. The appropriate rates for onshore locations and shallow water PML are 50%; for borders and deep offshore PML, they are 30% or 2% of overall gross income. The PIA authorizes the Federal Inland Revenue Service (FIRS) to manage the NHT (Nwuke, 2021).

Education Tax: An additional 2% of the assessable profit will be added as education tax to the measurable profit. Capital allowances are not included in the quantifiable profit but are not deducted when determining the NHT or CITA.

Allowances and Disallowances; The PIA outlined the requirements for community responsibility while eliminating the investment tax credit (ITC).

Interests and Fees; The PIA mandates that only 80% of the total cost incurred beyond the borders of Nigeria may be subtracted from the calculation of the NHT to enhance the local content policy.

Special Allowances; Under the PIA, small farmers are urged to locate and create larger fields. The 2% hydrocarbon tax on gross revenue was used to fund this.

2.0 **Literature Review**

2.1 **Theoretical Framework**

The differing rights, obligations, and advantages for the IOC and host government under the various contract types are determined by two primary categories of contracts under the Petroleum Fiscal System. The two types are;

- The concessionary system, which is referred to as the Royalty/Tax system
- The contractual system

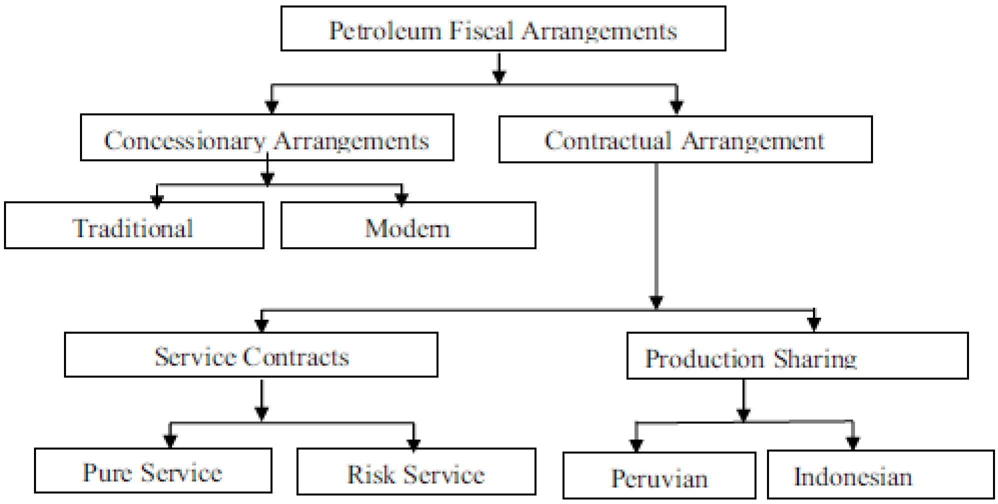

Figure 1.0: Forms of Fiscal Arrangement System (Johnson, 2006)

2.2 **The Concessionary System**

The IOCs are given access to the concession (permit, license, or royalty/tax) system through negotiation or bid, which provides them the only permission to explore, develop, and produce petroleum in a particular block. They own all the oil produced from the concession block and assume all investment and risk related to the E&P activities. While the concession is in effect, the IOCs pay the royalties in kind (oil and gas) or cash, and if there is a profit, they also pay income tax (Wang, 2007; Luo & Yan, 2010). The host government (or its national oil firm) can create a joint venture under a modernized concession system. The difference between JV and IOCs operating independently is that IOCs pay for all exploration costs. Once commercial oil and gas flow is discovered, the host country takes a certain percentage of development costs and operating costs (in cases where there is no carried interest) and recovers costs at a specific rate from the total income after deducting royalties. Nigeria now also uses the concession mode (Resolution Law Firm, 2021).

The host government uses the following fiscal tools to profit from the petroleum project under a concessionary contract (Kaiser & Pulsipher, 2004):

(A) Bonus: Certain occurrences result in bonuses being awarded. For instance, a vendor may pay a trademark bonus when an agreement is signed, or an exploration permit is granted. A production bonus is awarded when a field's productivity increases or reaches a certain level. These incentives may be taxable in some nations but not in others.

(B) Surface fees: During the discovery or operations and production, the developer may be required to pay average yearly levies to the host government, depending on the project's location (Shereih, 2016).

(C) Royalty: One of the most often utilized financial instruments globally is royalty. It indicates the contractor's monetary or in-kind payment to the host government. Amounts paid to a third entity besides the host country are overriding royalties. The only difference between the two calculations is who gets paid; the other factors are the same. Each host government has its unique system for implementing a royalty rate. Some businesses employ flat royalties, whereas others utilize other forms of royalties (Shereih, 2016). These dynamic rates may be determined, among other things, by yearly output, cumulative output, hydrocarbon price, or price and output combined.

(D) Tax on profit: The contractor is liable for various taxes, such as those levied on the export and import of the goods, as shown, for instance, in table 2.1, in addition to the regulations governing profit tax in the investing country. If the tax deficits from one contract are used to match the taxable proceeds of another contract in the same country, the tax structure used in this nation is referred to as tax consolidation or ring-fencing (Kasriel & Wood, 2013). The oil industry may be subject to additional taxes. Cash-flow taxes include the Brown Tax (BT) and Resource Rent Tax (RRT). A modified version of BT called RRT is only gathered after a return rate that corresponds to average earnings has been found. Although BT and RRT both take a share of the economic rent and, in theory, lessen the tax system's distortion, they have yet to be demonstrated to be a significant source of additional money in practice (Serova, 2015).

The attractiveness of the fiscal regimes available in the various jurisdictions is a crucial factor for multinationals involved in oil and gas exploration and production. To entice investors that take on the considerable risk associated with exploration while guaranteeing that the host governments maintain significant money for economic development, a complex fiscal framework that is stable and dynamic is required.

The fiscal terms of oil contracts are the main non-resource elements foreign oil corporations take into account when deciding whether to enter a country. For international oil corporations, a project’s viability and economic rewards are directly impacted by the fiscal terms, making them a crucial metric for assessing the country’s investment climate in the oil sector (Luo, 2010).

The Nigerian government passed the PIA 2021, which will serve as the primary regulatory document for the oil and gas industry, to provide the necessary connections with other economic sectors of the Nigerian economy and restructure the oil and gas business.

The provisions of the then-proposed Petroleum Industry Bill, which is now enacted as the PIA, were examined by Omowunmi in 2010. In order to assess how the draft Bill's fiscal provisions would affect offshore E&P economics, he constructed a deterministic and probabilistic model, which revealed that the government take might reach 92 percent.

The most popular comprehensive indicator for evaluating a contract's attractiveness is called GT. GT is the percentage of total project revenues during the contract that comes from the host country's income (Johnston, 1994). The income of the host country's national oil company and government take (GT) are included. It combines the effects of bonuses, royalties, the division of oil profits, all levels of taxation, government equity participation, and other elements into a single index. The contract becomes less appealing to the IOCs as GT increases (Luo, 2010).

An automated economic model for Deepwater E&P ventures was used to compare the fiscal regime in the Gulf of Guinea. The pre-PIA era's fiscal treatment was employed in the study by Echendu, 2011. However, the deterministic and stochastic outcomes showed that Nigeria's government could afford to advance due to higher proven reserves.

Progressivity, stability, adaptability, neutrality, and risk-sharing were established through this, and these are crucial requirements for both governments and contractors in both countries. He concluded that both nations have rigid budgetary policies that lack stability (Adeyemo, 2014). However, the pre-PIA budgetary policy served as the foundation for his efforts.

The amount a host government collects in GT significantly affects how appealing its fiscal system is and whether or not it will attract investors. The "price" of the area in the market for exploration land is mostly determined by the GT (Chakib, 1995).

METHODOLOGY

3.0 Research

This Study develops the evaluation strategy proposed by Luo and Yan (2010). Some of the elements used in this evaluation strategy include Government Take (GT), front loading index (FLI), and composite score (CS). These measurements were selected due to their thoroughness and capacity to show the income distribution ratio between International Oil Companies (IOCs) and resource-based countries under the joint influence of the fiscal regimes.

The study was conducted based on OML 58 of Nigeria's NNPC/Total Energies JV. OML 58 is located 30 kilometers northwest of Port Harcourt in the eastern Niger Delta. It is made up of conventional oil and gas fields located onshore and operated by Total Energies. The key oil and gas fields in OML 58 are Obagi and Obite fields respectively. Historical data for the oil and gas production was sourced from the NNPC Upstream Investment Management Services (NUIMS) database and Wood Mackenzi. Cost outlay was sourced from Wood Mackenzi.

For evaluating the petroleum fiscal regimes on OML 58 of the NNPC/TOTALENERGIES JV, the framework is based on the Discounted Cash Flow Method (DCF). The Government Take is determined using input from the cost outlay, production data, and revenue. The framework is shown in figure 3.1 In the analytical endeavour directed at assessing the petroleum fiscal regimes governing the operations within OML 58, a collaborative venture uniting the Nigerian National Petroleum Corporation (NNPC) with TOTAL ENERGIES, a robust framework has been meticulously fashioned, anchored upon the meticulous principles of the Discounted Cash Flow Method (DCF). This method, which stands as a cornerstone of modern financial analysis, furnishes a robust mechanism for evaluating the fiscal dynamics inherent in the exploration and extraction of petroleum resources, allowing for comprehensive insights into the interplay of revenues, costs, and temporal considerations.

The manifestation of this analytical journey within the visual embodiment of Figure 3.1 attests to the fusion of theoretical acumen and empirical praxis, underscoring the scholarly and pragmatic import of this evaluation within the realm of petroleum fiscal analysis.

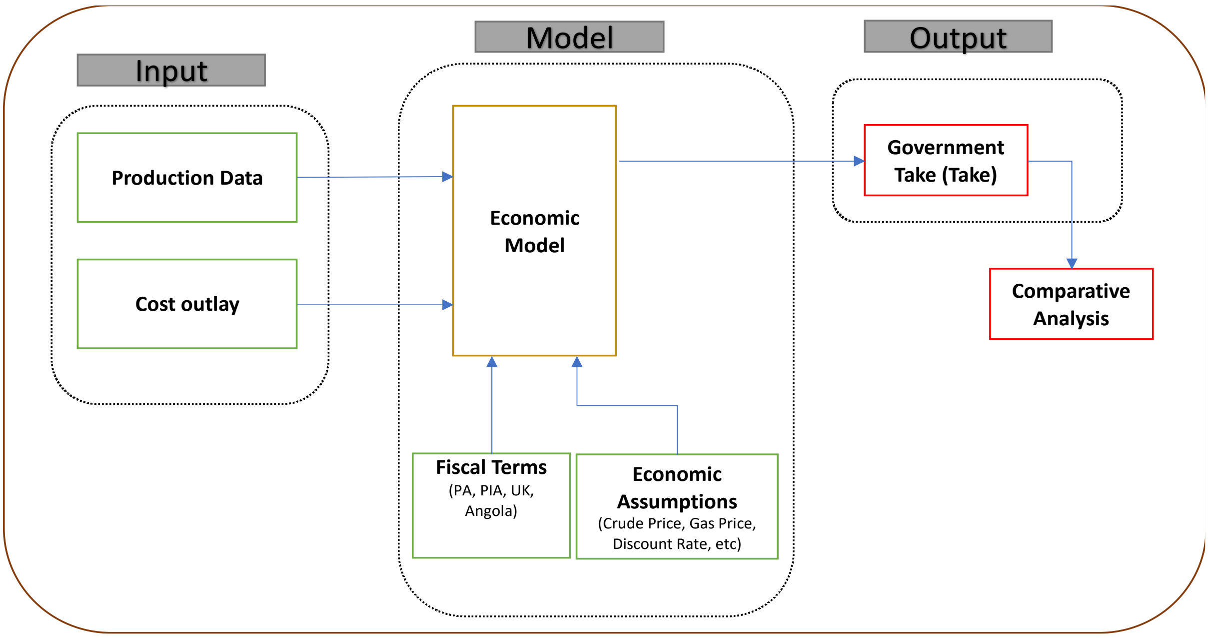

Figure 2.0: The modelling framework used for the study

Table 1.0: Cost Data for OML 58 (Wood Mackenzi)

Year	E&A Cost	Field Capex	Dev. Drilling	Transport Capex	Abandonment	CAPEX	OPEX	Total Cost	Sunk Cost
	$ million	$ million	$ million	$ million	$ million	$ million	$ million	$ million	$ million
1965		10	5	3	-	18	-	18	1
1966		20	10	-	-	30	6	36	1
1967		-	-	-	-	-	10	10	3
1968		-	-	-	-	-	-	-	-
1969		-	-	-	-	-	-	-	-
1970		30	10	-	-	40	-	40	-
1971		100	10	3	-	113	14	126	3
1972		100	10	3	-	113	31	144	3
1973		50	10	5	-	65	35	100	1
1974		10	10	-	-	20	46	66	2
1975		10	10	-	-	20	40	60	2
1976		10	10	-	-	20	42	62	2
1977		10	10	-	-	20	45	65	5
1978		10	10	-	-	20	46	66	3
1979		10	10	-	-	20	48	68	2
1980		10	10	-	-	20	52	72	2
1981		10	10	-	-	20	47	67	2
1982		10	10	-	-	20	60	80	6
1983		-	10	-	-	10	63	73	6
1984		-	10	-	-	10	67	77	2
1985		-	10	-	-	10	67	77	2
1986		-	10	-	-	10	58	68	2
1987		-	10	-	-	10	56	66	2

1988	-	10	-	-	10	62	72	5
1989	-	40	-	-	40	68	108	12
1990	10	-	-	-	10	74	84	20
1991	-	-	-	-	-	77	77	15
1992	-	-	-	-	-	76	76	20
1993	8	10	5	-	23	72	95	10
1994	20	10	-	-	30	53	83	10
1995	10	5	-	-	15	57	72	13
1996	-	5	-	-	5	47	52	20
1997	150	10	8	-	168	38	206	20
1998	180	10	8	-	198	36	234	-
1999	169	30	10	-	209	37	246	-
2000	50	10	10	-	70	138	208	-
2001	68	20	10	-	98	98	196	-
2002	70	10	10	-	90	108	198	-
2003	10	-	-	-	10	117	127	-
2004	100	30	-	-	130	128	258	-
2005	120	40	-	-	160	135	295	-
2006	150	30	-	-	180	175	355	-
2007	200	50	-	-	250	193	443	-
2008	340	60	-	-	400	168	568	-
2009	514	60	-	-	574	162	736	-
2010	540	60	66	-	666	189	855	-
2011	707	60	300	-	1,067	155	1,222	-
2012	500	45	450	-	995	153	1,148	-
2013	400	75	400	18	893	150	1,043	-
2014	100	75	340	-	515	154	669	-
2015	-	-	200	-	200	154	354	-
2016	-	30	150	8	188	166	354	-
2017	5	60	-	-	65	176	241	-

2018	10	60	-	-	70	184	254	-
2019	10	-	-	-	10	184	194	-
2020	-	-	-	-	-	160	160	-
2021	20	-	-	-	20	180	200	-
2022	-	25	-	-	25	161	186	-
2023	-	-	-	-	-	181	181	-
2024	364	-	52	-	416	183	600	-
2025	371	-	53	-	424	183	608	-
2026	162	-	-	-	162	210	373	-
2027	-	177	-	-	177	212	389	-
2028	-	135	-	-	135	217	353	-
2029	34	-	-	-	34	222	256	-
2030	-	-	-	-	-	224	224	-
2031	18	-	-	-	18	227	245	-
2032	-	-	-	-	-	231	231	-
2033					-	231	231	-
2034					-	228	228	-
2035					-	198	198	-
2036					-	195	195	-
2037					-	181	181	-
2038					-	141	141	-
2039					-	141	141	-
2040					-	121	121	-
2041				226	226	-	226	-
2042				230	230	-	230	-
2043				305	305	-	305	-
2044				267	267	-	267	-
2045					-		-	-
2046					-		-	
2047					-		-	

2048		-	-
2049		-	-
2050		-	-
2051		-	-
2052	-	-	-

Source: Asset Report for OML 58 (Wood Mackenzi Oct 2022)

The total of all annual revenues minus costs, taxes and investments is known as net cash flow (NCF). Simply put, it is the difference between the inflow and outflow of cash. It is money that has grown through time. Every capital investment project will have a financial inflow (cash receipt) and a cash outflow (cash disbursement) from the treasury.

Mathematically in Joint Venture Agreement (JV), NCF is given as (Mmakwe, 2009):

$$Net\ cash\ flow = Reciepts\ (Cash\ Received) - disbursement\ (Cash\ Spent) \quad (1)$$

$$Cash\ Recieved = Product\ Stream * Projected\ price\ of\ product \quad (2)$$

The equation clearly shows that the NCF can be either positive or negative depending on which is greater: receipt or disbursement (Mian, 2002). More specifically, a number of formulae are utilized to calculate the cash flow that is used to assess the viability and conduct an economic study of an E&P project (models).

These models are presented below:

Cost to Recover = CAPEX + OPEX (3)

Excess Cost Recovery (ECR) = Cost Recovery (CR) - Cost to Recover (4)

NCFBTaxC = Profit OilC + CR + %ageECR – Bonus - Total Cost (5)

Taxable income = NCFBTaxC - Crypto Tax + CAPEX - Depreciated amount - Expensed amount (6)

Petroleum Profit Tax (PPT) = %age Tax Taxable Income (7)

NCFATaxGovt = Bonuses + Royalty + Crypto Taxes + PPT + %share of NCFATaxT (8)

NCFATaxC = %share of NCFATaxT (9)

The equations defined above were used to build the economic model of the PIA fiscal system and the cash flow over the life of the projects was subsequently determined.

3.3.2 Host Government Take (GT)

The primary indicator of this Study is the government take (GT), as other indicators are derived from GT data. As a result, there are numerous techniques to calculate GT in the petroleum business. As explained in the literature study, the implications of several fiscal regimes are combined into one indicator by GT. The host nation's income as a percentage of the project's overall revenue during the contract's busy time is referred to as the GT. The GT equation, according to Bindemann (1999), is

$$GT = \frac{(NCF(Gov))}{(NCF(Gov) + NCF(IOC))} * 100\% \qquad (10)$$

where NCF (Gov) is the net cash flow of the host government and NCF (IOC) is that of the international oil company.

According to the interpretation of the GT indicator for the fiscal regime's attractiveness, "the larger GT is, the less appealing the fiscal regimes of the contract are to the IOC.

3.3.3 Government Take (Gt) Through Discounted Cash Flow Method (DCF)

The discounted host national take is determined using the Discounted Cash Flow Method (DCF), which is based on a specific discounted rate. Due to the long project life, DCF is taken into account for the time value of money. At a particular level of oil price and output, the host country's cash inflow and outflow during the project's life were modeled according to a specific discount rate, the present value of the host nation's income over the course of the entire oil/gas project is determined (Swe et al, 2018). The equation is

$$Government\ Take\ (GT) = Royalties + Taxes + 80\%\ of\ NNPC\ NCF) \quad (11)$$

3.3.5 Software Tool For Data Analysis

A statistical software tool was used for the calculations and analysis of the effect of the petroleum industry act on the government take. The tool used for calculation and analysis is Microsoft Excel. Risk was used to carry out a monte carlo analysis to determine the probability of getting the projected amount obtained from the deterministic model.

4.1 Results

The PIA (2021) included additional fiscal provisions that would only apply to existing acreages that have been renewed or converted, as well as acreages awarded under the PIA, where production level and oil price will determine royalty rates. The following rates on chargeable volume in the relevant areas will apply for royalties based on output for crude oil and natural gas production. Company Income Tax (CIT) and Hydrocarbon Tax (HT) will take the place of the Petroleum Profit Tax (PPT). The values of the economic parameters utilized in this analysis are displayed in Table 4.1.

- **General Assumption**

PIA Conversion Year:	2023
Look Forward Year:	2023
Look Forward Oil Price ($/bbl):	60
Look Forward Gas Price ($/mcf) – Export:	2.5
Look Forward Gas Price ($/mcf) – Domestic:	1.96
BOE Conversion Factor:	5.8
Intangible Development Well Cost:	90%
Tangible Development Well Cost:	10%
Discount Rate:	10%

- **Model Parameters**

Table 4. 1: Fiscal terms used for analysis

Fiscal Terms	Rates
NDDC Rate	3%
NDDC Start Year	1999
NCD Rate	1%
NCD Start Year	2010
Education Tax Rate (prior 2022)	2%
Education Tax Rate (2022 Beyond)	2.50%
Year for New Edu Tax Rate	2022
Host Community Fund Rate	3%
HCF Start Year	2022
Capital allowance: year 1-4	20%
Capital allowance: year 5	19%
CIT Rate	30%

Table 4.2: Fiscal Terms Applicable Pre-PIA (Petroleum Act era)

Petroleum Act Terms	Rate
Oil Royalty Rate	20%
Gas Royalty Rate	7%
Petroleum Investment Allowance	5%
PPT Rate	85%

Table 4.3: Fiscal Terms Applicable Post-PIA

PIA Terms	Rate
Production Allowance_1 (% of oil price)	20%
Production Allowance_2 ($/bbl)	2.5%

Table 4.4: Royalty by Terrain (Onshore)

Oil Prod (kbopd)		Rate
0	5	5.0%
5	10	7.5%
10	above	15.0%

Table 4.5: Royalty by Oil Price

Lower Limit ($/bbl)	Upper Limit ($/bbl)	Price Royalty	Gradient
0	50	0%	0.0%
50	100	5%	0.1%
100	150	10%	0.1%
150		10%	
Export Gas Royalty			5.00%
Domestic Gas Royalty			2.50%
NHT Rate			30%
CPR -Cost Price Ratio			65%

4.1.2 Production Data Analysis

Oil production from OML 58 commenced in 1966 as depicted in figure 4.1, but operations were halted between 1967 and 1971 which was due to the Nigerian Civil war (Wood Mackenzie). Production is forecasted to zero out in the year 2041. This historical pause in operations was a consequence of the war's disruptive impact on the industry. Fast-forwarding to the foreseeable future, a projection suggests that oil production is anticipated to gradually decline, ultimately reaching a complete halt by 2041.

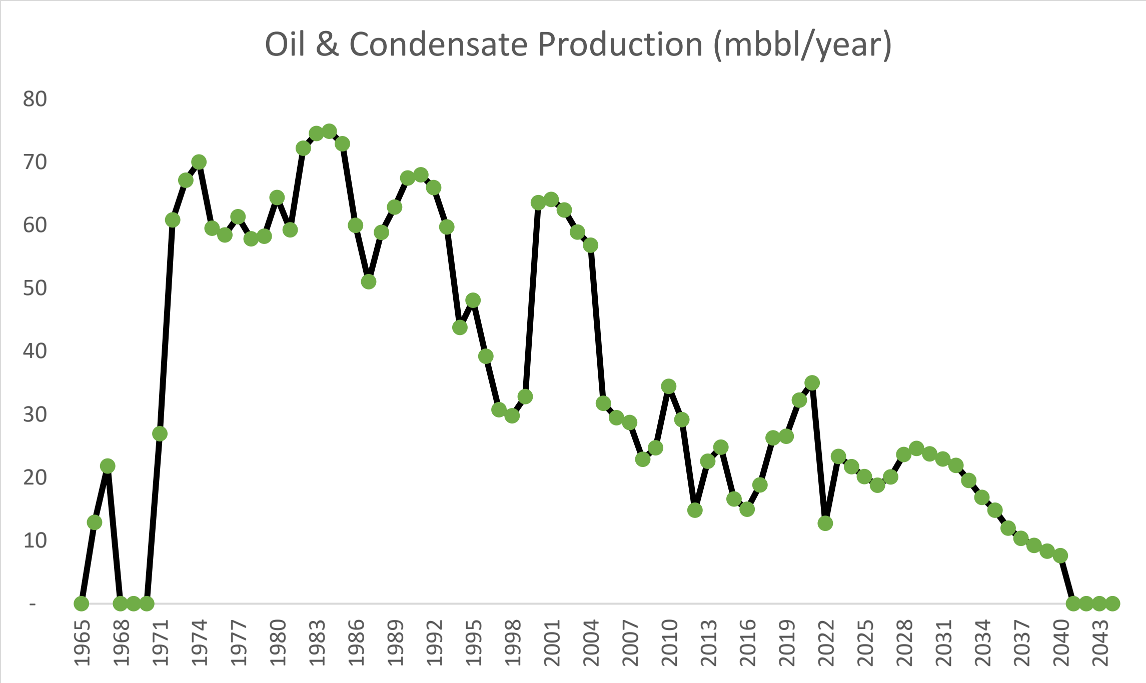

Figure 4. 1: OML 58 Oil & Condensate Production Profile

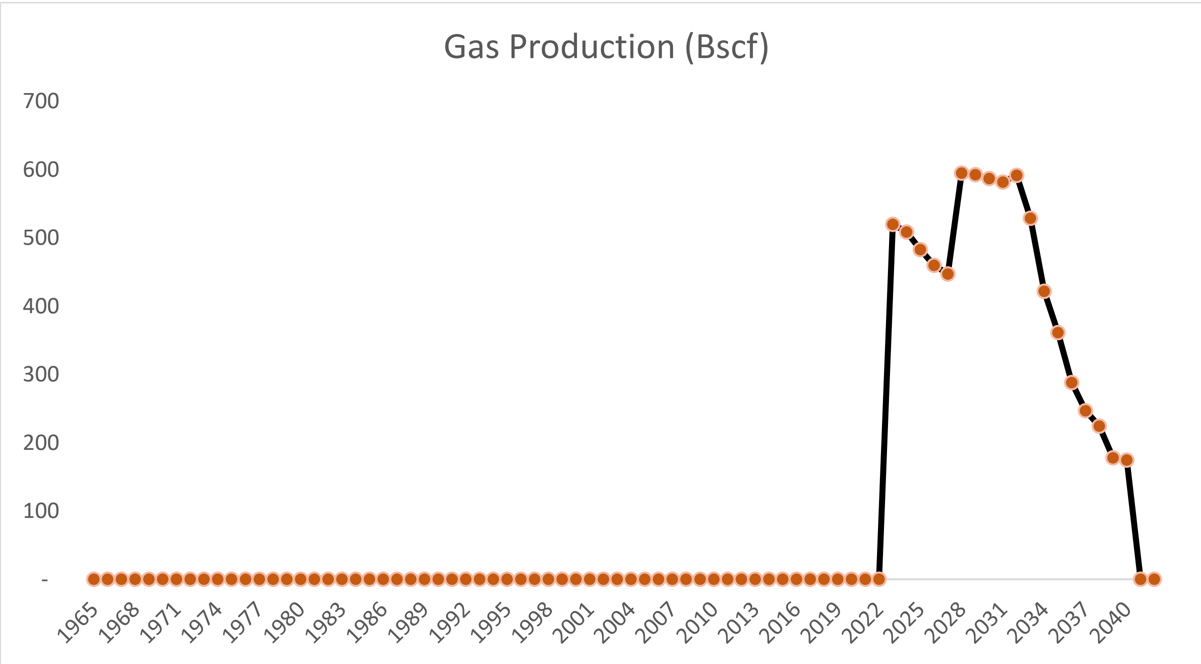

Figure 4. 2: OML 58 Gas Production Profile

Gas production continually increases until it reaches its maximum in the year 2032, after which it begins to reduce at a fast rate.

4.1.3 Cash Flow Analysis

From the model, it was observed that there was a reduction of 32% in royalties and 11% decrease in taxes that will be paid to the government using the fiscal terms of the PIA compared to the amount using the provisions of the PA. figure 4.3 and 4.4 depicts this respectively. However, the NCF increased by 20%.

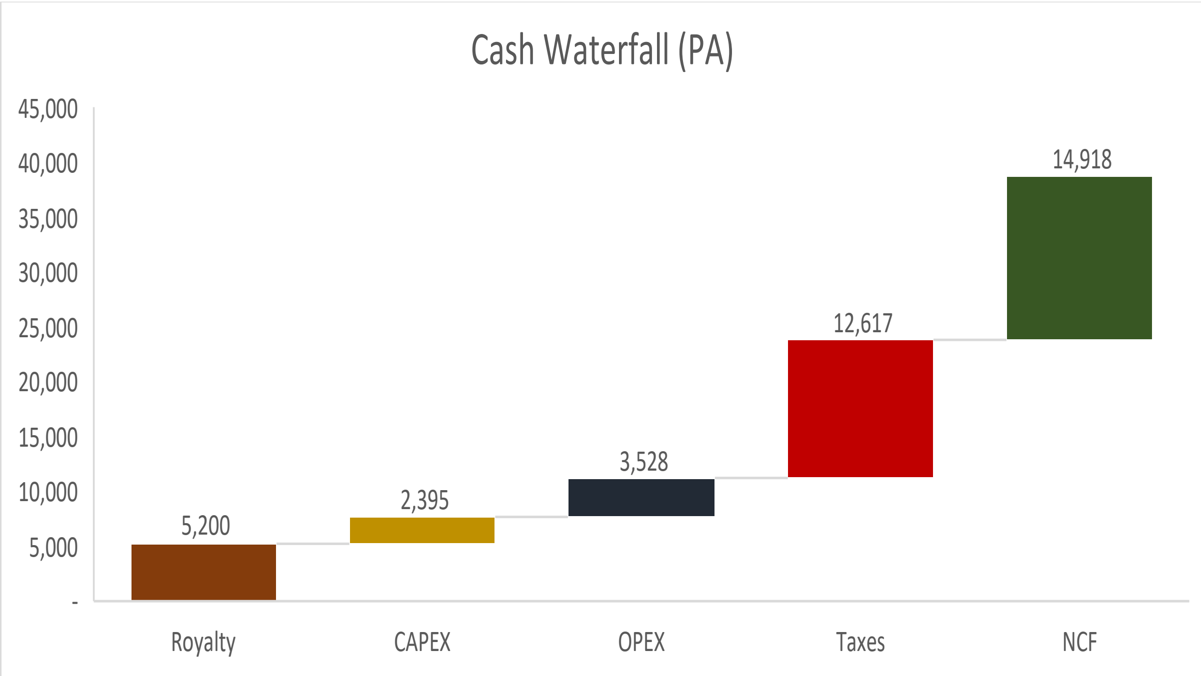

Figure 4. 3: Cash Waterfall for OML 58 under the PA fiscal provisions.

4.1.4 Sensitivity Analysis

Figure 4.4 depicts the sensitivity analysis that was conducted to determine the effect of the various factors that can affect the cash flow. The tornado chart indicates that oil and gas production have the highest impact on the net present value using a 10% discount rate.

4.2 Discussion of findings

4.2.1 Comparison of Government Revenue for Pre and Post Pia

In line with the intention of the PIA to attract investment into the oil and gas industry, the revenue accruable to the Nigerian government from the OML 58 operations was reduced by 5% over the life span of the project. Total Government take over the life span of the project will be 23.4 billion dollars in the PIA scenario while in the PA scenario it will amount to about 25 billion dollars. Figure 4.3 is a graphical representation of the decline in government take when the fiscal terms of the PIA were applied compared with the PA terms.

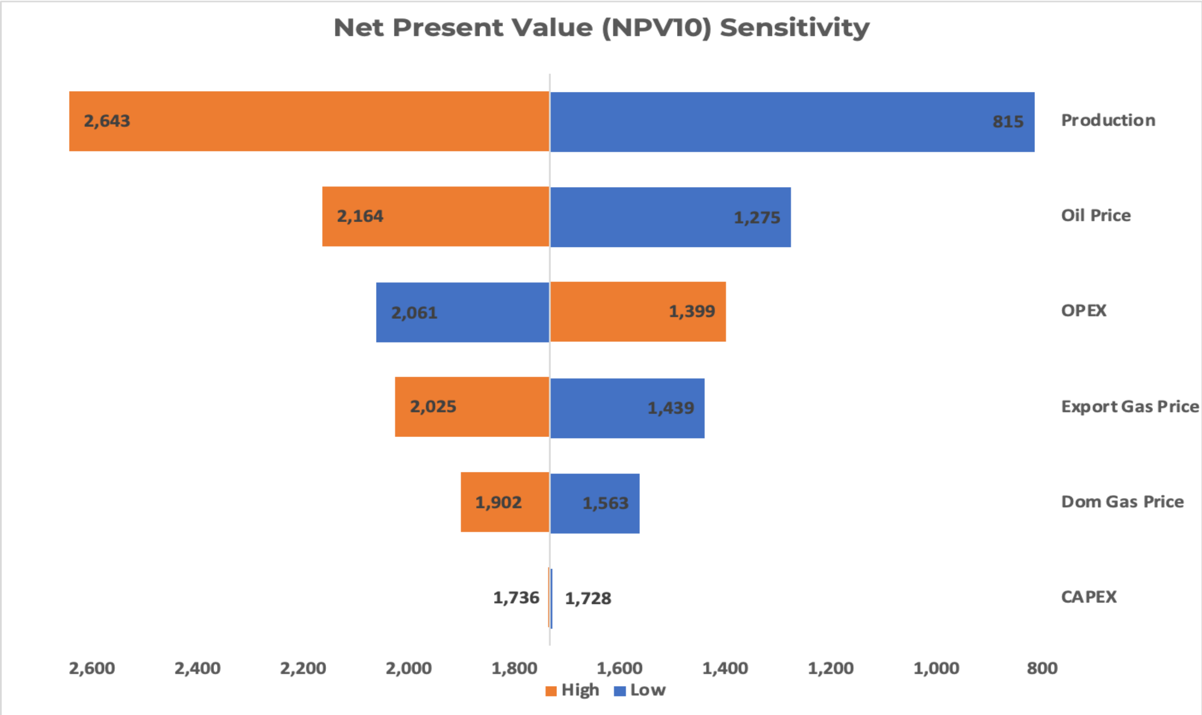

Figure 4. 4: Net Present Value Sensitivity analysis.

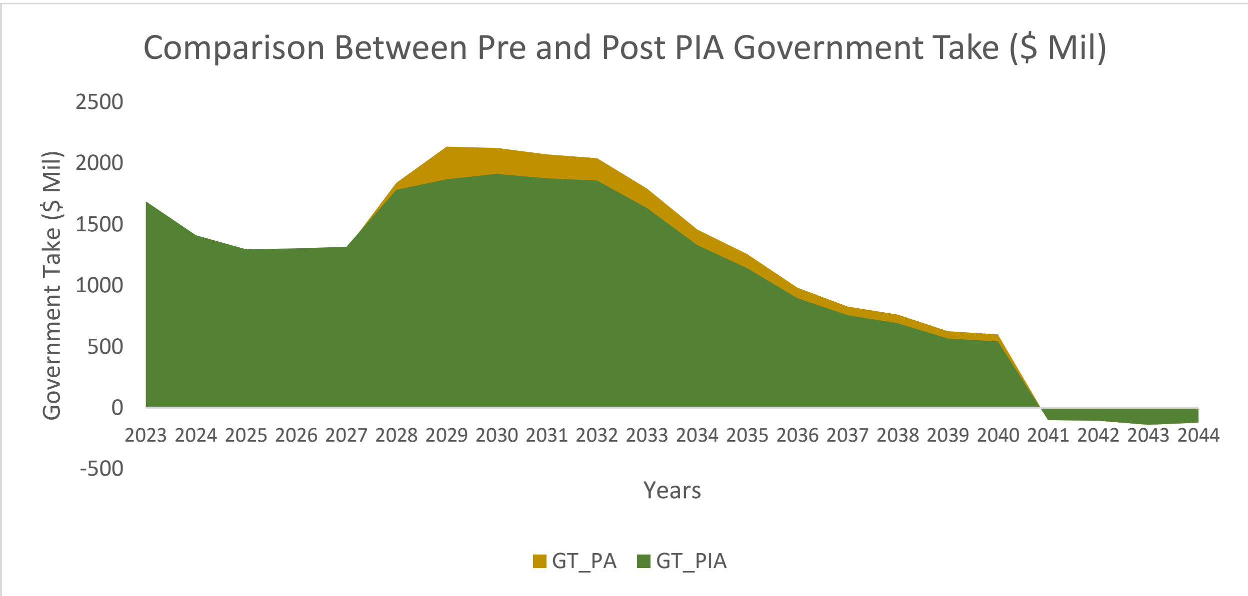

Figure 4. 5: Comparison between Government revenue for post and pre-PIA

Table 4.6: Revenue Allocation

	PA Scenario ($ million)	PIA Scenario ($ million)
Government Take	24,978	23,397

NNPC Net Take	1,790	2,155
TotalEnergies Take	5,967	7,183

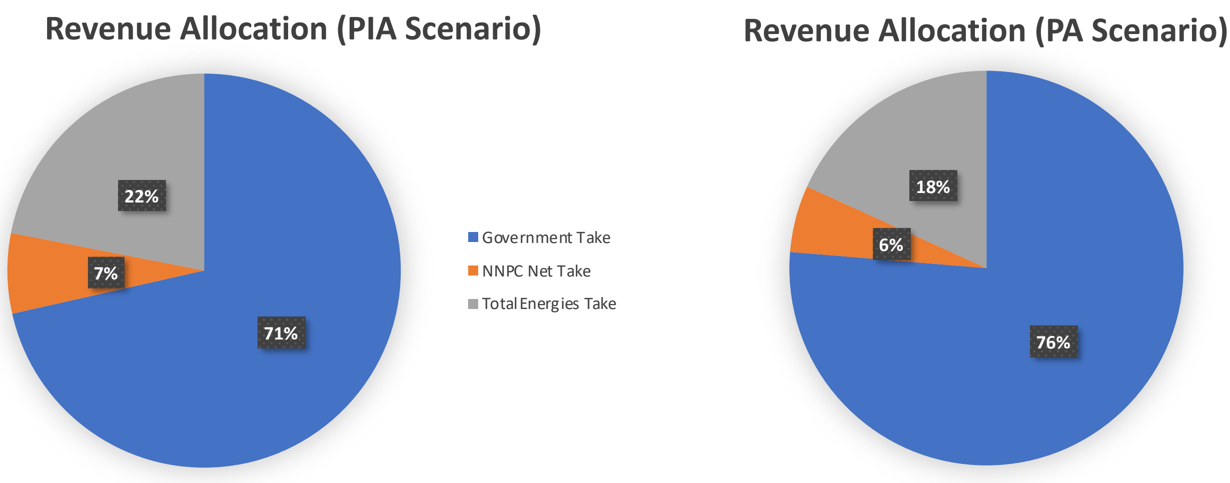

Figure 4.6: Revenue Allocation

From the result of the model, it was observed that there will be an increase of $1.2 billion dollars in revenue for TotalEnergies if it were to convert upon expiration of the OML in 2023. This represents 4% increase if the old PA terms was used until the end of life of the project. Table 4.6 represents the revenue allocation in a tabular form and graphically in figure 4.3

4.2.2 Comparison of Government Revenue, and IOC Revenue for Post-Pia and Pre-PIA

The PIA is an endeavor by Nigeria to adapt to the changing market while attempting to attract and retain investments that will fuel sector growth. This is accomplished by having fiscal policies that are generally more equitable and by having strong governance and administrative frameworks. It is necessary to compare the change in international company revenue with the change in government revenue for both pre-and post-PIA to assess the PIA's potential to attract investors to Nigeria. The graphical representation of government revenue concerning international oil company revenue for the pre-PIA and post-PIA periods, respectively, is shown in Figures 4.4 and 4.5.

Figure 4.4 and 4.5 shows that the IOC revenue for post-PIA was higher than pre-PIA, which can be seen in Figure 4.5.

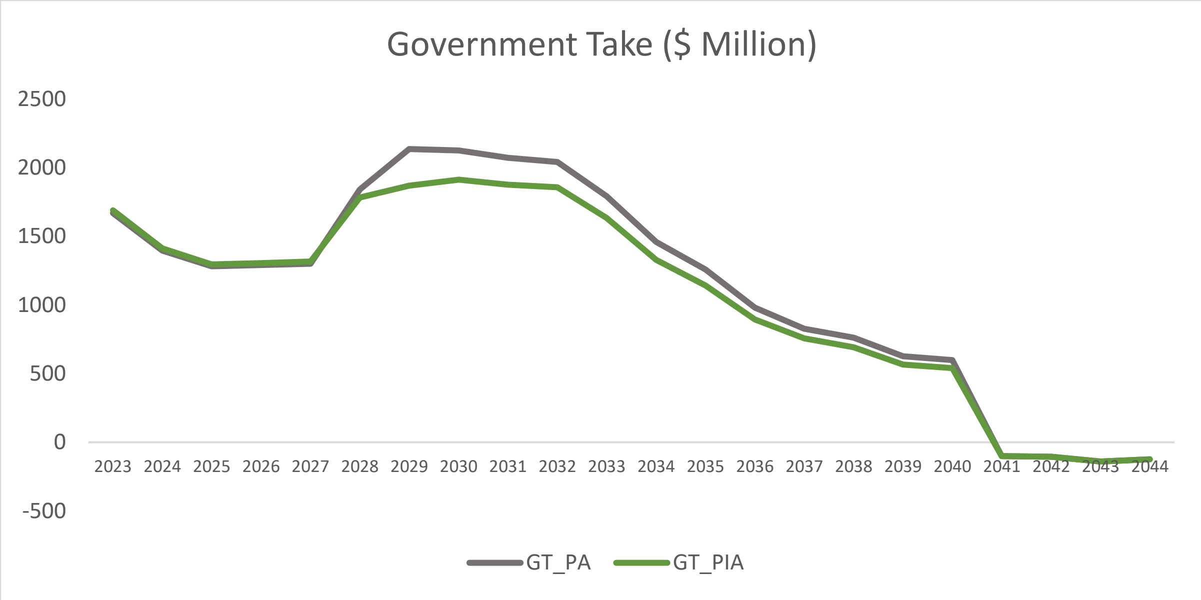

Figure 4. 7: Government Take Comparison Pre and Post PIA

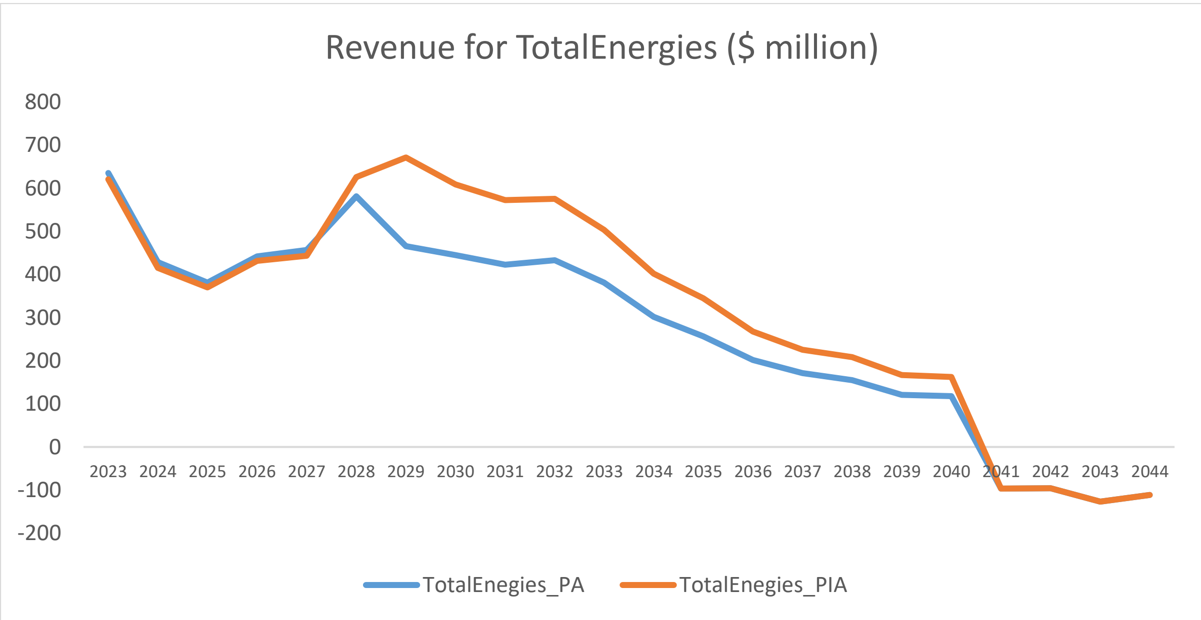

Figure 4. 8: Total Energies Take Comparison Pre and Post PIA

Monte Carlo Simulation

The result of the Monte Carlo analysis conducted shows that there is a 90.3% probability that the government take from the OML 58 will be 5.5 billion dollars. The graph in figure 4.6 indicates the result. The culmination of the Monte Carlo analysis undertaken yields a statistically significant insight, denoting a conspicuously high likelihood. Specifically, the findings delineate a substantial 90.3% probability pertaining to the government take emanating from the OML 58 venture, attaining the quantum of 5.5 billion dollars. This probabilistic revelation, underpinned by meticulous computation and analytical rigor, serves as an instrumental contribution to the understanding of the fiscal implications within this context.

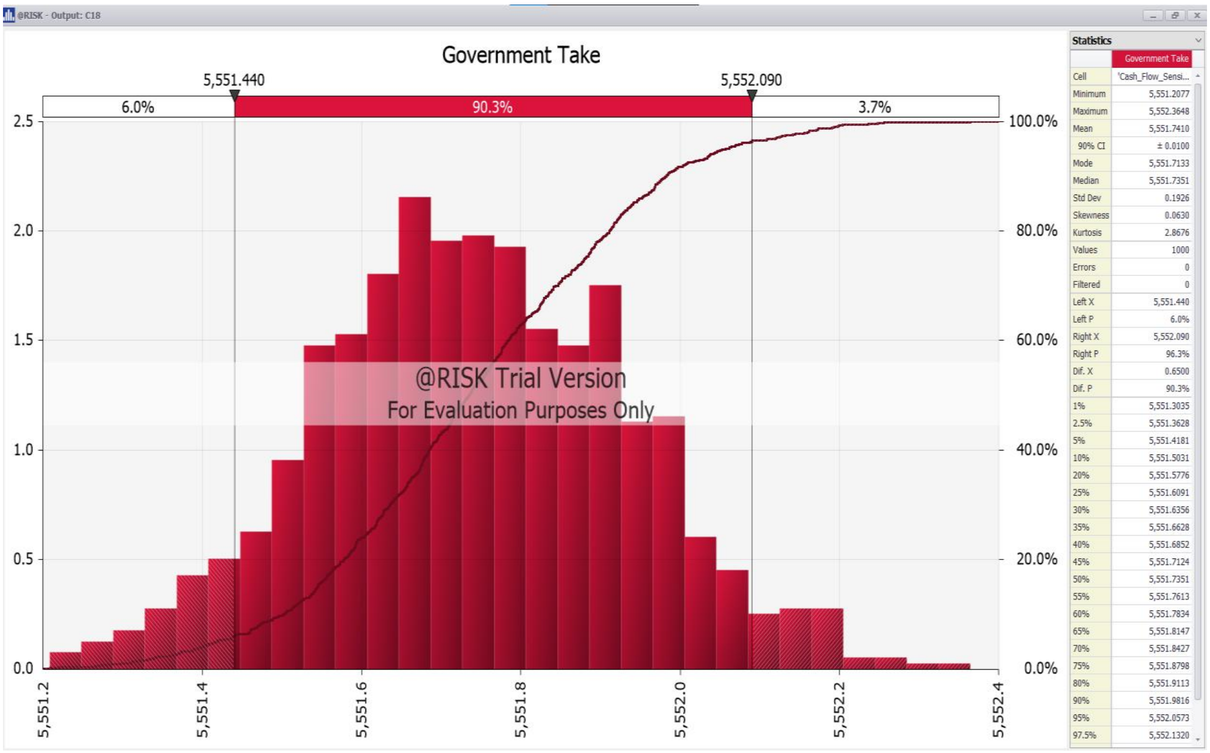

Figure 4.9: Monte Carlo Simulation for Government Take. (Source: Output of @Risk)

5.0 Conclusions

The Nigerian economy largely depends on its petroleum resources, a major government income source. However, the oil and gas sector has failed to impact other sectors of the economy to facilitate sustainable development and economic growth of the nation. The Petroleum Industry Act (PIA) offers a chance to reposition the petroleum sector institutions and fiscal regimes to enable the growth of the industry and provide the desired multiplier effect on other sectors of the economy. This study reviews the impact of the PIA on the revenue accruable to the government from its JV investments using OML 58 as a case study with the aid of an excel based deterministic model to determine the GT.

5.1 Recommendations

The studies carried out indicate a reduction in the total revenue accruable to the FGN, as such it is recommended that

1. The FGN should create policies that will enforce the usage of the various funds (Host community funds, Frontier Exploration Fund, etc) established by the PIA for the intended purpose. This will facilitate the desired linkage between the oil and gas industry and the other sectors of the economy.
2. It is also recommended that a policy that enforces all government agencies that operate within the oil and gas industry signup with the Nigeria Extractive Industries Transparency Initiative (NEITI) to promote transparency, accountability, and citizen participation in government.

The Petroleum Industry Act (PIA) of 2021 represents a significant milestone in Nigeria's efforts to reform and revitalize its oil and gas industry. With the aim of attracting investments and promoting sustainable growth, the PIA introduces a new fiscal framework that includes reduced royalty rates and amended tax laws. While these measures are designed to make investments in the Nigerian oil and gas sector more attractive, it is essential to carefully consider and plan for the potential impact on government revenue, given the country's heavy dependence on the petroleum industry for its major source of income.

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An empirical analysis of Government Expenditure and Economic Growth in Nigeria: A Disaggregated Approach

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Abstract

This paper represents part of a larger research agenda to assess how fiscal policy inf1uences economic growth in Nigeria. The paper attempts to assess the impact of government expenditure on economic growth in Nigeria by adopting a disaggregated approach to the study. The essence of the study is to determine the components of government expenditure that enhances growth, identify those that do not, and recommend that they should be cut or reduced to the barest minimum. The paper is broadly consistent with literature and it opens new grounds by focusing on the long-run impact of fiscal policy. The analytical framework is based on econometric methodology encompassing, test for stationarity, test for cointegration and the specification of an error correction model. The study found no significant relationship between most of the components of government expenditure and economic growth. The estimation results were mixed, in particular some of the variables were weakly significant. However, it provided important clues to the future direction of research.

Keywords: Government Expenditure, Economic Growth, Capital Expenditure.

I. Introduction

Developing economies have been faced with an increasing size of government operations, and its impact on economic growth has become an emerging major public debate. However, the observed growth in public spending appears to apply to most countries regardless of their level of economic development. Indeed as early as (1893) Adolf Wagner had formulated the law of expanding state activity, which sta tes that government spending leads to higher levels of economic development. The postulate was derived primarily from the nineteenth century German experience of rapid industrial and economic growth. The basis of this being that sectors with high social priority and low rates of return would not attract private investment and, hence, the need to channel government funds.

The aim of government is to attain better allocative and distributional equality through greater disbursement of public and quasi-public goods. Government intervention could be seen as an important part of public expenditure aimed at achieving optimal outcomes with respect to supply of these public goods. However, given the degree of openness of less developed countries, the trade dependency and the vulnerability to external shocks, the role and size of government becomes paramount to adjustment and stabilization programmes. Two school of thoughts exist in the discussion of the size of government. The first argues that larger government participation is inimical to efficiency, productivity and growth in the system. The basis for this view is that the public sector is not responsive to market signals; it has an enormous regulatory process that engenders higher production costs; and is prone to distortions arising from both fiscal and monetary policies. On the other hand, those in favour of government articulate the need for the provision of certain goods and services that would otherwise not be provided by the private sector, in order to place the economy on a predetermined growth path.

The premise of the latter position is the failure of the market arising from externalities. Empirically, there is a lack of consensus on the impact of the size of governmen t on growth. Also, economic theory docs not provide a well-developed methodology for incorporating government in standard growth models. Studies that have found a negative relationship between the size of government and growth include Landau (1986) and Barro (1990). Others that have found a positive relationship arc those of Enwczc (l 973), Longe (l 98-l), Ram (1986) and Aschauer (1989). Majority of the studies have utilized aggregate measures of government size in the form of either growth in government consumption or government consumption as a ratio of GDP. The purpose of this paper is to identify those expenditures that may or may not contribute to economic growth with a view to recommending that such expenditures considered inimical to growth be eliminated or reduced to the barest minimum. The analytical section of the paper will determine which categories of government expenditure is growth inducing, particularly for purposes of fiscal adjustment. The author recognizes a gap in the study with respect to government expenditure. The author recognizes that there is a need to clearly and properly separate government expenditure into government consumption, expenditure and government investment expenditure for a better and meaningful analysis of the impact of government expenditure on economic growth. This is an area for further studies. The paper is organized into six sections. .

Literature Review

Although there is no shortage of opinion, theory and evidence are notably sparse. The provision of social and physical infrastructure through public investment and expenditure on some goods and services theoretically, can increase productivity in the private sector when there is an efficient allocation of resources. Other benefits of government intervention include the correction of market failure and the preservation of property rights through legislation as well as the provision of security services. Conversely, from an accounting perspective, an increase in government consumption is achieved at the expense of capital formation or private consumption. Some development economists of the structuralism school proof that some categories of government expenditure are necessary to overcome constraints to economic growth (Chenery and Syrquin, 1975).

The findings of Landau (1983) indicated that the share of government consumption to GDP reduced economic growth. This is consistent with the pro-market view that the growth in government constraints overall economic growth. These findings were robust to varying sample periods, weighting by population and a mix of both developed and developing countries (10-l countries). The conclusions were germane to growth in per capita output and do not necessarily speak to increase in economic welfare. In a later study, Landau (1986) extends the analysis to include human and physical capital, political, international conditions as well as a three-year lag on government spending in GDP. Government spending was disaggregated to include investment, transfers, education, defense and other government consumption. The results in part mirrored the earlier study in that government consumption was significant and had a negative influence on growth. It was not clear why laggrd variables were included given that the channels through which government influence growth suggest a contemporaneous relationship.

Hemming (1991), observed that, it is more likely that growth is influenced by the composition of expenditure, since certain types of expenditure may be more growth inducing. Critical among these types of spending are provision of socio-economic infrastructure, operations and maintenance, and general administrative and legal frameworks. Three studies Gould (1983), Saunders (1985), and Smith (1985) explore the first correlation using somewhat different countries and time periods. Smith and Saunders found that higher levels of government spending arc associated with slower growth; Gould found a mildly positive correlation. None of the studies is especially rigorous or comprehensive, and all the results are statistically weak or highly sensitive to outliers. For example, Smith no longer finds a strong correlation in the OECD countries if Japan, with its high growth rate and low government expenditure, is excluded.

Dervis and Petri (1987) found that the developing economies that grew the fastest between 1966 and 1984 had low shares of government spending in GDP, although this correlation appears in r egressions that include policy, structural, and external variables. Barro (1990) further notes that for a broad group of 98 countries, growth in real per capita GDP was positively related to initial human capital and negatively related to share of government consumption in GDP, The work of Ashauer (1989) focused on a demand side hypothesis that a high marginal productivity of government spending would yield multiple expansions in output. To the extent that these expenditures are productive, a reduction in expenditure may affect longer form movements in productivity.

The income effects arising from government expenditures feed into Wagner's law that addresses the income elasticity of public goods. Although his findings, which employed US data, indicated that nonmilitary public capital and, in particular, 'core' infrastructure were important to productivity, they did not support Wagner's hypothesis. Ram (198G) marked a rigorous attempt to incorporate a theoretical basis for tracing the impacts of government expenditure on growth through the use of production functions specified for both public and private sectors. The data spanned 11 countries sufficient to derive broad generalizations for the market economies investigated. The impact of government spending on growth acted through two channels, the "externality" and the "differential productivity" effects related to the relative productivity of factors employed in the public as opposed to the private sector. He attempts to distinguish between these effects in the estimation of a growth equation using cross-sectional data for 19G0-70 and 1970-80 from the Summers and Heston data set, as well as separate time series estimation for individual countries.

Real government consumption is his measure of government size. The model finds a positive relation between growth in government and overall economic growth. Ram concludes that the externality and differential productivity effects are positive, so productivity in the government sector appeared to be higher than in the private sector, at least in the l 9G0s sub sample. When investigating the effect of government on economic growth in Saudi Arabia, AlYousif (2000) used two different models and obtained contradictory results. However, he found the model with positive relationship between government size and economic growth more applicable and, therefore, concludes that government size could have a positive effect on economic growth. Foister and Henrekson (2000) found a robust negative relationship between government expenditure and growth. Their study was carried out in rich countries between the years 1970 - 1995. Their estimated coefficients suggested that l0 percentage increase in government expenditure is associated with a decrease of 0. 7 0.8 percentage points in growth rate.

Like the rest of the developing countries, in Nigeria less attention has been gi\'en to examining the productiveness of the various components of public spending. This is borne out of the observation that the primary objective of fiscal policy is aggregate demand management (Diamond 1990). By and large, this view places prominence on aggregate government expenditure and appears unenthusiastic to differentiate between or among the various components of public expenditures. Longe (1981) examined the growth and structure of government expenditures in Nigeria with a view to ascertaining if the pattern fits with the results of similar studies for other countries, which attempt to establish general patterns of government expenditure. His study found that government expenditure has not shown any considerable structural shift over the review period, and that the ratio of government expenditure to GNP has been rising and corresponds with the rising share hypothesis.

Fajingbesi and Odusola (1999) analyzed the existing link between public out lays and economic growth in Nigeria with a view to recommending the appropriate expenditure reforms to embark upon using a vector error correction technique. The findings showed that real capital expenditure positively and significantly affected real output while the effects of real recurrent expenditure were relatively marginal. Odusola (1996) adopted a simultaneous equations model to capture the interrelationship between military expenditure and economic growth in Nigeria. This was necessary because of the inherent causal relationship between government expenditure and economic growth, making any deductions from a single equation model invalid. The study found that aggregate military expenditure was negatively related to growth at l 0% significant Jcel; and when decomposed into recurrent and capital expenditure, the former was more growth retarding than the later. Enwcze (1973) in his study of fourteen selected developing countries based on timeseries data, also found that the share of total government expenditures in national income was rising but the rising share was not associated with any functional component of total expenditures. Findings of Ekpo (1995) showed !hat capital expenditures on transport and communication, agriculture, health and education positively influenced private investments in Nigeria, which invariably enhanced the growth of the overall economy. Government capital expenditure on construction and manufacturing, crowds out private investments. The results were obtained from regressing the disaggregated components of government capital expenditures on private investment; using ordinary least squares approach with annual data for 1960-90. Exarnining the growth impact of recurrent, capital and sectoral expenditures over the period 1970-93, Ogiogio (1995) in his study observed the existence of a long-run relationship between economic growth and government expenditure. Contemporananeous government recurrent expenditures, however, had more significant effect than the capital expenditures, while five-year lags of capital expenditures are more growth inducing. The study also pointed out that government investment programmes in socio-economic infrastructure provides conducive environment for private-sector-led growth.

Structure and Trend of Government Expenditure in Nigeria

The structure of government expenditure is now considered by examining the total expenditures and the functional components of expenditures separately. This is as a basis for legislative oversight and a source of information about the end uses of each unit's expenditure. Recurrent expenditure is made up of all "consumption" items such as goods and services, personnel cost, overhead cost, etc; while capital expenditure include all expenses which contribute to long term development such as spending on National priority projects, social and economic infrastructure etc; (Fajingbesi and Odusola 1999).

Total Expenditure

The ratio of total expenditure to the gross domestic product has been rather volatile. Between 1970 and 1979, the ratio of total expenditure to GDP averaged 20.3 per cent. Between 1980 and 1989, the ratio oscillated be1ween 15.G per cent and 29.--l percentith 1980 recording th e peak and the trough in 198-1. From the I 990 to 1999, the ratio fluctuated between 11) per cent and 28.3 per cent Yith the peak recorded in 1999 and the trough in 199G. The ratio of to1al expenditure 10 GDP was 1-1.1 per cent and 18. l per cent for 2000 and 2001, respectively. Figure 1, shows a graphical presentation of the above scenario.

Recurrent and Capital Expenditure

Also, a similar pattern is seen when the two components of total expenditure are compared with GDP. The share of recurrent expenditure to GDP averaged 11.0 per cent between 1970 and 1979. It fluctuated between 8.3 per cent and 14.-1 per cent between 1980 and 1989 (with 1987 having the highest value and 1983 the lowest). The declining trend between 1980 and 1985 was as a result of the economic stabilization policies (expenditure cutting) embarked upon by the Shagari administration and towed by the Buhari/Idiagbon regime in 198-1. The Babangida administration also emphasized expenditure Stitching and reductions in the Structural Adjustment Programme (SAP). The declining trend between 198G andl989 could be explained by SAP. The same trend was seen between 1990 and 2001 with l 996 having the lowest value of -1.-1 per cent and 1993 a peak of 19.6 percent. A cursory look at the ratio of capital expenditure to GDP also shows a similar pattern. Within the period under review, the ratio was between 2.6 per cent and 20.0 percent with an average of 9.1 per cent, showing a sharper cut in the potentially productive public expenditures. As cited in (Fajingbesi and Odusola 1999), this was far below the average of 21 per cent and 16-17 per cent for African Countries and other developing regions as reported by Collier and Gunning (1991), contributing to the disappointing growth performance in the country.

Functional Components of Government Expenditure

Government expenditure items, whether recurrent or capital are usually classified into four major groups, namely: administration, economic services, social and community services and transfers. This is to make a clear distinction between productive and unproductive spending, as the second and third categories are considered to be more productive than the others.

Recurrent Expenditure

Government spending on administration averaged 32.9 per cent between 1970 and 1979, it fluctuated between 24.1 per cent and 48.6 per cent between 1980 and 1989 with a peak of 48.6 per cent in 1983. The increasing trend continued through 2001, but oscillated between 16.-l per cent and 38.7 per cent. Government spending on this component has been rather large. The largest in terms of size is transfer payment; it averaged 54.2 per cent between 1970 and 1979. It fluctuated between 27.0 per cent and 5-l.l per cent between 1980 and 1989 with a steady increase especially between 1984 and 1989. The trend fluctuated between -l3.0 per cent and

75.3 per cent between 1990 and 2001 with its peak in 1992 and the trough in 1997. Economic services and social and community services, which are required to act as "organs" for achieving economic growth and development and raise the quality of life of the people, averaged 4.8 per cent and 8.0 per cent between 1970 and 1979, respectively. Both components oscillated between 4.2 per cent and 10.3 per cent for economic services, and 3.0 per cent and 17.7 per cent for social and community services between 1980 andl989. Economic services continued to fluctuate between 3.-l per cent and 9.2 per cent through 2001, while social and community services showed an increasing trend during the same period (1990-2001).

Capital Expenditure

This is the cost of bringing into existence new institutions, services and-projects. Spending on economic services used to take a greater share of the capital expenditure before being taken over by administration in 1991. It declined at a rapid rate before being overshadowed. It showed an increasing trend from 8.3 per cent to 66.6 per cent between 1970 and 1979, and a declining trend from 58.8 per cent to 26.l per cent between 1980 and 1989, with its lowest value in 1986 (12.9 per cent). During the period 1990 to 2001, it gained momentum again and increased from 14.5 per cent in 1990 to 59.2 per cent in 2001. Following closely are administration and transfers averaging 24.6 per cent and 16.4 per cent between 1970 and 1979. Between 1980 and 1989, both oscillated between 3.1 per cent and 28.5 per cent, and, 2.2 per cent and 76.3 per cent, respectively. Administration fluctuated between 7.5 per cent and 22.2 per cent, while transfer fluctuated between 17.4 per cent and 75.9 per cent from 1990 through 2001. Social and community services, which are also important, followed slowly with an average of 15.3 per cent between 1970 and 1979. Between the 1980 and 1989 fiscal year, it ranged between 5.8 per cent and 24.2 per cent and 2.2 per cent and 12.2 per cent between 1990 and 2001, respectively. From the forgoing, it is seen that economic services and social and community

Services that are adjudged to be more development oriented than general administration have more or less not received much attention.

Theoretical and Analytical Framework

Neo-classical Theory of Growth

Most ideas concerning economic growth start from the aggregate production function where factors of production determine the national output. According to the coclassical theories, growth comes about in three ways if holding land fixed.

i. Increase in the labour supply
ii. Increase in the capital stock
iii. Increase in productivity

Increasing labour supply generates a larger output. Real output rises if more people take part in a country's production, i.e. through immigration, or if people who are not a part of the labour force begin working. Capital increase can be divided into two parts, increase in physical and human capital. Physical capital increase output because it enhances the productivity of labour and provides valuable services directly. A productive increase can for instance take place when investment in equipment likes computers and machinery, can reduce man-hours. Human capital promotes economic growth because people with skills are more productive than those without skills. Investment in human capital is made through e.g. formal (education) training and onthe-job training. Productivity mcrcases explain the increase in output that cannot be explained by the input increase (labour and capital). This is called the productivity of an input and can be affected by a number of factors. The most important factor is technology change, which affects the productivity in two stages. First, the advance in knowledge called inventions. Second, the use of that knowledge, which if it leads to a more efficient production is called innovation (Burda and Wyplosz, 2001).

Endogenous Growth Theory

Endogenous growth theory highlights the fact that if productivity is to increase, the labour force must continuously be provided with more resources. Resources in this case include physical capital, human capital and knowledge capital (technology). Therefore, growth is driven by accumulation of the factor of production, while accumulation in turn is the result of investment in the private sector. This implies that the only way a government can affect economic growth, at least in the long run, is via its impact on investment in capital, education and research and development. Reduction of growth in these models occurs when public expenditures deter investments by creating tax wedges beyond those necessary to finance their investments or taking away the incentives to save and accumulate capital (Foister and Henrekson, 1997). We sha11 start from the premise that the inconsistency in the results obtained in the past was due to the fact that the underlying process generating the data was not considered. We shall then test the extent to which the size of government expenditure would impact on economic growth, using time series data and taking into consideration the data generating process. This would be done by:

• Examining the nature of the relevant variables in the study for stationarity; and

• Examining whether or not there exists a long-run relationship between economic growth and government expenditure.

On the basis of the above, we would then deduce from the result which components of government expenditure promotes economic growth. This study will adopt a simple linear model a form similar to that used by Landau () 986) to examine the impact of government expenditure on economic growth. We specify a functional form thus: Y=f(TOTALGOVER MENTEXPE DJTURE) .... (1) Y = f(RE, CE) .... (2) Then; Y = f(CEl, CE2, CE3, CE4, REl, RE2, RE3, RE-t) .... (3) For the purpose of this study we specify the equation in log form; Ly,= c1o + a ,LCEl, + a2LCE2, + a,LCE3, + a,LCE4, + a5LRE1, + a,,LRE2, +a,LRE3,+ a.LRE4, +e, ... (4) Where: a,,= intercept, a,= elasticities of the independent variables, i, =] ,2, ... ,8 A priori, a,> 0. While, LY = Log of Gross Domestic Product; CEl, CEZ, CE3, CE-l = functional components of Capital fapenditure REl, REZ, RE3, RE4 = functional components of Recurrent Expenditure CEl & REl = Administrative component of Capital & Recurrent Expenditure; CE2 & REZ = Economic Service component of Capital & Recurrent Expenditure; CE3 & RE3 = Social and Community Service component of Capital & Recurrent Expenditure; CE-l & RE4 = Transfer component of Capital & Recurrent Expenditure. We shall then proceed to test for stationarity in and cointegration among the variables. If cointegrated, implying a long-run equilibrium relationship between the variables, we would then proceed ,to specify an error correction model. Engel and Granger (1987) stated that a homogenous non-stationary series, which can be transformed to a stationary series by differencing d times, is said to be integrated of order d. Thus, Y, a time series is integrated of order d [Y,~I(d)] if differencing d times induces stationarity in Y,. If Y,~1(0), then no differencing is required as Y, is stationary. The test proposed by Dickey-Fuller to test for the stationarity properties of a time series is called the Unit Root test denoted by DF. The regression equation for the DF class of unit root test is; 6 Y, =

Table 1: Testing Linearity against Smooth Transition Regression

Transition variable model	F	F4	F3	F2	suggested
LOGE(t)	9.5411e-08	1.2371e-01	6.7224e-02	2.9318e-08	LSTR1
LOGL(t)*	3.0724e-11	1.0550e-01	1.1025e-05	2.5114e-08	LSTR1
LOGK(t)	8.4540e-09	2.3600e-02	1.7304e-02	3.2087e-08	LSTR1
TREND	6.0072e-11	1.4493e-01	3.8013e-02	3.5410e-12	LSTR1

Source: Researchers' Computation (*J-Multi*)

The concept of cointegration derives from the fact that if two series X, and Y, are l(d), then X, and Y, are said to be cointegrated if there exist a unique value b which ensures that the residuals, (Y, - PX,) is 1(0). Testing for cointegration, therefore, amounts to testing for a unit root in the residuals of regression equation (4). If the residuals are stationary, then the series arc cointegratcd. The equation of the regression for this test is thus: k t:,. E, = a E,.1 + L a; t.. i;,.1 + µ. .... (7) 1-) Where: Et is the residual from our static regression and test for the null of no cointegration is conducted by comparing the t-statistic of the coefficients, a , to the mackinnon critical vales. The ull hypothesis of no cointegration is Ho: a = 0. Significant negative values would lead to a rejection of the null. The stationarity of the residual implies cointegration of the variables.

Source of Data:

The model uses annual data from 1970 - 2001. These were obtained from the Statistical Bulletin and Annual Report and Statement of Accounts of the Central Bank of Nigeria.

Major Findings Result from Stationarity Test: Table4a.

Table 2 Critical Values tests

Variable	ADF	Order of Integration
LY	-6.58382728	1(0)
LCE1	-4.98457289	1(0)
LCE2	-6.48941904	1(0)

LCE3	-3.67842834	1(0)
LCE4	-5.56734723	1(0)
LRE1	-7.25678572	1(0)
LRE2	-9.34567567	1(0)
LRE3	-4.87654455	1(0)
LRE4	-2.98765030	1(0)

5% Critical values for the tests are 2.6898767

Using the Mackinnon (1 991, 1996) critical values for cointegration test, we reject the null hypothesis of no conitegration and conclude that the variables are conitegrated at 5% level of significance. Adopting the general-to-specific framework, we proceed to estimate an over eparamaterised error correction model from where a parsimonious error correction model is obtained as shown in Table G. A critical look at the parsimonious model above shows that the past value of gross domestic product was negatively related to its current value and significant.

Variables	**Augmented Dickey-Fuller (ADF)**				**Philips-Perron (PP)**			
	Level		First Difference		Level		First Difference	
	Test Statistic	Critical value	Test Statistic	Critical Value	Test Statistic	Critical Value	Test Statistic	Critical Value
RGDP	-1.788	-3.562	-5.715	-3.568**	-1.866	-3.562	-5.715	-3.568**
TCE	-0.938	-3.215	-4.491	-3.568**	-0.198	-2.216	-4.896	-3.568**
TRE	-2.952	-4.284	-8.833	-3.218***	-2.940	-4.284	-26.271	-3.218***
GEE	-3.116	-3.562	-5.727	-4.323*	-3.108	-4.284	-18.020	-4.296*
GEH	-1.311	-3.562	-4.710	-3.218***	-1.392	-3.562	-5.510	-3.218***
GEP	-1.501	-4.284	-4.539	-3.568**	-1.478	-4.284	-4.402	-3.568**
GED	-1.944	-3.568	-5.128	-4.296*	-0.982	-3.562	-5.090	-4.296*
TO	-0.476	-3.587	-5.218	-4.356*	0.413	-4.284	-273.33	-4.296*
TI	-1.253	-4.284	-5.738	-3.568**	-1.253	-4.284	-5.738	-3.568**

Note: *, **, and *** indicate the presence of co-integration relationship at 1%, 5% and 10% significance level respectively.
Source: Author's Computation from E-views Output

Also, the apriori expectation of the signs was met in the past values of administration, economic services, social and community services and transfer components of recurrent expenditure, administration and transfer components of capital expenditure. Also the current value of administration component of recurrent expenditure and the current values of economic service and transfer components of capital expenditure met the apriori expectation of the sign. The other components were not properly signed even though significant.

Discussion of findings

The past (lags 1 & 2) values of administration, past (lag 2) value of economic services, past (lag 2) value of social and economic services, past (lag 1) value of transfer component of recurrent expenditure and the past (lag l) value of administration, current value of economic services, current and past (lag l) values of transfers component of capital expenditure were properly signed, but their coefficients are rather small. Though they would impact positively on economic growth, the impact would be minimal. The same reason above could be adduced for this. But the current value of the administration component of recurrent expenditure was also properly signed with a very large coefficient.

Recurrent expenditure has largely dominated government expenditures for most of the year under review, as shown in the significant components of recurrent expenditure. With respect to the pattern of the major functional components of government expenditure in total expenditure, the relevant factors in explaining their pattern might be political, social and economic.

The rate of adjustment parameter was relatively high, significant and appropriately signed, as indicated by the coefficient of the error correction variable. This shows that economic growth in Nigeria adjusts fairly to changes in the explanatory variables. This shows the existence of a long-run equilibrium relationship between economic growth and the variables that in0uence its short-term movements as used in the model. Thus, economic Policy

Conclusion

Governments over the years have proven to be bad managers of resources, which is why there is a global trend to reward market-oriented system of economic management. Governments have failed 10 play their role in the process of economic growth and development; hence, the need for the gradual withdrawal of government and increased participation of the private sector in the developmental process. The role of government should be reappraised with more emphasis placed on providing the enabling policy environment for private sector initiatives. The corresponding recurrent expenditure associated with the above mentioned capital expenditure would be eliminated with respect to the above expenditure. Nigeria's experience in public expenditure management has not been quite inspiring. The current economic crises, with the attendant macroeconomic problems high inflation, exchange rate distortions, debt overhang, BOP d is equilibrium and high unemployment - has been attributed largely to reckless and poor management of public expenditure, coupled with widespread corruption.

It is on this note that current literatures arc preaching the failure of Keynesian economics. The rate of adjustment parameter in the regression re-enforced the position that government is not a good investor. The magnitude of the parameter shows that it would take approximately four years for the economy to feel the impact of government expenditure in the system. This could also, be justified through the budget where the government expects to execute a budget worth trillions and yet the economy fell no impact of such a budget.

Recommendations

There is need for lesser government participation in economic activity and for government to concentrate on the provision of the enabling environment for the direction of economic activities in all sectors of the economy. This, among other things, calls for good governance as well as transparency and accountability in the use of public resources.

Government should stop capital expenditure on economic services and social & community services, since government is not supposed to make profit in the provision of these services.

Government should, therefore, only provide the enabling environment for the private sector to take over the provision of these services, so that there would be efficiency and reduction in cost.

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Inter-Professional Shared Decision Making and Organizational Citizenship Behaviour of Tertiary Health Institutions in South-South Nigeria.

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Abstract

This study examined the relationship between inter-professional shared decision making and organizational citizenship behaviour of tertiary health institutions in south-south Nigeria. The study applied survey research design. A total of four hundred and sixty-four (454) doctors and nurses in five teaching hospitals in South-South Nigeria, constituted the population of the study, while the sample size of the study was 208 doctors and nurses. The hypotheses formulated for the study were tested using Structural Equation Modelling (SEM). The outcome of the analyses revealed a significant positive association between the shared-decision making and the measures of organizational citizenship behaviour (altruism, conscientiousness and courtesy). It was concluded that inter-professional shared decision-making drives organizational citizenship behaviour of tertiary health institutions in South-south Nigeria. Therefore, it was recommended that health institutions should provide education and training to healthcare professionals on the principles of shared decision-making, including patient-centered care, empathy, and respect; create a supportive environment that encourages and reinforces altruistic behaviour; involve patients and families in the shared decision-making process to ensure that their values and preferences are incorporated into the decision-making process.

Keywords: Shared Decision Making, Altruism, Conscientiousness.

Introduction

The healthcare industry in Nigeria is currently challenged by outbound medical tourism, deteriorating medical infrastructure, low government budget allocation and poor compensation for public healthcare workers, all of which have prompted a large number of skilled medical practitioners to relocate overseas in search of better employment opportunities. Those who have remain offer the bare minimum in service due to poor treatment and funding inadequacies that have led to a general dissatisfaction with the system (Ibeh, 2022). It therefore becomes almost impossible to see healthcare works exhibit citizenship behaviours at their places of work.

Tertiary health care institutions are an important component of the healthcare system of any country. Their role in enhancing specific and overall health parameters of community is immense ranging from complex specialized clinical care to supervision, training, development of guidelines and quality assurance. They are built with a vision to foster advanced medical education and research (Bali et al., 2021). In general, organizational citizenship behaviours are not included in the employee's mission definitions. In this respect, there are no criminal sanctions if these behaviours are not carried out. There is also no reward in the event of these behaviours (Podsakoff et al., 2009). It is stated that many factors have been effective in demonstrating the organizational citizenship behaviour of employees. In the context of tertiary health institutions, the more people who demonstrate organizational citizenship behaviour, the more benefit the institution will have. A number of employees exhibiting this behaviour will start to feel as if they are in the scope of other employees (Bommer et al., 2003). Apart from the ability of employees to act as organizational citizenship due to their own characteristics, they can also demonstrate organizational citizenship in the context of their organization's behaviours and organizational support (Karaalioğlu, 2019). In this regard, the employee may be inclined to demonstrate organizational citizenship behaviour to institutions that give confidence and support to them. The social support behaviours of the institution can be effective for employees in addressing organizational citizenship behaviour (Nguyen & Nguyen, 2017). Organ (1988) identified five dimensions of organizational citizenship behaviour: conscientiousness, sportsmanship, civic virtue, courtesy, and altruism. These five dimensions cover such organizational behaviours as helping co-workers, following company rules, not complaining, and actively participating in organizational affairs. In this study however, altruism, conscientiousness and courtesy served as the measures of organizational citizenship behaviour.

Several factors have been identified as predictors of organizational citizenship behaviour - job satisfaction and commitment, employee engagement and human resource development climate (HRDC) (Ahmed et al., 2012), but the interest in this study is the role of inter-professional shared decision making on organizational citizenship behaviour. In the management of a serious mental patient, for example, services from different professionals like a psychiatrist, case managers, pharmacists, nurses, physicians, and sometimes occupational therapists work together as a team to achieve the desired result (Anna & Woolley, 2016). As the delivery of healthcare becomes more interconnected, the collaboration of physicians, nurses, pharmacists, social workers, and other disciplines becomes increasingly important. The World Health Organization (WHO) has linked inter-professional shared decision making with better outcomes in infectious disease, non-communicable diseases, family health, humanitarian efforts, and responses to epidemics (Green & Johnson, 2015).

Extant studies on the predictors of organizational citizenship behaviour abound, e.g. perceived organizational support (Obiora & Jaja, 2015); organizational justice (Evawere, Eketu & Needorn, 2018); human resource diversity management practices (Omoankhanlen, 2021); impression management (Omoankhanlen & Issa, 2021); psychological contract fulfillment (Omoankhanlen & Yakubu, 2021); and social intelligence (Oshi, Akaibe & Chikwe, 2021). However, there appears to be no empirical study that have examined the relationship between inter-professional collaboration and organizational citizenship behaviour, especially of tertiary health institutions in South-South region of Nigeria. Furthermore, there appears to be no study that have deployed structural equation modelling in testing the association between interprofesional shared decision making and organizational citizenship behaviour, leaving a methodological gap. Consequently, this study represents a unique departure from similar studies as it fills the identified contextual and methodological gap by determining the relationship between inter-professional shared decision making and organizational citizenship behaviour of tertiary health institutions in South-South Nigeria, using structural equation modelling.

Statement of the Problem

Despite abundant evidence for the positive effects of inter-professional collaboration, studies have shown that the uptake of inter-professional collaboration in organizations remains weak and it is also inadequately practiced in healthcare teams, especially in Africa (Bardet et al., 2015; Kebe et al., 2020). A study in South Africa showed that healthcare professionals have diverse opinions of perceptions on inter-professional collaboration indicating a lack of knowledge on inter-professional collaboration in the healthcare field (Ellapen et al., 2018). Another study done in two Kenyan sub-county hospitals to examine the role of clinical leadership revealed that most clinical heads, nurses in charge, and other mid-level managers have an intimidating leadership style that affects the practice of inter-professional collaboration (Nzinga et al., 2018). Inadequate inter-professional shared decision making has been associated with medication errors, patient safety problems, team conflict and patient mortality (Bender et al., 2013). Thus, there is a great need for research on shared decision making, in association with inter-professional shared decision making, particularly in tertiary health institutions in Nigeria.

In the context of healthcare settings, an essential aspect of inter-professional shared decision making involves the cooperative engagement between doctors and nurses. Trust is fundamental for effective teamwork, as it influences communication, information sharing, and joint decision-making processes (Körner, 2010). Shared decision-making empowers healthcare professionals to jointly participate in clinical discussions, consider various perspectives, and collaboratively determine the most appropriate treatment plans for patients. Despite its significance, achieving effective shared decision-making between doctors and nurses proves challenging due to differences in professional roles, hierarchies, and communication patterns. These challenges can lead to barriers in the realization of cohesive teamwork and hinder the delivery of patient-centered care (House & Havens, 2017). In practice, the hierarchical structure inherent in healthcare organizations often affects the willingness of nurses to actively engage in shared decision-making with doctors. The asymmetry in power dynamics create an environment where nurses sometimes hesitate to express their opinions or engage in open discussions, leading to potential missed opportunities for holistic patient care. Furthermore, factors such as time constraints, workload pressures, and inadequate communication channels further exacerbates these challenges, impeding the seamless exchange of insights and collaborative decision-making processes (McInnes et al., 2017).

On this premise, it could be argued that medical workers poor show of citizenship behaviour in tertiary health institutions in a fall out of the afore-stated anomalies bedeviling the sector. It is against this backdrop that this study seeks to determine if inter-professional shared decision making of medical workers can help improve organizational citizenship behaviour.

Objectives of the Study

1. To assess the relationship between shared-decision making and altruism in tertiary health institutions in South-south Nigeria.
2. To ascertain the relationship between shared-decision making and conscientiousness in tertiary health institutions in South-south Nigeria.
3. To investigate the relationship between shared-decision making and courtesy in tertiary health institutions in South-south Nigeria.

Research Hypotheses

As a guide to the rest of the study, the following null hypotheses are framed:

H_{01}: There is no significant relationship between shared-decision making and altruism.

H_{02}: There is no significant relationship between shared-decision making and conscientiousness.

H_{03}: There is no significant relationship between shared-decision making and courtesy.

Literature Review

Theoretical Framework: Collaboration Theory

Collaboration Theory (CT) explains specifically how people can coordinate to determine positive references (Colbry et al., 2014). CT encompasses how collaboration works regardless of whether there exists a formal structure between a manager-with-subordinate or subordinate with-subordinate (Huxham, 2010). According to Huxham (2010), collaboration theory takes into consideration the ways of building group cohesion, influencing others as well as organizing work. This theory enhances collaborative relationships through socialization, which involves learning from others' expertise. At the interpersonal level, collaboration has been described as an influence tactic for gathering cooperation (Yukl et al., 2005). As an influence tactic, collaboration was most likely to engender commitment while the exchange was most likely to result in compliance. The other areas in which interpersonal collaboration influences are teamwork, leadership, followership, shared leadership, and social exchange. The theory also explains how speaking and understanding work in conversation, and asserts that conversation partners must act collaboratively to reach a mutual understanding. Healthcare professionals are very interdependent due to the complexity of health problems and this makes it important to work in collaboration with their colleagues and the patient to provide better care (D'Amour et al., 2005). The collaborative theory is therefore important in this study as an inter-professional collaboration among healthcare workers because it not only requires coordination among their colleagues and superiors but also tactical influence by building group cohesion, teamwork, establishing working relations, and also learning from each other (Huxham, 2010). Collaboration theory encourages the practice of sharing ideas and building the spirit of trust and harmony to realize a collective action for achieving a common goal, particularly among such interdependent health professionals (Colbry et al., 2014). The collaborative model of care supports and promotes the healthcare professional's role in attaining better patient outcomes. To be successful in providing safe and quality care in any healthcare institution, a collaborative approach must be instilled.

Concept of Shared-Decision Making

Shared decision making is a two-way communication process between patients and healthcare professionals, where both collaborate in making healthcare decisions. (Charavel et al., 2001;). Charles et al. (1999) conceptualised decision making as a dynamic process and identified a typology of actions that come under this heading including information exchange, deliberation and decision making. In theory, both patients and healthcare professionals follow a series of actions, including sharing information, identifying the task of making a decision, understanding the best evidence about risks, and identifying the benefits of different types of therapy (Légaré and Witteman, 2013). Based on this information, both parties deliberate, culminating in patients and healthcare professionals reaching a consensus (Charles et al., 1997). This model assumes that both health professionals and patients can contribute relevant information during the decision-making process. Adams and Drake (2006) note that healthcare professionals have the newest evidence-based information on diagnosis, the course of illnesses, and treatment options. Although patients may have limited knowledge of medical issues, they are the experts on their treatment preference, their own values, and their treatment goals (Charles et al., 1997). Taking into account the voices of both of these parties together, can, therefore, make for better decisions for patients (Slade, 2017).

A systematic review which explored patients' experience of clinical assessment involved twelve studies (ten quantitative studies, one qualitative, and one mixed methods) of patients with bipolar disorder (Fisher et al., 2016). In this review, the one qualitative study included took place in the UK and involved 28 patients with mental illness (Bilderbeck et al., 2014). The review found that patients desired more active roles in decision making, and that the advanantages of implementing shared decision making included improved treatment adherence, increased patient satisfaction, and reduced suicidal ideation. Whilst the reviews findings are informative, the scarcity of qualitative studies raises concerns of the absence of the patient voice. The most recent systematic review aimed to examine a rationale for shared decision making in mental healthcare (James & Quirk, 2017). The results suggested that shared decision making was widely acceptable and was considered to bring benefits to mental healthcare.

Organizational Citizenship Behaviour

Organizational citizenship behavior has been defined by Organ (1988) as individual behaviour that is discretionary, not directly or unequivocally recognized by the formal reward system, plus that in the collective promotes the effectual functioning of the organization. With OCB, the emphasis is on the discretionary attitudes and behaviours of workers that are beyond the call of obligation (Podsakoff et al., 2014). OCBs are the behaviours that are voluntary to employees which are not part of employees' prescribed functions (Oladipupo, 2016). Thus, the behaviour is rather a matter of personal choice, such that its omission is not generally understood as punishable nor rewarding (Ojebola et al., 2020). They are discretionary, beyond-role behaviours and gestures that are not explicitly recognized by the formal reward system but are considered important in promoting organizational effectiveness (Organ, 2018). It is informal; that is, it is not recognized by the formal structures of a firm, and hence, not rewarding, it is desirable for the firm to progress and make headway in the ever competitive business environment.

Citizenship behaviours are often referred to as extra-role behaviours, pro-social organizational behaviours, and contextual performance, among other terms (Podsakoff et al. 2000). The practical importance of organizational citizenship behaviours (OCB) for public organizations is that the behaviours of employees can enhance the effectiveness of the organization through resource transformation, innovation, and adaptation (Organ 1988).

Measures of Organizational Citizenship Behaviour

Altruism

The word altruism (from the Latin alter, “other”) was coined by Auguste Comte in the 1830s as a general term to designate care for others (Morrison & Severino, 2007). Khalil (2004) defined this phenomenon as a person’s predisposition to think about the welfare and rights of others. It is considered a behaviour that is performed voluntarily and intentionally without expecting anything in return (Morrison & Severino, 2007).

Therefore, altruism is explained as an ethical behaviour that focuses on the welfare and help of others without expecting an external reward (Simmons, 1991). These are behaviours that can be observed in many circumstances, both in everyday situations and in situations of distress (Becker, 1976). More specifically, within organizations, altruism refers to those voluntary behaviours of helping another person with an organizationally relevant task or problem (Organ, 1988). Altruism in organizations therefore involves helping coworkers with work-related problems and includes actions such as “helping to solve a problem”, “covering another person’s position” and “guiding and helping new people who join the company” (Smith et al., 1983). As more concrete examples of altruistic behaviours in organizations we can mention the following: helping colleagues with different linguistic backgrounds to develop their activities or helping with the tasks of an employee who is in a state of stress. Likewise, recent research (Guinot et al., 2016) has shown some benefits of altruism in organizations. For example, evidence shows that behaviours based on generosity and helpfulness lead to the creation of interpersonal relationships based on mutual trust. Also, these behaviours tend to improve health and longevity, as well as social integration within companies (Morrison & Severino, 2007).

Conscientiousness

Conscientiousness is related to self-control and process of planning, organizing and execute tasks successfully (Rothmann & Coetzer, 2003). Conscientiousness is “manifested in achievement orientation (i.e., hardworking and persistent), dependability (i.e., responsible and careful) and orderliness (i.e., planful and organised)” (Rothmann & Coetzer, 2003). Persons scoring high on conscientiousness tend to be systematic in their approach and are characterized by efficiency, tenacity, and a strong sense of duty; they have a strong will to perform and are intrinsically motivated to work hard to achieve their goals; and they are ambitious and have high expectations of themselves and others. Conscientiousness persons tend to finish work-related tasks independent of inspiration or a sense of joy. Instead, they can motivate themselves to finish the task at hand even if the task is monotonous or boring (Sjöberg, Sjöberg, & Henrysson Eidvall, 2021).

Persons that score high on conscientiousness tend to put allot of effort into planning and organizing which generates predictability and enables a high and even level of efficiency; they are punctual, fulfil deadlines, and finish what they started; and they tend to take obligations seriously and are therefore often perceived as reliable, dutiful, conscientious, and loyal (Sjöberg, Sjöberg, & Henrysson Eidyvall, 2021). Highly conscientious persons care about rules and regulations, respects norms and authority, and make an effort to fulfil others’ expectations (Sjöberg, Sjöberg, & Henrysson Eidyvall, 2021). Persons scoring low on conscientiousness tend to be “careless, irresponsible, lazy, impulsive, and low in achievement striving” (Barrick, Mount, & Judge, 2001, p 11). They tend to feel less obliged to follow rules, norms, and authority (Sjöberg, Sjöberg, & Henrysson Eidvall, 2021).

Courtesy

Courtesy includes behaviours, which focus on the prevention of problems and taking the necessary step so as to lessen the effects of the problem in the future. In other words, courtesy means a member encourages other workers when they are demoralized and feel discouraged about their professional development. Early research efforts have found that employees who exhibit courtesy would reduce intergroup conflict and thereby diminishes the time spent on conflict management activities (Podsakoff et al., 2000). Courtesy includes actions demonstrating special attention to establishing relationships characterized by kindness and co-operation, for example trying to avoid arguments and being willing to keep other people's best interests at heart (Ozturk, 2010). Courtesy refers to continuous interaction among organization members, who work for shared purposes of the organization, and collective, positive behaviours such as communicating with the other members the work accomplished, and decisions made. Creating an environment in which all parties affected by decisions could contribute to the decision-making process will open channels for required communication which is vital (Bingöl, 2003).

Courtesy has to do with positive relationship during co-operational processes in an organization which helps in reducing and preventing work-related issues that involve individual problems through positive attitude. This is as Podsakoff et al. (2000) stated that assessing and doing what is best for an employee can help in strengthening courtesy behaviour among the organizational staff. Courtesy could be said to be the gesture that help others in preventing interpersonal problems from occurring, such as giving prior notice of the work schedule to someone who is in need, consulting others before taking any actions that could disrupt others (Organ, 1990).

2.3 Empirical Review

A survey study conducted by Collette et al. (2017) to assess the state of collaboration between 355 nurses and 80 physicians at a non-academic acute care hospital indicated that effective communication is an important determinant for success in collaborative practice amongst healthcare practitioners. The study found a lack of proper communication among physicians and nurses which resulted in an inadequate and improper transfer of patient-related information. Efficiency in the transfer of important patient information is highly dependent on inter-professional collaboration and significantly reduces the risks of clinical errors. According to Collette et al (2017), there was a greater collaboration and communication amongst physicians themselves than between physicians and nurses. The authors recommended that healthcare professionals need to enhance communication amongst themselves to improve inter-professional collaboration and cope with the complex healthcare needs of a higher number of chronically ill patients.

A systematic review done by Abd Hamid et al. (2016) to examine the relationship between inter-professional communication and inter-professional collaboration (IPC), highlighted the importance of inter-professional communication among professionals to achieve positive IPC. The study reviewed 200 pieces of literature on inter-professional care, health care management, and health sciences related to inter-professional communication and identified inter-professional communication as a core competency of IPC. Abd Hamid et al. (2016) reported that poor communication is the main contributor to poor quality of patient outcomes while good communication amongst health care professionals can improve the inter-professional collaboration and in the end, will enhance the patient health outcomes. The authors recommended that every healthcare professional should have the competency of effective communication to develop good collaboration and obtain considerable patient outcomes.

Peyrat-Guillard and Glińska-Neweś (2014) presented links identified among manifestations of employee positive relationships and organizational citizenship behaviour. The presentation is based on the results collected through a questionnaire survey conducted in Polish companies. The data analysis shows particular associations between positive relationships and organisational citizenship behav-iour (OCB). Their results suggest that OCB-I (the behaviours targeted toward other individuals in an organisation) may be triggered by respect and acceptance and that OCB-O (i.e. the behaviours targeted toward an organisation itself) may be considered as effects of the relationships manifesting honesty and reliability. They suggestted research avenues to capture the processes behind the described associations.

Piedra (2013) explored the relationship between employee trust and organizational citizenship behaviour. The demographics data requested gender, age, ethnic background and years in the workforce. The organizational citizenship behaviour scale measured the participant's assistance within the organization, and communication with co-workers and supervisors and dedication to the organization (Organ, 1988). The Pearson Product Moment Correlation calculated the extent to which there is a positive relationship between employee trust and organizational citizenship behaviour. The R-squared was used to calculate the relationship between the demographics and the variables. The results showed that there tends to be a relationship between employee trust and organizational citizenship behaviour. The Pearson Correlation = 0.158, SE of r = 0.138, Calc t = 1.146, Crit t = 2.16, df = 48 and Rsquare = 0.024. Further research recommended on the variables employee trust and OCB.

Methodology

This study applied a cross-sessional survey research design. The target population for this study is the entire public tertiary health institutions in South-South Nigeria. But the accessible population comprised of nurses and doctors of five teaching hospitals in five states in South-South Nigeria. Thus, medical personnel from teaching hospitals are in better position to offer objective responses on issues of inter-professional collaboration as it affects organizational citizenship behaviour. Information obtained from the various hospitals revealed that there are a total of four hundred and sixty-four (454) doctors and nurses in the teaching hospitals studied. The sample size for this study was determined using the Krejcie and Morgan Sample Size Determination Table, which is estimated to be 208 as the sample size from the population size of 454. The data used for this study was basically obtained from respondents with the use of a structured questionnaire. The data were analyzed using different statistical methods and regression analysis as undertaking using Structural Equation Modelling.

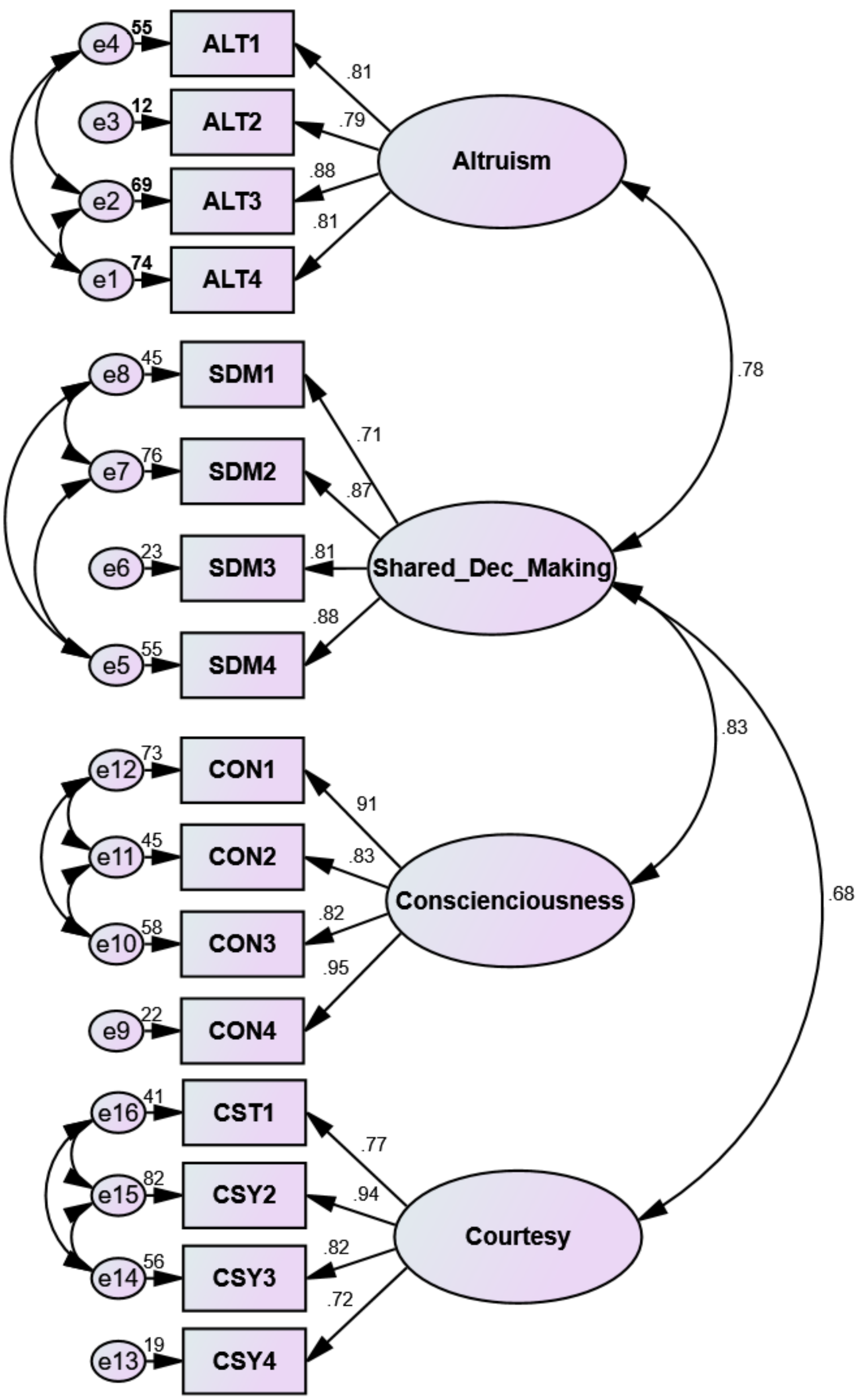

Figure 1: Structural Model of Hypotheses 1, 2 and 3.

Results

Shared-Decision Making and Organizational Citizenship Behaviour

Presented in table below is the result for the tests for the hypotheses of the study. The third set of hypotheses (hypotheses 1-3) assessed the extent to which shared-decision making impacts on the measures of organizational citizenship behaviour. They are listed as follows:

H_{O1}: There is no significant relationship between shared-decision making and altruism of tertiary health institutions in South-south Nigeria.

H_{O2}: There is no significant relationship between shared-decision making and conscientiousness of tertiary health institutions in South-south Nigeria.

H_{O3}: There is no significant relationship between shared-decision making and courtesy of tertiary health institutions in South-south Nigeria.

The first hypothesis (H_{01}), states that there is no significant relationship between shared-decision making and altruism. However, table 4.33 indicates that shared-decision making has a positive and significant relationship with altruism of Tertiary health institutions in South-south Nigeria. (β= 0.744, r=1.371, p<0.005). Thus, H_{O7} was not supported. The evidence presents shared-decision making as a strong predictor of altruism of hospitals in South-south of Nigeria. Statistically, it shows that when shared-decision making goes up by 1 standard deviation, altruism goes down by 0.744 standard deviation. In other words, when shared-decision making goes up by 1, altruism goes up by 74.4%. The regression weight for shared-decision making in the prediction of altruism is significantly different from zero at the 0.005 level (two-tailed).

The second hypothesis (H_{02}), states that there is no significant relationship between shared-decision making and conscientiousness. However, table 4.33 also suggests that shared-decision making has a moderate and significant relationship with conscientiousness of hospitals in South-south of Nigeria (β=-0.713, r=0.933, p<0.005). Thus, H_{O8} was not supported. This means that the shared-decision making of tertiary health institutions in South-south, Nigeria, will lead to conscientiousness. Statistically, it shows that when shared-decision making goes up by 1 standard deviation, conscientiousness goes up by 0.713 standard deviation. In other words, when shared-decision making goes up by 1, conscientiousness goes up by 71.3%. The regression weight for shared-decision making in the prediction of conscientiousness is significantly different from zero at the 0.005 level (two-tailed).

The third hypothesis (H_{03}), states that there is no significant relationship between shared-decision making and courtesy. However, table 4.33 also suggests that shared-decision making has a moderate and significant relationship with courtesy of hospitals in South-south of Nigeria (β=-0.814, r=1.643, p<0.005). Thus, H_{O9} was not supported. This means that the shared-decision making of hospitals in South-south, Nigeria, will lead to courtesy. Statistically, it shows that when shared-decision making goes up by 1 standard deviation, courtesy goes up by 0.814 standard deviation. In other words, when shared-decision making goes up by 1, courtesy goes up by 81.4%. The regression weight for shared-decision making in the prediction of courtesy is significantly different from zero at the 0.005 level (two-tailed).

The results from these relationships indicate that shared-decision making as a significant predictor of organizational citizenship behaviour of tertiary health institutions in South-south Nigeria. Thus all three null hypothetical statements of no significant relationships between shared-decision making and the measures of organizational citizenship behaviour are not supported, based on the lack of statistical evidence to show otherwise.

Discussion of Findings

The outcomes of the study reveals that there is a significant positive correlation between inter-professional shared decision making and organizational citizenship behaviour, and that organizational climate moderates the relationship between the both variables.

Shared-Decision Making and Organizational Citizenship Behaviour (H_{01} – H_{03})

The findings on hypotheses 1-3 are that there is significant positive relationships between shared-decision making and organizational citizenship behaviour. This is in line with

Khasawneh (2011) investigated the relationship between shared leadership and organizational citizenship behaviour among faculty members in Jordanian public universities. Shared leadership is defined as a process in which multiple individuals lead together, share responsibility for decision-making, and work collaboratively to achieve common goals (Khasawneh, 2011). To establish the relationship between shared leadership and organizational citizenship behaviour, the study formulated research questions that aimed to validate the constructs of shared leadership and organizational citizenship behaviour in Jordan. The study found a positive relationship between shared leadership and organizational citizenship behaviour, indicating that shared leadership can positively influence faculty members' organizational citizenship behaviour. Overall, the study provides valuable insights into how shared leadership can positively impact workers' behaviour. It also highlights the importance of developing a global workforce for the 21st century by promoting shared leadership practices that foster collaboration, responsibility-sharing, and effective decision-making among team members.

Participation in decision making is linked to organizational citizenship behaviour in many ways. First, employees' participation in decision making can enhance a sense of fairness and trust in the organization, as they can defend their own interests (Bogler &Somech, 2005). Employees who view their institutions as behaving in their interest experience greater job satisfaction, and also act to return the favour by exhibiting more organizational citizenship behaviour (McNeely & Meglino, 1994). Second, as employees understand work processes and challenges better than administrators or policymakers, their participation ensures that better information is available for making decisions to facilitate successful teaching (Conley & Bacharach, 1990), and also they will get information on shaping their decisions which can enhance willingness to engage in organizational citizenship behaviour.

Previous research has shown that employees tend to exhibit more OCB the more they perceive procedural fairness in decision-making (Greenberg, 1990; Konovsky & Pugh, 1994; Moorman et al., 1998). Shared decision-making is associated with perceived support from the supervisor, probably because the opportunity to participate in decision-making implies respect for the rights of individual employees and a full-status relationship with the immediate supervisor (Konovsky & Pugh, 1994; Tyler & Lind, 1992). Behaving as a 'good' organizational citizen can be considered a way of maintaining balance in the employee–supervisor relationship (Deluga, 1994; Mowday, 1991; Organ, 1990).

Conclusion

From the findings of the results and discussions, with reference to the aim and objectives of the study, the study found that inter-professional shared decision making drives organizational citizenship behaviour of tertiary health institutions in South-south Nigeria. Therefore, the study conclude that shared-decision making could remarkably improve altruism, conscientiousness and courtesy of tertiary health institutions in South-south Nigeria.

Recommendations

Based on the findings and conclusions, the following made the following recommendations:

i. Health institutions should provide education and training to healthcare professionals on the principles of shared decision-making, including patient-centered care, empathy, and respect. This training can help healthcare professionals to understand the importance of these principles and how they can be applied in practice.
ii. Health institutions can create a supportive environment that encourages and reinforces altruistic behaviour. This can include recognition programs, peer support, and leadership that promotes and models altruistic behaviour. They can provide feedback and evaluation to healthcare professionals on their performance in shared decision-making. This feedback can be used to identify areas for improvement and to recognize and reinforce positive behaviours.
iii. Healthcare organizations should involve patients and families in the shared decision-making process to ensure that their values and preferences are incorporated into the decision-making process.

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Organisational Climate and Employee Work Passion of Electricity Distribution Companies in South-South Nigeria

By

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Abstract
This is a study of the relationship between organisational climate and employee work passion. A sample size of 318 was drawn from a population of 1562 employees of the Electricity Distribution Companies in South-South, Nigeria. . The Yamane formula was used in determining the sample size while the simple random sampling technique was used in selecting the elements. The primary data for this study was collected through a structured questionnaire. The bivariate analysis that is geared towards examining the relationship between organisational climate and employee work passion was analysed using Partial Least Square – Structural Equation Modelling (PLS-SEM) with the aid of Smart PLS 4. The findings reveal a significant relationship between organisational climate and the measures of employees work passion. The study concludes that a significant relationship exists between organisational climate and employee work passion. The study recommended that the management of the electricity distribution companies should constantly create a good organisational climate that will encourage flexible work arrangements, such as remote work options or flexible hours, to help employees balance their work and personal lives as such will help enhance employee work passion

Key Words: Organisational Climate, Harmonious Work Passion, Obsessive Work Passion.

Introduction

According to Perrewe, Hochwarter, Ferris, McAllister and Harris (2014), employee work passion is an emotional and persistent state of desire, due to affective and cognitive work appraisals. The secret to consistent long-term success of any organization, is to have passionate workers that are consistently working towards creating a competitive edge for the firm. Passionate employees are proactive and they go extra mile to help their colleagues to be passionate about their job (Ho, Kong, Lee, Dubreuil & Forest, 2018). The level of productivity in an organisation is determined by the ability of the people and their passion towards the given task. Vallerand and Houlford (2003) maintained that work passion is a strong proclivity towards an activity that is loved by the person and also self-defining incorporating in one's identity and investing noteworthy time and energy on an activity.

Furthermore, Lajom, Amarnani, Restubog, Bordia and Tang (2018) found that employees who have a passion for work not only love work but also consider the work to be very important and meaningful for the development of self and organizational concepts. Ozigi (2022) is of the opinion that employees in the electricity distribution company need to be engaged and passionate about their job in order to enhance the effectiveness and efficiency in operation. Employees work passion can help enhance performance, boost competitive advantage of the firm, ensure free flow of operation, boost the organizational capability and overall fortune of the organization. Employee work passion is a propelling force which could make the employees to display extra role behaviour with the aim of achieving and sustaining the success of the organization. According to Birkeland and Buch (2015) Passion is dualistic in nature and belongs to either of two types: harmonious passion (a motivational force wherein the activity is purely under the control of the individual) or obsessive passion (a controlled internalization of an activity where the activity in turn controls the individual. Only employees who have a passion for work shows enthusiasm, work through challenges, and create their own success towards excellence and organizational growth.

Employees as a rational being and full of ingenuity are most likely to display positive attitude in the organization when there is improved organisational climate. Hence, organizations are beginning to pay more attention to the organisational climate based on the fact that employees are not machines but humans with feeling, rational thinking and whose action is informed based on their psychological state. Sahni (2019) maintained that quality of work life is the favourable or unfavourable job environment of the employees in the workplace. The author upheld that quality of work life encompasses aspect relating to compensation, work environment, training and development, working hours, satisfaction and work life balance.

Some of the dimensions of quality of work life that has been used by scholars include work environment, welfare practices, organizational climate, compensation, job satisfaction, training and development, career and Job satisfaction, home–work Interface, Stress at work, Control at work, general well-being (Swamy, Nanjundeswaraswamy & Rashmi, 2015; Easton & Van Laar, 2018; Adikoeswanto, Eliyana, Hamidah, Sariwulan, Buchdadi & Firda, 2020). Quality of work life defines the work atmosphere and should aim to enhance an employee's skills and abilities (Yadav, Khanna, Panday & Dasmohapatra, 2019. A stable organisational climate brings fulfillement at workplace and amplify their wholehearted participation and cooperate with the management in improving productivity and creating a healthy work environment (Porter &Kramer, 2019). It has been found that better quality of work life instils enthusiasm, motivation and better interpersonal relationship among employees (Hakanen, Peeters & Schaufeli, 2018).

Egan, Braud, Manganelli and Forest (2018) suggest that organizational leaders, supervisors, and human resource development (HRD) practitioners could develop interventions that promote greater employee work passion. Astakhova and Ho (2018) did a study on Understanding the work passion–performance relationship. Results indicate that organizational identification mediates the effect of harmonious work passion. However, there are a few studies published on organisational climate and its relationship with employee work passion in Electricity Distribution Company in South-South, Nigeria. This study seeks to bridge these observed gaps by proffering an evidence on how organisational climate relates with employee work passion.

Statement of the Problem

The negative impact of low passion of workers in the organization is capable of truncating the total success and competitiveness of the entire organization. The effective operation of the electricity distribution company may not be fully achieved when the employees are not passionate. In alignment with the above assertion, Eketu (2019) contended that poor employee passion in organization has resulted in absenteeism, lackadaisical attitude at workplace, low morale of the employees and truncate the inability to achieve target. While preparing workforce for employment in the electricity distribution company, there is need for the workforce to be ready to contribute towards sustained business growth and such cannot be achieved when the employees do not display high passion in their job.

If the issue of low passion persists, such could have an advanced negative effect on the firms success on the long run. However, David (2001) argued that for workers to display passion at workplace, organization should ensure teamwork and effective communication, promote co-worker and supervisor support system, improve worker's compensation, staff training and development, and other factors that enhances the psychological state of the employees. Similarly, organization must understand their quality of work life (QWL) enhances the wellbeing of employees and make then to effectively use their skills (Ishfaq, et al., 2022). Many studies have shown that Quality of work life has a positive impact on positive employee outcomes and that eventually improves individual work performance (Mirkamali & Narenji 2008; Armstrong 2006). The key elements of quality of work life in the literature include job security, job satisfaction, better reward system, employee benefits, employee involvement and training and development (Havlovic, 1991). However, at the same time, the organization found that employees were increasingly indifferent and apathetic at work, with only 29 percent of the US employee population reporting having a passion for their work (Tucker, 2002). Responding to these growing concerns, scientists began to investigate and investigate the concept of passion in the workplace, and evidence shows that employees who have a passion for work is able to drive job success and also the success of their organizations (Neumann, 2006; Vallerand, 2010).

Aim and Objectives of the Study

The aim of this study is to examine the relationship between quality of work life and employee work passion of electricity distribution companies in South-South, Nigeria. The specific objectives are to;

I. Determine the relationship between organizational climate and harmonious passion of electricity distribution companies in South-South, Nigeria.
II. Investigate the relationship between organizational climate and obsessive passion of electricity distribution companies in South-South, Nigeria.

Research Question

The following research questions will serve as a guide in this study in order to achieve the objectives of the study.

I. What is the relationship between organizational climate and harmonious passion of electricity distribution companies in South-South, Nigeria?
II. What is the relationship between organizational climate and obsessive passion of electricity distribution companies in South-South, Nigeria?

Research Hypotheses

This following proposed hypotheses served as answer to the research questions;

Ho_1: There is no significant relationship between organizational climate and harmonious passion of electricity distribution companies in South-South, Nigeria.

Ho2: There is no significant relationship between organizational climate and obsessive passion of electricity distribution companies in South-South, Nigeria.

Literature Review

Reinforcement Theory

Skinner's (1963) work is built on the assumption that behaviour is influenced by its consequences. Reinforcement theory is the process of shaping behaviour by controlling consequences of the behaviour. Reinforcement theory proposes that you can change someone's behaviour by using reinforcement, punishment, and extinction. Rewards are used to reinforce the behaviour you want and punishments are used to prevent the behaviour you do not want. Extinction is a means to stop someone from performing a learned behaviour. The technical term for these processes is called 'operant conditioning' reinforcement, "is a term in operant conditioning and Behaviour analysis for process of increasing the rate or probability of a behaviour in the form of response by delivery either immediately or shortly after performing the behaviour". The theory states that an individual's behaviour is a function of its consequences (Management Study Guide, 2021). Reinforcement theory built on operant conditioning suggests that environmental factors (e.g. reward) contribute to the shaping of behaviour (e.g. job performance) in the organization. Positive reinforcement (e.g. monetary bonus) is a desirable consequence that follows a response (e.g. high job performance) and increases the probability that the response will be repeated while negative reinforcement is the removal of an unpleasant stimulus (e.g. demotion) when a desired response (e.g. high job performance) occurs (Wood, Wood, & Boyd, 2005).

Organizational Climate

Employee personality and the work environment they are in both influence how people behave in organizations. Numerous organizational traits and interpersonal dynamics that make up the workplace environment have an impact on individuals' attitudes toward their jobs. There are numerous terminologies and descriptions that can be used to discuss how employees perceive their work settings, including organizational climate, psychological climate, collective climate, and organizational culture (Parker et, al. 2003). One of the key elements of an effective organizational environment that directly influences employee behaviour is the organizational climate. Since the late 1960s, organizational climate has received considerable attention in the literature on organizational behaviour. It is seen as an essential perspective for understanding employees' attitudes and behaviours toward their jobs.

According to Forehand and Gilmer (1964), an organization's climate is its distinct set of prominent characteristics that characterizes it, sets it apart from competitors, and affects how its members behave. Researchers identified climate as a key feature of the internal organizational environment, which results from employee policies and activities and puts pressure on workers' attitudes and behaviour (Pritchard and Karasick, 1973; Steers, 1997). The term "organizational climate" refers to the shared perceptions of the employees and the significance they ascribe to the rules, norms, and practices they encounter at work as well as the actions they see being encouraged, supported, and expected with regard to the organization's human resources (Ahmad et al., 2018; Cygler et al., 2018; Schneider et al., 2013, 2016). Organizational climate, according to Kumar-Bamel et al. (2013), includes organizational structure and processes, interpersonal interactions, employee behaviour, performance expectations, and growth possibilities. Furthermore, organizational climate has significant effects on individuals, groups, and organizations (Ghanbari & Eskandari, 2016).

According to Payne et al. (1971), organizational climate refers to how employees view their company and its goals. Churchill et al. (1976) defined organizational climate as the sum of the social factors that make up a worker's workplace. Mullins (2010) asserts that if organizational climate is defined as "how it feels to work around here," then organizational culture might be described as "how things are done around here." Organizational climate was defined by Griffin and Moorhead (2014) as individual views; recurrent patterns of behaviour, attitudes, and sentiments of employees. Employee attitude, according to Aysen (2018), depends on personality qualities and the environment in which they work. All of these definitions can be summed up by saying that the organizational climate is the psychological factors, or how employees perceive their work environments, put together.

According to Ghanbari and Eskandari (2016), organizational climate can influence how employees view knowledge management and innovations and can inspire them to participate in the process of turning information into new products. According to Rahmic (2013), an organization's culture has a big impact on the organizational and psychological processes of communication, problem solving, learning, motivation, efficiency, and productivity as well as on innovation, job dedication, and job satisfaction.Following is how Campbell et al (1970) classification of organizational climate characteristics was done by Sudhakar (2019): 1) Public Perception: Organizational environment is a general description of what constitutes the organisation. It is the overview impression of the organisation that people have. It represents the impression that people have about the internal organisational environment they work within. 2) Concept of Abstract and Intangible: Organizational climate is a conception of quality. Explanation of the components of the organisational environment in quantitative or observable units is very difficult. 3) District and unique identity: The corporate environment gives the company a distinct identity. It shows how different one company is from other organisations 4) Built end organizational climate: It reflects a fairly lasting consistency of the internal climate encountered by members of the organisation and 5) Multilateral Concept: Organizational climate is a multidimensional concept. Individual autonomy, authority structure, leadership style, communication pattern, degree of confrontation and collaboration etc. are the different dimensions of the organisational environment.

Employee Work Passion

Employee Work Passion is an individual's persistent, emotionally positive, meaning-based state of wellbeing stemming from reoccurring cognitive and affective appraisals of various job and organizational situations, which result in consistent, constructive work intentions and behaviors. (Zigarmi, Houson, Witt, & Diehl, 2011). Zigarmi, Houson, and Witt (2009) conducted a factorial analysis of employee passion identifying eight factors: meaningful work, collaboration, fairness, autonomy, recognition, growth, connectedness with leader, and connectedness with colleagues. Tucker (2014), for example, states: Everybody has passion. Few people have jobs that activate their passion. Everybody has talent. Few people have jobs that demand full use of their talents and strengths. Organizations ought to make passion and strengths-based management a requirement. World-class organizations already do. They look beyond a person's resume, work experience, or education. Instead, they use sound selection instruments to discover: "Does this person have passion for excellence? Does she have strong feelings that help her to never give up? Does she love challenges? Is she easily motivated?" In sum, "what are her talents, strengths, and passions, and how can we leverage them?"

Research is dominated by studies about the adaptive 'harmonious' passion (HP) and the maladaptive 'obsessive' passion (OP) (Vallerand et al., 2003). HP and OP are often referred to as 'types' of passion. Previous studies have interpreted the differences between both types as differences between harmonious versus obsessive individuals, stating that harmoniously passionate individuals make adaptive experiences of their passionate activity whereas obsessively passionate individuals make maladaptive experiences of their passionate activity (Vallerand et al., 2003; Vallerand, 2012).

Harmonious Passion

A harmonious passion is a self-defining characteristic that is part of people's sense of who they are (Vallerand et al., 2003) and not a state of mind. Second, it is conceivable to be highly dedicated and absorbed in one's work without being passionate for it (Vallerand and Houlfort, 2003). Specifically, one can be autonomously motivated toward a task or an activity (Deci and Ryan, 2000) because one recognizes that the task or activity is important for oneself without having a passion for it. Specifically, harmonious passion develops when an activity becomes part of an individual's identity without any constraints or contingencies associated with it, and when it has been freely chosen as highly important for oneself (Deci & Ryan, 2000; Sheldon, 2002; Vallerand et al., 2003). Furthermore, with harmonious passion, the activity remains under the control of the individual, even though it occupies a very important place in his/her life. An example of a harmonious passion would be a teacher who loves and highly values teaching but who can nonetheless freely and enthusiastically engage in his or her work without creating conflicts with the other important spheres of his or her life (e.g. relationships with family and friends). Consequently, this teacher can derive pleasure and self-actualization from teaching without jeopardizing his or her personal life.

Harmonious passion has been linked to satisfying interpersonal connections with others (such as coworkers and teammates) in contexts both within and outside of the workplace because it produces positive feelings that increase one's sense of closeness and relationship satisfaction with them (Ho & Pollack, 2014; Philippe, Vallerand, Houlfort, Lavigne, & Donahue, 2010). The willingness of the person to assist others may therefore increase as a result. A person's capacity to assist can also be improved by a harmonious passion.

Obsessive Passion

Obsessive passion is the result of a controlled internalization of an activity within a person's identity. Specifically, intra and/or interpersonal contingencies associated with the activity, such as contingent self-esteem, social acceptance or high performance, lead to the development of an obsessive passion for that activity (Mageau, Carpentier & Vallerand, 2011). This type of passion is characterized by a love for the activity and a strong engagement. However, when the engagement becomes out of the person's control, the activity comes to the point where obsessively passionate people cannot help but to engage in the activity even when such engagement is ill advised. Obsessive passion has generally been associated with negative and maladaptive affective, cognitive, behavioral and interpersonal outcomes (Vallerand, 2008, 2010). An example of an obsessive passion would be a teacher who loves teaching but becomes so invested in his or her work that his or her entire self-esteem is derived from work. Obsessive passion thus generates conflicts between work and other spheres of life, to the point where family and social life are neglected.

As opposed to normal passion, obsessive passion is defined by an insatiable drive to partake in the passionate activity that one enjoys. Obsessive passion forces a person to set aside or disregard other crucial tasks, which frequently results in conflict between that person's passionate activity and other activities (Mageau & Vallerand, 2007), as well as conflict with their partner (Seguin-Levesque, Laliberte, Pelletier, Blanchard, & Vallerand, 2003). Although rigorous perseverance in the intense activity at the expense of other pursuits may boost performance in the activity (e.g., Vallerand et al., 2008), it is also linked to detrimental affective, cognitive, and behavioural effects both during and after activity participation. According to studies, persons who have obsessive passions have difficulty concentrating and do not experience much flow when engaged in the activity (Mageau et al., 2005; Vallerand et al., 2008; Wang et al., 2008). According to research, people who have obsessive passions experience negative emotions both during and after activity engagement (Mageau et al., 2005) and ruminate when they are unable to participate in the activity (Ratelle, Vallerand, Mageau, Rousseau, & Provencher, 2004). Additionally, obsessional passion has been found to be unconnected to feelings of joy (Vallerand et al., 2003) and to be either negatively related to (Rousseau & Vallerand, 2003) or unrelated to (Vallerand & Miquelon, 2007) feelings of life satisfaction. In conclusion, while obsessive passion could result in certain advantages (such as enhanced performance in the activity; Bonneville-Roussy, Lavigne, & Vallerand, 2011; Vallerand et al., 2008), it might also result in significant costs. People eventually embrace imbalanced lifestyles out of intense devotion.

Empirical Review

Permarupan, Saufi, Kasimc and Balakrishnan (2013) examine the organizational climate and employee's work passion and organizational commitment within academician of public and private Universities in Malaysia. An argument is put forward that there is a causal link of good organizational climate, employees work passion and commitment in an organization. A conceptual model of organizational climate and employee's work passion and organizational commitment is presented that provides an explanation of the linkage between these variables. A 500 sample of academicians from public and private Malaysian universities were administered using organizational climate questionnaire. This cross-sectional study aimed to address the employee's needs and expectation from the employer in the aspect of organizational climate and commitment. Thus, by understanding the empirical results of the organizational climate, this finding will be able to emerge as an improvised model to enhance employee's work passion as well as organizational commitment.

Yadav, et al, (2019) did a study to find out the relation of quality of work life (QWL) and organizational commitment (OC) that engenders the financial performance of IT Companies in terms of revenue per employee. Data Collection is done through a combination of secondary and primary source. Primary data were collected by distributing questionnaire and collecting responses of participants. This paper emphasizes the data from secondary source and relates it with the findings from primary data. To analyze the performance in terms of revenue per employee of selected organizations, researcher segregates the revenue per employee of the IT companies in three levels i.e. highest Range revenue (above \$10 billion), Average range revenue (below \$10 billion and above \$5 billion) and Low range revenue (Below \$5 billion). Data are explained by using descriptive statistics and further analysis is done by regression analysis and ANOVA. Findings of the study say that there is significant relationship between quality of work life and organizational commitment with revenue per employee of IT companies.

Zohurul and Sununta (2011) have undertaken this exploratory study on the influence of workers quality of work life (QWL) on job satisfaction and organizational performance. QWL is hypothesized to directly or indirectly influence organizational performance. A questionnaire survey was undertaken within the EPZ enterprises with non-managerial employees who are mainly involved in the production process. A simple random sampling method was used and about 216 sample responses were returned and usable. Data were analyzed using descriptive statistics, chi-square test and regression analysis to test the formulated hypotheses and the significance and reliability of the findings. The findings suggest QWL although is positively related to organizational performance but it is not significant as hypothesized. However, there is a positive and significant relationship between QWL and employees' job satisfaction.

Methodology

This study involved a survey investigation on how employee work passion is impacted by organisational atmosphere. The population consists of 1562 workers who work for the south-south Nigerian energy distribution firms. 318 workers from the energy distribution businesses in South-South, Nigeria, make up the study's sample. The sample size was calculated using the formula from Yamane (1968). A type of probability sampling strategy that offers every member of the population an equal chance of being chosen is the simple random sampling technique, which was applied. This study's primary data was gathered using a structured questionnaire. Partial Least Square – Structural Equation Modelling (PLS-SEM) with the aid of Smart PLS 4 was used to analysed the data.

Result

Test of Hypotheses 1 and 2

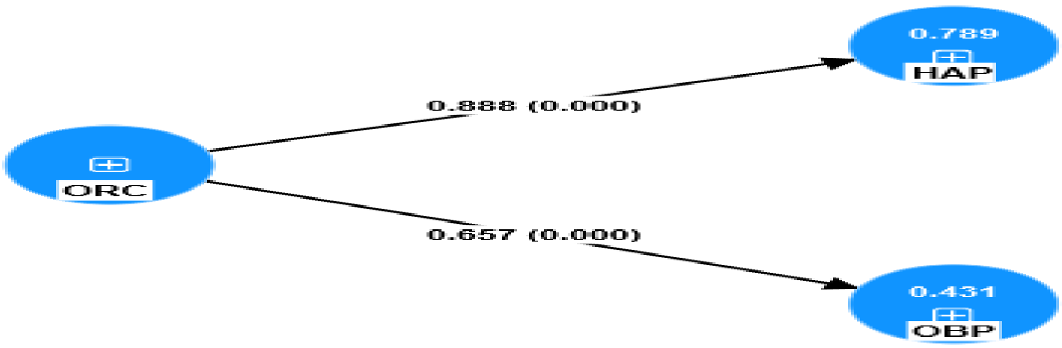

Figure 2: Hypotheses 1and 2

Table 1: Test of Hypotheses 1 and 2

Null Hypothesis	Path (Relationship)	Path Coefficient (β)	P Values (p)	T Statistics (t)	Predictive Accuracy (R^2)	Decision
H_{O1}	ORC -> HAP	0.888 (Strong)	0.000 (Accepted)	17.822 (Significant)	0.789 (Substantial)	Reject
H_{O2}	ORC -> OBP	0.657 (Strong)	0.000 (Accepted)	9.956 (Significant)	0.431 (Moderate)	Reject

Source: SmartPLS 4 Research Data Output, 2023

From figure 1, the path coefficient indicates that there are positive and significant paths between Organisational Climate and Harmonious Passion (β = 0.888, p = 0.000, t = 17.822), and Organisational Climate and Obsessive Passion ($\beta = 0.657, p = 0.000, t = 9.956$). Therefore, H_{O1} and H_{O2} were rejected. Therefore, it can be concluded that:

There is a significant relationship between Organisational Climate and Harmonious Passion of electricity distribution companies in South-South, Nigeria.
There is a significant relationship between Organisational Climate and Obsessive Passion of electricity distribution companies in South-South, Nigeria.

Table 2: Results of Hypotheses Testing

Null Hypothesis	Path (Relationship)	Path Coefficient (β)	P Values (p)	T Statistics (t)	Predictive Accuracy (R^2)	Decision
H_{O1}	ORC -> HAP	0.888 (Strong)	0.000 (Accepted)	17.822 (Significant)	0.789 (Substantial)	Reject
H_{O2}	ORC -> OBP	0.657 (Strong)	0.000 (Accepted)	9.956 (Significant)	0.431 (Moderate)	Reject

Source: Output on Research Data, 2023

Discussion of Findings

The above sections showed the analysis of the study variables based on the objectives and methods to ascertain the validity of the hypotheses. Arising from the analysis of the study variables presented above, the findings of the analysis are being discussed thus:

The relationship between Organisational Climate and Harmonious Passion

$\beta = 0.888$, $p = 0.000$, $r^2 = 0.789$ for Organisational Climate and Harmonious Passion. This suggests that Organisational Climate and Harmonious Passion have a significant relationship. Organisational Climate has a good link with Harmonious Passion, according to the path coefficient of 0.888. The significance level is 0.000. Because this is less than the 0.05 criterion, the null hypothesis is rejected and the alternate hypothesis is accepted. With a coefficient of determination of 0.789, a unit change in Organisational Climate can explain for up to 78.9% of the entire variation in Harmonious Passion. As a result, Organisational Climate is an important aspect in organizations and can affect Harmonious Passion. This outcome reinforces the position of Mohammadhu and Atham (2018) who discovered that the harmonious passions exhibited by workers is an offshoot of how they feel about their work climate.

The relationship between Organisational Climate and Obsessive Passion

$\beta = 0.657$, $p = 0.000$, $r^2 = 0.431$ for Obsessive Passion and Obsessive Passion. This suggests that Organisational Climate and Obsessive Passion have a significant relationship. Organisational Climate has a good link with Obsessive Passion, according to the path coefficient of 0.657. The significance level was 0.000, which is less than 0.05. As a result, the null hypothesis was rejected and the alternate hypothesis was accepted, resulting in the conclusion that Obsessive Passion has a substantial relationship with Obsessive Passion. With a coefficient of determination of 0.431, a unit change in Organisational Climate can account for up to 43.1% of the entire variation in Obsessive Passion. As a result, Organisational Climate is an important aspect in organizations and can affect Obsessive Passion. This outcome reinforces the position of Madjid and Kamaluddin (2018) who was of the notion that organisational climate has a significant relationship with employee work passion.

Conclusion and Recommendation

The employee work passion of electricity distribution companies in South-South, Nigeria in particular is relevant in enhancing the organisational climate. Enhancing organisational climate will help ensure harmonious passion of the electricity distribution companies which will thus help boost their work passion. When an organization is fast in detecting major changes in organisational climate, such will enable them to put different mechanism in place in order to maximize employee work passion. Furthermore, enhancing organisational climate will subsequently result in higher level of harmonious passion and obsessive passion. Organisational climate of organizations enhances the employees works passion. When organizations lack adequate organisational climate, such will negatively affect their passion for work. Based on the findings and conclusion of the study, the following recommendations are hereby proffered;

1. The management of the electricity distribution companies should constantly create a good organisational climate that will encourage flexible work arrangements, such as remote work options or flexible hours, to help employees balance their work and personal lives as such will help enhance employee work passion.
2. The management of the electricity distribution companies should crate an organisational climate that foster a culture of open communication and transparency where employees feel comfortable sharing their ideas, concerns, and feedback and create platforms for regular dialogues between management and staff to promote passion for work.
3. The electricity distribution companies should provide opportunities for employees to work on projects aligned with their passions and interests within the electricity sector
4. The electricity distribution companies should enhance conducive organisational climate to contribute to the company's growth.
5. The management of the electricity should ensure that the organisational climate is such that enhance the workers wellbeing as such will help increase their work passion.

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EFFECT OF TALENT MANAGEMENT AND ORGANIZATIONAL COMPETITIVENESS OF MANUFACTURING FIRMS IN SOUTH -SOUTH, NIGERIA

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ABSTRACT

This study examined the relationship between talent management and organisational competiveness of manufacturing firms in South -South, Nigeria. Cross-sectional survey was utilized and a population of six hundred and eleven (611) managers and supervisors of twenty-four (24) manufacturing companies were covered. A sample size of two hundred and forty-two (242) respondents were drawn from the population using Taro Yamen. The simple random sampling technique was adopted and copies of questionnaire were administered in gathering data for the study. The Structural Equation Modelling (SEM) was used in analysing the hypotheses in order to ascertain the relationship between talent management dimensions with the measures of competitiveness and it was also used in determining the moderating influence of transformational leadership on the relationship between talent management and sustainable competitive advantage. The result of the analysis revealed that the dimensions of talent management has a significant and positive relationship with the measures of competitiveness. It was also observed that transformational leadership do positively moderated the relationship between talent management and competitiveness. It was concluded that talent management is relevant in boosting the competitiveness of the manufacturing firms. The study recommended among others that talent management in manufacturing firms can be leveraged on in establishing cost leadership, product differentiation, and organizational responsiveness within the firm. This can be achieved by putting in place and implementing relevant recruitment, selection and placement programmes so as to attract prospective productive employees.

Key Words: Talent Attraction, Talent Retention and Organizational Competitiness.

1. Introduction

The intensity of the worldwide market factors has impacted the methodologies organizations take on around the world (Quaye and Mensah, 2018). These days, organizations are putting more accentuation on leftover cutthroat independent of the ventures they work. Subsequently, acquiring feasible upper hand (SCA) has turned into a significant point of associations universally (Papula and Volná, 2013). Doorman's (1985) sees upper hand systems as far as cost administration, separation and concentration as an unmistakable consider getting long haul market advantage. Because of Watchman's statements, Barney (1991) characterize SCA as a drawn out benefit getting from exceptional worth creation processes that happen non concurrently with likely contenders and are hard to duplicate. Likewise, the investigations of Quaye and Mensah (2018) uncovered that supportable upper hand (SCA) is a vital proportion of business achievement particularly in the present over-soaked market. Associations are not simply worried about how to make deals and lift benefit, yet how to support those benefits and deals volume has made SCA an imperative key presentation pointer. This implies that associations are continually looking for means and procedures to accomplish and support an upper hand over rivals and furthermore to remain significant in the business. The capacity of corporate substances to endeavor well in the business world will assist with supporting the organizations stand in the business. In arrangement with the above thought, it is vital to guarantee that assembling firms can contend well with other global firms to flourish inside the ecological choppiness. Tambunan (2019) kept up with that the intensity of firms is significant in light of the fact that it assist with improving the achievement and fortune of the firm. Associations dynamic fitness to contend and beat contenders, made them market pioneers. The manageability of associations in the realm of business relies heavily on how they can keep up with and support an upper hand over competitions. In arrangement with the above affirmation, Anton, et al., (2015) kept up with that associations seriousness expands their situation in the worldwide business space. The low degree of seriousness of firms has additionally appeared in the decrease of monetary exercises and development in the nation and it has over the period lead to the liquidation of many firms. Regardless of past work to resolve this issue of low intensity, yet the issue actually continues to happen. Accordingly, it becomes troubling for chiefs in the Nigerian assembling area to look for administrative procedures, for example, ability the executives to battle low degrees of manageable upper hand. It is on this reason that this study looks at the connection between ability the executives concerning ability fascination, ability improvement and ability maintenance with feasible upper hand of assembling firms in South-South, Nigeria.

Aim and Objectives of the Study

The aim of this study is to examine the relationship between talent management and sustainable competitive advantage of manufacturing firms in South -South, Nigeria. The specific objectives are to;

i. Investigate the relationship between talent attraction and differentiation advantage of manufacturing firms in south-south, Nigeria.
ii. Examine the relationship between talent attraction and cost leadership of manufacturing firms in south-south, Nigeria.
iii. Determine the relationship between talent attraction and organizational responsiveness of manufacturing firms in south-south, Nigeria.
iv. Investigate the relationship between talent development and differentiation advantage of manufacturing firms in south-south, Nigeria.
v. Examine the relationship between talent development and cost leadership of manufacturing firms in south-south, Nigeria.
vi. Determine the relationship between talent development and organizational responsiveness of manufacturing firms in south-south, Nigeria.
vii. Investigate the relationship between talent retention and differentiation advantage of manufacturing firms in south-south, Nigeria.
viii. Examine the relationship between talent retention and cost leadership of manufacturing firms in south-south, Nigeria.
ix. Determine the relationship between talent retention and organizational responsiveness of manufacturing firms in south-south, Nigeria.
x. Examine if transformational leadership does significantly moderate the relationship between talent management and sustainable competitive advantage of manufacturing firms in south-south, Nigeria.

Research Hypotheses

The following hypotheses in a null form were proffered as tentative answers to the research questions;

HO_1: There is no significant relationship between talent attraction and differentiation advantage of manufacturing firms in south-south, Nigeria.

HO_2: There is no significant relationship between talent attraction and cost leadership of manufacturing firms in south-south, Nigeria.

HO_3: There is no significant relationship between talent attraction and organizational responsiveness of manufacturing firms in south-south, Nigeria.

HO_4: There is no significant relationship between talent development and differentiation advantage of manufacturing firms in south-south, Nigeria.

HO_5: There is no significant relationship between talent development and cost leadership of manufacturing firms in south-south, Nigeria.

HO_6: There is no significant relationship between talent development and organizational responsiveness of manufacturing firms in south-south, Nigeria.

HO_7: There is no significant relationship between talent retention and differentiation advantage of manufacturing firms in south-south, Nigeria.

HO_8: There is no significant relationship between talent retention and cost leadership of manufacturing firms in south-south, Nigeria.

HO_9: There is no significant relationship between talent retention and organizational responsiveness of manufacturing firms in south-south, Nigeria.

HO_{10}: Transformational leadership does not significantly moderate the relationship between talent management and sustainable competitive advantage of manufacturing firms in south-south, Nigeria.

2. Literature Review

Conceptual Literature

Capacity Interest

As demonstrated by Armstrong (2006) affiliation should use various methodologies and strategies for enlisting and picking the right capacity. The enrollment of capacity pool is the first and critical endeavor of the capacity the board cooperation the capacity pool is a get-together of contenders that are the potential outcomes head of the affiliation who will control the relationship towards the merciless show. So to get and stay aware of the introduction of the affiliation the enlistment and assurance the fit individuals is incredibly crucial. The development of capacity pool ought to be conceivable in two designs, one is internal and second one is outside. Within selection of capacity pool will be from the overall existing delegates of the affiliation. Within enlistment could can give advantage as the delegates certainly know the lifestyle and way to deal with doing what needs to be done in the affiliation and it moreover could lift the certainty of the specialists if their position is motivated (Davis et al., 2007). In any case, the external sources will be the best method of get-together a capacity when affiliation needs to bring the social change and needs advancement (Ballesteros and Inmaculada, 2010). Business checking consolidates headway of an affiliation's image, sufficient to attract laborers. Without the extraordinary brand picture, it is trying to attract the right capacities (Ana, 2009).

In more perplexing business environment and data based endeavors HR is procuring importance and getting a charge out of major advantage through the improvement of the HR over an extended time is challenging for the affiliations (Hamel and Prahalad, 1993). In this manner, attracting gifts to gain advantage is very hard for the affiliations. (Trank et al., 2002). Describing laborers considering their show for the affiliation is an earnest cycle and ensuring different diverts to attract them is required. An enormous part of the associations are not successful at getting the extraordinarily gifted people for their affiliation, several amounts of them incredible at having pipelines. Regardless, a couple of associations don't understand who they need (Chambers et al., 1998). To attract the gifts there are a couple of key locales like various leveled culture (Looney and Looney, 2005), business brand, capacity the chiefs approach itself (D'Annunzio-Green, 2008), practices for regulatory improvement of gifts which consolidates getting ready expected open entryways, movement organizing and versatile compensation systems employment open entryways, and vision of the affiliation (Looney and Looney, 2005).

Capacity interest is referred to in a ton of late writing in the field of capacity the board (Ntonga, 2010). Capacity interest (enrollment and assurance) systems for an affiliation are the basis of capacity the leaders (Alruwaili, 2018). Armstrong, (2006) communicated that there are various approaches to attracting fit people (individuals), yet enrollment and assurance is one of the primary times of capacity interest. As shown by Allen and Rudders (2006), due to work market inadequacies, the fight for capacity has reinforced. Low capacity responsibility and result from a shortfall of capacity the board, which prompts lower execution and discouraged delegates who don't perform to their greatest limit. Cook (2011), capacity interest is the most well-known approach to perceiving the ideal individuals for each work inside the relationship by sorting out what contains first class execution in each work. Ntonga (2010) moreover communicated that there should be straightforwardness and that workers should be taught whether they are able in a couple of related given tasks, the limit of a chief to create or see the capacity that agreed with various leveled development.

Talent Development

The boss movement begins with the ID of the most fitting individual improvement necessities, inciting the improvement of people obligation to pack and authentic new turn of events. Noe et al (2012), consider limits improvement as a conclusive progress mediation with the motivation driving unequivocally centering the person towards future moderate sales. Furthermore, capacity to make is a basic administrative limit, since the decided improvement of every single conclusive construction and things is reliant upon it. Concerning factors requiring limits improvement, Long (2004) states that an equilibrium ought to be made between making individual limit and updating the connection. Furthermore, genuine limit the pioneers requires an arranged strategy for overseeing human asset the board, since limit is discovered in all human asset the bosses works. Precisely when limit is truly picked, whether from inside or outside, the human asset the pioneers capacity ought to be finished to hold this limit, develop it and use it to the possible increase of both the individual and the association.

Limit improvement basically rotates around cooking "zero limit blackouts" and to make solid areas for a game plan rather than limit substitution. Research drove by Garavan et al. (2012) obviously underlines the significance of limit improvement generally and locally and his evaluations in this way propose that limit improvement design is unquestionably not a one-size-fits-all way of thinking, yet it ought to be disengaged, with a feature on re capacity to attempt movement techniques to determine the issues of people. A wide concentrate by Mehdiabadi and Li (2016) suggests that the majority of the past evaluations comparable to limit movement are loped around calling improvement, culture and limit, backing of laborers, and regulating broadened social events of gifts.

Transformational Drive

Considering propelling explicit, social, political, and money related new turns of events, affiliations should prosper in a climate that is portrayed by precariousness and whimsies. Consequently, affiliations are obliged to change constantly to propelling conditions. Affiliations need solid master in this sort of climate to help them through changes that will pure and simple be pursuing for the affiliation. For relationship to remain mindful of their achievements, in the event that not make due, they should change their practices; they require something past little, moderate changes to their system. To rethink themselves, affiliations should go through a monstrous change. In such manner, affiliations should alter their authoritative social orders to achieve the ordinary changes. As per Tichy and Ulrich (1984), significant authority incorporates remodeling a connection; it incorporates changing the relationship to follow another vision that will accomplish the progress of the alliance's way of life.

As shown by Simola et al. (2012), profound drive is a style of association where joint endeavors between a lot of natural individuals are coordinated "around a common perspective" to "change, prompt, and work on the activities and moral longings of devotees." As per Geib and Swenson (2013), eminent authority is a drive procedure that means to carry out specific enhancements "in people who follow" and achieves these objectives by using the "structure and improvement" of the connection.

Bass (1990) perceived different social characteristics that profound drive is portrayed by. In any case, critical association involves a pioneer's temptation for influence associates' huge respect, get their trust, and award pride in them. Furthermore, draw in burdens the transparency of a commonplace vision and sense of direction that are fundamental for the progression. The subsequent quality is motivation, in which pioneers use pictures to orchestrate adherents' endeavors; they immediately express the general objective of the change cycle and further develop obviously standards oblige it. Shrewd energy is the third quality. By putting serious strong regions for an on reason and imaginative psyche in definitive thinking conditions, pioneers partner with their labor force's brains. To wrap things up, memorable association stresses individualized thought. Pioneers offer every expert their bound together thought and, each case in turn case, guide and bearing them.

Theoretical Literature

Resource-Based Hypothesis

The asset base hypothesis was propounded by Barney (1991). The hypothesis whereupon this study turns upon is the asset based hypothesis of the firm which sets considerations (Barney, 1991).

The resource based view further sets that affiliations can achieve all over and execution enduring they have tremendous or irrelevant resources that are essential, unprecedented, exceptional and non-substitutable. These four credits of resources depict what Barney (2007) thinks about essential assets that, if fittingly set up development and backing an affiliation's vital position and work on its show.

According to Barney (1991), endeavors in an essentially indistinguishable district can be heterogeneous seeing their own resources and as resources are not no inquiry adaptable among attempts, with key position being extreme. Anyway, and limits are not immense isolated and are by and large vain in segregation Newbert (2008). Hence, Newbert battles that the most ideal way to manage accomplishing an essential position is by misdirecting of a gigantic resource limit mix. This view is moreover stayed aware of by Bitar and Hafsi (2007), who recognize those resources and cutoff points are wellsprings of advantage, yet they don't be ensured to add to key position.

Anyway, paying little mind to what the long compelling obliged use out of RBV. The speculation has its own critics. According to Hedman and Railing (2003), this speculation is reprimanded for excusing the impediments to parts and affiliations. Chan et al. (2004) furthermore reprimands the speculation for its sure doubt of static equilibrium yet helps start from making current restricts that are significant solid areas for in a general sense observing the legitimate environment. For firms to accomplish advantage in this serious environment, they need to offer an advantage to clients. This value can be gotten from either cash saving advantage, affiliation or isolated things. Resource based speculation hence, twirls around the connection between an affiliation's inside resource strength and the ability to stay terrible through its methodology definition. Resource based view speculation (RBV) has correspondingly been related by Grant (1991) to join consistent framework. As displayed by Grant, Resource based View Theory joins savage frameworks and abilities to regard creation.

He puts that in spite of the way that cutoff points ought to be seen as the base to foster merciless procedure yet they nearly ought to be reestablished and stayed aware of by trained professional. Thusly RBV is crucial to see the worth in worth could start from key procedure of resources and dreadful designs.

Making on the essential position has taken a shift and it has seen that the inward resources fundamentally affect play in the showing of the association (Wright et al., 2009). The resource set up point of view concerning the firm gives importance to building uncommon, challenging to duplicate and basic resources as well as a unique strategy for blending those resources for get a victory for the association. According to resource set up view advantage is dependent concerning the basic, thrilling and challenging to copy resources that live in the coalition and HR one of those little resources.

A later speculation of firms, the breaking point set up viewpoint with respect to the firm, which gives importance to make and work on the constraint of the laborers of the firm through a deliberate course of cutoff procurement and breaking point move and sharing to get key position. According to the resource based view, rival firms battle considering the heterogeneity and inaction of their resources and endpoints (Peteraf and Barney, 2003). Resources can be physical, human and authentic in nature, and they can be used to execute regard conceptualizing framework. As was proposed by Barney (1991), resources which are immense, exceptional, novel, and non-substitutable, could perhaps give firms a certified vital position. A lot of resources that seem to match the above measures are limit assets. This speculation is relevant to this overview since when affiliation have undeniable or tricky resources that are fundamental, wonderful, extraordinary and non-substitutable, such will help with refreshing their validity in the business.

Empirical Review

Ayaz and Ali (2021) assessed the impact of limit the board rehearses (limit ID, limit upkeep and limit upgrade for) sensible benefit on picked higher instructive foundations in Kabul, Afghanistan. Five obvious higher foundations were relegated individuals. A model size of 250 respondents was perused a recorded higher affiliation. The outcomes uncovered that there is critical strong regions for an association between limit the bosses rehearses (TMP) and commonsense key position. The three speculations are all perceived in the last comments of the study. Besides, the study applies a quantitative technique, and whole information was gathered through a took on survey.

A review wrapped up by Mulburg (2010) uncovered that in the security business, the expense association methodology is used since the propensities and tastes of clients are exceptional. In such manner, the cost of associations picks on the off chance that it will be consumed or not considering the buying power consistency. Cost power and typical independent course are related with the progress of fitting techniques that exploit the experience turns, plant scales, work or more costs, as well as different parts associated with costs. Regarding cost drive, the associations and outcomes of any affiliation are considered across the contenders to be explicit (Bayraktar, Hancerliogullari, Cetinguc and Calisir, 2017). Watch (1985) looks at progress as a central strategic position to progress. A connection can be in a gotten position close with its rivals on the off chance that it has something imaginative (Ven de Ven, 1986). Nord and Exhaust (1987) saw the normal progress and enthusiast movement in thing improvement. Routine improvement recommends the partner of something with connection that looks like beyond ones, while revolutionary movement gathers acclimating something outstanding with alliance. The effect of enhancement for association's general execution is shown by a gigantic get-together of made works. Improvement is the multistage cycle by which affiliations change contemplations into extra made things, association or cycles, to propel, battle and separate themselves truly in their business local area (Baregheh, Rowley and Sambrool, 2009). Cost drive methods depend upon an association's capacity to give a thing or association at a lower cost than its opponents (Birjandi, Jahromi, Darasi and Biijandi, 2014). Cost drive technique is an incorporated arrangement of move made to make work and things with highlights that are palatable to clients at the most inconsequential expense, close with that of contenders (Sirmon, Hitt, Ireland and Gilbert, 2011). By and by, Calthrop (2010) views cost association as being about cost per unit of information, not most reduced cost from an overall perspective. Watchman (1985) adds that cost drive technique is a convincing system for accomplishing reasonable strategic position by diminishing and controlling the expenses. Watchman (1980) set that a firm that truly seeks after cost drive theory underlines mind blowing venture for cost decline, tight expense or more control, inventive work and business among others to accomplish an immaterial expense position. Utilization of cost drive structure incorporates working solid areas for of working environments; dynamic expense decreases pursuit from previous encounters; tight expenses or more control as well as aversion of irrelevant client records and cost minimization (Jones and Linderman, 2014). This is applied in districts like help transport, imaginative work, deals power and publicizing (Scott-Jackson, 2010). Irrelevant expense makers reliably sell standard things and feature extensively on harvesting scale or all around money saving advantages from all sources. A piece of the ways to deal with perceiving immaterial expense framework and accomplish the ordinary show are: economies of scale, control and reducing of regulatory expenses, the bend of commitment, and improvement. Cost influence system happens through experience, premium in progress work environments, security and vigilant seeing on the absolute working expenses (through projects like diminishing the size and quality association) and the help for applying the strategy for cost drive is to get the benefit by decreasing the cash related costs among its adversaries (Barney, 2002). As per Frambach et. al, (2003), cost authority moreover will in general be more contender organized rather than client coordinated. Surely, Christopher (2011) places that the most helpful rival in any industry district will by and large be the least expense maker or the provider furnishing a thing with the best seen segregated values. This technique consolidates the cycle through which the affiliation can convey or convey work and things at a lower cost than contenders inside the business.

3. Methodology

The study employed the cross-sectional research design. The survey's objective people are the collecting firms in south Nigeria. The six communicates that incorporate the south are Edo, Delta, Bayelsa, Streams, Akwa Ibom and Cross Streams. Incidentally, the survey's accessible people contained 24 (24) creating associations. This incorporate picked four firms from each state and the affiliations were purposively picked considering their direct section to information and considering the doubt that they are legitimate specialist of the general population and key part in the business. Using the Taro Yamene formula the sample size of the study was 242.

4. Presentation of Results

Null Hypothesis	Path Coefficient (β)	T Statistics (t)	P Values (p)	Predictive Accuracy R^2	Effect size (f^2)	Decision on Null Hypothesis
H_{O1}	0.553 (Strong)	3.126 (Significant)	0.002 (Accepted)	0.305 (Moderate)	0.440 (Large)	Reject
H_{O2}	0.616 (Strong)	11.604 (Significant)	0.000 (Accepted)	0.379 (Moderate)	0.611 (Large)	Reject
H_{O3}	0.808 (Strong)	13.948 (Significant)	0.000 (Accepted)	0.652 (Moderate)	1.874 (Large)	Reject
H_{O4}	0.599 (Strong)	10.908 (Significant)	0.000 (Accepted)	0.358 (Substantial)	0.559 (Large)	Reject
H_{O5}	0.523 (Strong)	10.669 (Significant)	0.000 (Accepted)	0.278 (Moderate)	0.376 (Large)	Reject
H_{O6}	0.763 (Strong)	11.638 (Significant)	0.000 (Accepted)	0.582 (Moderate)	1.391 (Large)	Reject
H_{O7}	0.583 (Strong)	1.992 (Significant)	0.006 (Accepted)	0.339 (Moderate)	0.514 (Large)	Reject
H_{O8}	0.721 (Strong)	2.065 (Significant)	0.000 (Accepted)	0.520 (Moderate)	1.082 (Large)	Reject
H_{O9}	-0.513 (Strong)	2.233 (Significant)	0.218 (Rejected)	0.263 (Moderate)	0.356 (Large)	Accept

H_{O10}	0.390 (Strong)	8.580 (Significant)	0.000 (Accepted)	0.152 (Moderate)	0.260 (Medium)	Reject

With respect to the above table, all the null hypotheses were rejected, indicating that there is a positive and significant talent management and organisational competiveness of manufacturing firms in South -South, Nigeria.

5. Conclusion and Recommendations

Conclusion

We reason that capacity the chiefs drives possible high ground of collecting firms in South Nigeria, and that culture distance expects a tremendous part in how much capacity the board helps sensible high ground, considering the revelations and discussions and with respect to the survey's goal and targets. In particular, we find that ability to use interest deals with cost organization, thing detachment, and definitive responsiveness for gathering firms in South Nigeria. Creating firms in South Nigeria benefit basically from a capacity improvement that deals with cost organization, thing detachment, and various leveled responsiveness. Capacity Upkeep basically helps cost organization, thing partition, and various leveled responsiveness of gathering firms in South Nigeria, and Momentous authority earnestly and impressively coordinates the connection between capacities the board and viable advantage of collecting firms in South Nigeria.

Recommendations

The following recommendations are made:

i. Talent fascination in assembling firms can be utilized on in laying out cost administration, item separation, and hierarchical responsiveness inside the firm. This can be accomplished by setting up and carrying out significant enrollment, determination and situation programs to draw in imminent useful representatives.

ii. Manufacturing firms ought to use ability improvement in keeping up with cost administration, item separation, and authoritative responsiveness. This ought to guarantee that hierarchical learning exercises integrates different orgnizational abilities and that the firm ought to found tutoring programs that can assist with working with information move, accordingly preserving authoritative recollections that can support upper hand.

iii. Talent maintenance ought to be utilized on by chiefs of assembling firms as they continued looking for practical upper hand through cost initiative, item separation, and authoritative responsiveness. This should be possible by integrating these factors (compensation, extra, motivations, prize, and benefit sharing) into their business connection procedures and strategies which at last expands the degree of responsibility and association among the workers.

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THE BUSINESS OF BUSINESS IS BUSINESS

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ABSTRACT

The paper participated in the age long argument of the rational or otherwise on corporate philanthropy. It opposes the proponent's view that "The business of business is business". The paper sees as an extremely capitalist in inclination. This capitalism tendency to profiteering is seen by this paper as harmful to stakeholder's thesis and could mar the long-run pursuits of theprofit objective of the business paradoxically. The paper therefore advocates for business involvement in corporate philanthropy as an aspect of corporate philanthropic strategic behavior which is known to enhance not only the long-run survival of the business, but also good corporate image and harmony between host communities and business organizations.

Keywords: Corporate social responsibility, Agility, Adaptability, Robustness.

INTRODUCTION

A reflection on the rationale for corporate social responsibility is indeed a buzz in business strategic thinking. Corporate social responsibility is a management concept where by companies integrate social and environmental concerns in their business operation. It is a type of business self-regulation with the aim of being socially accountable. Positively contributing to the society. MC Williams, Abigail, Siegal, Donald (2001).

In this sense, in the process of doing business, it is possible to do things that may hurt or upset people. Hinging from corporate social responsibility which is a self-regulating business model that helps a company be socially accountable to itself. Its stakeholders and the public by practicing corporate social responsibility, being conscious of the kind of impact they have on all aspect of the society, including economic, social and environmental examples of corporate socialresponsibilities are: hiring refugees for work, community service, support health and governmentofficials in their attempts to mitigate the effect of pandemic and positive actions. The long-run survival of the business/firms in most cases one of the critical objectives pursued by the firm. The long run survival ensures that the going concept of the firm is at least upheld, Razmi (2006).

The state of the business environment particularly turbulent appears to directly threaten the survival objective. Hamilton and Oboreh (2006), Chikwe (2013), Eketu and Neerdorn (2014). It then becomes a serious concern for the firm to behave in a way that perceived or real threats to survive are eliminated if not reduced therefore having a green business environment and having apositive impact on the society.

Aim and Objectives of the Study

The aim of the study will be to identify the association between corporate philanthropic strategyand oil and gas companies' resilience in Rivers State.

i. Identify the association between volunteer grant strategy and agility of oil and gas companies.
ii. Examine the association between volunteer grant strategy and robustness of oil and gascompanies.
iii. Assess the association between volunteer grant strategy and adaptability of oil and gascompanies. Identify the association between matching gift strategy and agility of oil and gascompanies.
iv. Assess the association between matching gift strategy and adaptability of oil and gascompanies.
v. Examine the association between matching gift strategy and robustness of oil and gascompanies.
vi. Identify the moderating effect of entrepreneurial motive on the association betweencorporate philanthropic strategy and corporate resilience.

Hypothesis

The following research hypotheses are formulated as tentative answers to the research questionsin null form.

H_{o1}: There is no significant association between volunteer grant strategy and agility of oil andgas companies.

H_{02}: There is no significant association between volunteer grant strategy and robustness of oiland gas companies.

H_{03}: There is no significant association between volunteer grant strategy and adaptability oiland gas companies.

H_{04}: There is no significant association between matching gift strategy and robustness of oiland gas companies.

H_{05}: There is no significant association between matching gift strategy and adaptability of oiland gas companies.

H_{06}: There is no significant association between matching gift strategy and agility of oil andgas companies.

H_{07}: Entrepreneurial motive does not significantly moderate the association betweencorporate philanthropic strategy and corporate resilience.

LITERATURE REVIEW

Conceptual Framework

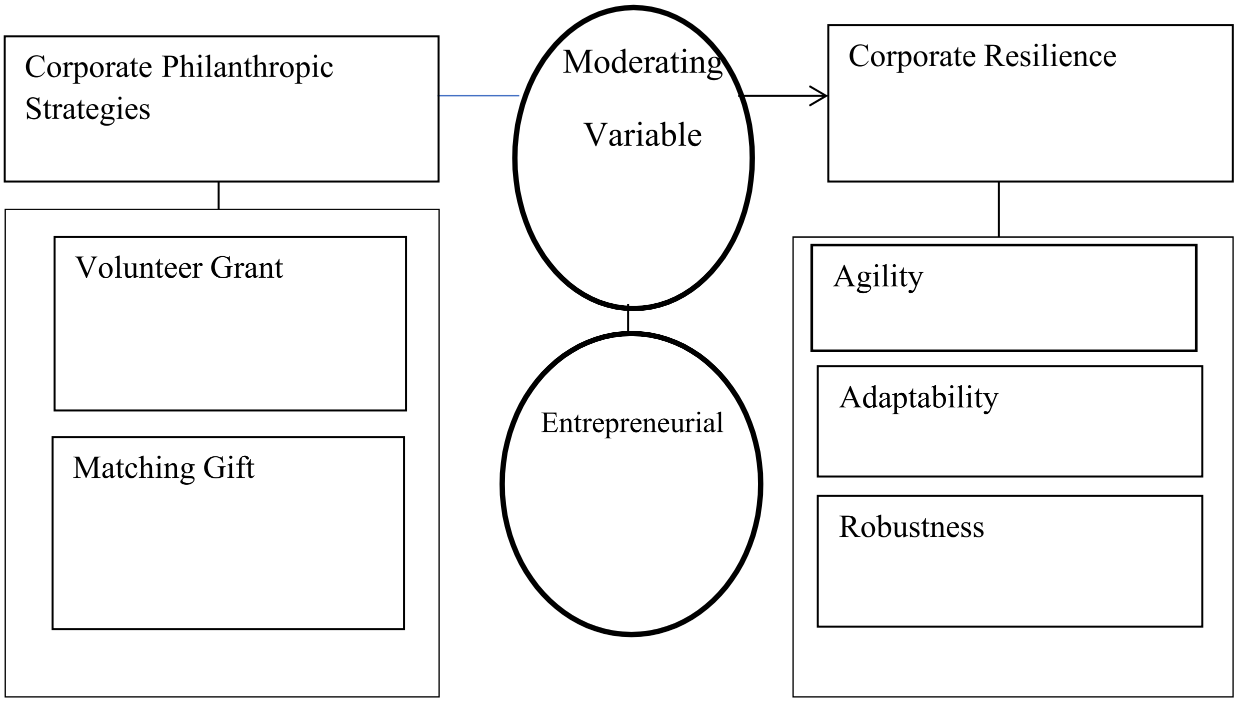

Fig. 1: Conceptual Framework for corporate philanthropic Strategies and Business Resilience

Source: Measures of Corporate resilience adopted from Chu (2015); Dimensions of corporate philanthropic strategy adopted from Carroll model (1991); Entrepreneurial motives adopted fromTeece (2014).

Corporate philanthropic strategy:

The industrial revolution also had adverse environmental impacts, such as pollution and resource depletion. In response to these emerging challenges, there was a growing recognition among some business leaders and reformers of the need for responsible business behavior. They realizedthat businesses had a role to play in addressing the social and environmental consequences of industrialization.

This understanding laid the foundation for the concept of corporate philanthropy. Some business owners and philanthropists began to take steps to improve the welfare of their workers and communities. They initiated philanthropic efforts, such as building schools, hospitals, and housing for their employees. These actions were seen as an early form of corporate philanthropy, as they went beyond the traditional profit-seeking objectives of businesses and demonstrated a sense of duty towards society. The formalization of corporate social responsibility as a concept and its integration into business practices came much later, particularly in the second half of the 20th century.

Since then, corporate philanthropy has evolved significantly, and the understanding of responsible business behavior has expanded beyond philanthropy to encompass a broader range of issues related to sustainability, stakeholder engagement, ethics, and corporate governance. Today, corporate social responsibility is an integral part of business strategies, and companies are increasingly expected to demonstrate their commitment to social and environmental responsibilities in their operations and decision-making processes.

Agility:

Agility allows organizations and individuals to adapt to Change In a world where technology, markets, and environments evolve quickly, agility helps in adjusting to these changes effectively. Being agile means you can spot and take advantage of new opportunities as they arise. Manage Uncertainty, Rapid change often comes with uncertainty. Annareth & Noniro (2016) Agility helps in dealing with ambiguity and making decisions in uncertain conditions. In competitive markets, the ability to adapt faster than rivals can be a significant advantage. To Improve Decision-Making, Agile organizations empower employees at all levels to make decisions,which can lead to more informed and quicker choices. Agility Enhance Innovation By fostering an environment where experimentation is encouraged, agility can lead to increased innovation. Boost Customer Satisfaction, Responsiveness to customer needs and changing market trends is a key element of agility. Satisfied customers can drive business success. to Manage Risk, Agile organizations often have risk management strategies in place that can reduce the impact of unexpected events. Agility is a way to future-proof organizations and individuals in a world where change is the only constant. Kantur & Iserisay (2015) Agility provides a strategic advantage by enabling organizations and individuals to thrive in dynamic environments, capitalize on opportunities, mitigate risks, and stay ahead of the curve.

Adaptability:

The adaptive strategy execution framework acknowledges that change is constant. It encourages organizations to align with both internal and external changes. This includes adapting to market dynamics, industry trends, customer preferences, and emerging technologies. Daudelin (1997) The key rationale behind this approach is to remain agile in the face of uncertainty. Instead of adhering to a single, unchanging plan, adaptive strategy execution acknowledges that the path to success might need to shift as new information becomes available or market conditions change. Charles Darwin illustrates the idea that adaptability is essential for survival. In the business context, this means that companies that can adapt to change and continuously refine their strategies are more likely to thrive in dynamic and unpredictable markets. Implementing adaptivestrategy execution requires a culture of learning, flexibility, and open communication. It encourages organizations to be proactive rather than reactive, enabling them to anticipate changes and adjust course accordingly.

Robustness:

Part of business robustness is effective risk management. Businesses that assess and mitigate risks, whether they are financial, operational, or reputational, are better equipped to handle adverse situations. This includes financial planning, insurance coverage, and diversified supply chains. A robust business not only protects its own interests but also safeguards the interests of its customers and employees. This builds trust and loyalty among stakeholders. During the pandemic, companies that prioritized the safety and well-being of their employees and customersearned goodwill. Robustness can be a source of competitive advantage. Pearce & Robinson (2013) When your business can continue operating effectively while others struggle during a crisis, you're in a better position to gain market share and stand out in your industry. A robust business ensures it complies with relevant laws and regulations. Non-compliance can lead to legal issues and reputational damage, which can be devastating during challenging times.

Matching gift:

Matching gift programs are another form of corporate giving that many employers offer. In theseprograms, employers agree to match the charitable contributions made by their employees, up toa certain limit. Some employers may also match volunteer hours completed by employees with monetary grants or donations to the organizations where the employees volunteered. Matching gift programs provide additional support to the causes that employees care about and cansignificantly amplify the impact of their charitable contributions. By matching donations or volunteer hours, employers demonstrate their commitment to social responsibility and encouragetheir employees to engage in philanthropic activities. , matching gifts, thus promoting sustainability within the communities where they operate. It underscores the need for businesses to engage in social responsibility to maintain their reputation, gain competitive advantages, and contribute to long-term sustainability.

Corporate Resilience:

Business resilience refers to an organization's capacity to effectively respond to and recover from disruptions, emergencies, or unforeseen events that could impact its operations and objectives. These disruptions can include natural disasters, economic crises, cyber-attacks, supply chain disruptions, pandemics, regulatory changes, or any other events that pose a risk to the organization. Environmental risks include concerns related to climate change, natural disasters, and environmental regulations. Failure to address environmental risks can lead to environmental damage and potential legal and reputational consequences. Risk Assessment and Management, Businesses need to identify and assess potential risks and vulnerabilities they may face.

This involves analyzing internal and external factors that could disrupt operations and implementing risk mitigation strategies to minimize their impact.

The Relationship between Corporate Philanthropy and Corporate Resilience:

Businesses that incorporate corporate resilience into their business will be better able to build their resilience and will therefore be resilient, motivate staff, improve brand image and become stronger as a result (Benight & Bandura, 2004). It is on this premise that researchers identify resilience as a key to corporate philanthropy; giving that developing resilience is essential for businesses to sustain their business (Ayala & Manzano, 2014; Bullough & Renko , 2013).

Theoretical Framework:

The foundational theory for this study will be the *stakeholders Theory* (Freeman and Reed 1984). This theory deals with the importance of identifying all relevant stakeholders of the company. Companies have various stakeholders who can influence or be affected by the achievement of theorganization's objectives. This model explains how stakeholders attribute success or failureaccording to the two dimensions: volunteer grant and matching gift.

It is conceivable that companies also tend to explain the outcome of their activities in respect to these dimensions. The approach aims to create a more balanced and sustainable approach to business that benefits both the company and the larger community (R. Edward 1984) . Adopting the stakeholder perspective can help organizations build trust, foster positive relationships with stakeholders, mitigate risks, and enhance their overall reputation. As a result, many companies are integrating stakeholder considerations into their strategic decision-making processes and corporate governance practices. By embracing the stakeholder theory, organizations can better align their business objectives with societal expectations, contributing to more responsible and ethical business practices.

Empirical review:

carrols four domain of corporate social responsibility (1979) and pyramid of corporate social responsibility (1991). The four domain approaches which include four core domain of economic, legal, ethical and philanthropic responsibility. There are two approaches to understand businesses, classical and socio economical view.

Classical View

Multon Friedman (1970) an economist argued that today managers are professionals, their social responsibility is to maximize the profit. According to him, their first priority should be to run the business in the best interest of the owners, which is ultimately profit, or returns to investments.

Socio-Economic View: Maximizing profit is the second priority. The first priority is protecting and improving society welfare. These days, modern business organizations are not only economic institution, but they engage their self in such activities to influence political process fortheir benefits. Society encourages business to become involved in its social, political and legal environments.

Ayala and Manzano (2014) tested whether a connection exists between resilience dimensions and the success of established businesses in the Spanish tourism sector, and whether any gender- specific differences exist.

Fatoki (2018) investigated the relationship between entrepreneurial resilience and the success of companies. Success was measured using both organisational and individual criteria.

Hadjielias, Christofi and Tarba (2022) draw on the concept of psychological resilience and focuses on company managers to the end of examining business resilience in the context of the COVID-19 pandemic.

METHODOLOGY

Descriptive research design was used. The population of the study consists of 262 registered oil and gas companies in Rivers State, Nigeria. A convenient sampling technique was used. The data required in this investigation was largely quantitative. The quantitative data was sourced by aid of structured questionnaire which is a primary source. However, secondary sources of data was the business records of the oil and gas companies, and records of the unit of the rivers State ministry of mineral resources in charge of oil and gas companies **.** The study collected research data using questionnaire **.**The research instrument was structured in two basic parts: part- Demographics, and part B – Study variables. Part B will be further divided into three sections: Section 1 – Predictor variable (corporate philanthropic strategies; section 2 – Criterion Variable (Resilience of oil and gas corporations); and section 3 – moderating variable (entrepreneurial motives). The researcher relies on the expertise of the supervisor and student surrogates for the enhancement of validity. On reliability, the research adopts the Cronbach Alpha test. A pilot survey using a prototype of the questionnaire was administered on a pilot cluster. The data obtained from the retrieved pilot questionnaire were inputted into SPSS version 22 to generate the alpha (coefficient) values below:

Table 3.1: Alpha Values on Reliability Test

S/No	Construct	No of Items	Alpha Value
1.	**Volunteer grant**	**5**	**0.77**
2.	**Matching gift**	**5**	**0.75**
3.	**Agility**	**5**	**0.74**
4.	**Adaptability**	**5**	**0.76**
5.	**Robustness**	**5**	**0.78**
6.	**Entrepreneurial Motives**	**5**	**0.73**

Source: SPSS Output.

Fig.3.1: The threshold for acceptable reliability coefficient of Cronbach Alpha value, according to Nunnally & Bernstein (2000), is 0.7. This is the minimum acceptable value, implying that the more an alpha value is positively away from 0.7, the more the

associated construct is reliable. Considering the values on table 3.1, all the constructs were reliable.

In this study, three levels of analysis where adopted, via: primary analysis involving univariate analysis, using descriptive statistics, this involved mean score evaluation of demographic elements, and dimensions and measures is study variables; secondary analysis – involvingbivariate analysis, using inferential statistics. At this level, the bivariate – hypotheses was tested using Spearman's Rank Order correlation. Also, the multivariate – hypothesis involving the moderating influence of entrepreneurial motives on the association between corporatephilanthropic strategies and resilience of oil and gas companies regression analysis. The tertiary analysis will involve the use of theoretical logic to connect the empirical evidence with theoretical evidence to establish facts as objective realities.

RESULT AND DISCUSSIONS

The result of the study analysis is to evaluate the relationship between corporate philanthropy and resilience of oil and gas companies in Rivers State, Nigeria. Descriptive statistics was adopted in evaluating the underlying relationships between predictor and criterion variables. The study clearly outlines evidences and results in tables and charts. The hypothesis was tested and findings discussed.

SEM Assessment Results of Measurement Models

Table 4.12: SEM Assessment Results of Measurement Models

Latent Variable	Convergent validity	Internal Consistency reliability	
	AVE	**Composite reliability ρ_c**	**Cronbach's Alpha (CA)**
	> 0.50	**> 0.70**	**0.70 - 0.90**
VGT	0.739	0.934	0.912
MGT	0.630	0.895	0.854
AGY	0.749	0.937	0.916
ADY	0.780	0.946	0.929
ROS	0.808	0.954	0.940
EMS	0.817	0.957	0.944

Source: AMOS Version 23.0 Output, 2023

The profound nature of our inquiry lies in the fact that the coefficients of reliability pertaining to the latent variables, as well as their corresponding Cronbach's alpha values, have surpassed the threshold of 0.7. Thus, it can be inferred that the outcomes serve to validate the notion that the derived variables possess a coherence in elucidating the variances inherent within them.

Results of Hypotheses Testing

Both the reliability coefficients of the latent variables and their corresponding Cronbach's alphavalues exceeded the 0.7 threshold. Consequently, the results verify that the extracted variables are consistent in explaining the variances that constitute them. The outcome of the data analysedand presented in tables and figures. Based on the above findings, the study realized the following:

The empirical findings pertaining to the correlation between volunteer grant outcomes and agility exhibit a noteworthy, affirmative, and momentous association. The augmentation of volunteer grants shall inevitably engender a corresponding augmentation in the nimbleness of oil and gas enterprises within the confines of Rivers State. The concept of the beta value suggests that the mere alteration of a single unit in the realm of volunteer grants holds the potential to encompass a substantial seventy-nine percent of the overall variability observed in the domain of agility.

Therefore, the significance of the volunteer grant lies in its ability to cultivate a sense of nimbleness within the oil and gas enterprises of Rivers State, Nigeria.

The findings pertaining to the volunteer grant exhibit a correlation that is not only positive, but also substantial and significant in nature, particularly in relation to adaptability. The augmentation of volunteer grants shall inevitably engender a corresponding augmentation in therealm of adaptability. The profound implications of the beta value lie in its assertion that a mereunitary alteration in the realm of volunteer grant shall be responsible for an astonishing eighty- eight percent of the comprehensive fluctuations witnessed in the domain of adaptability.

Therefore, the essence of the volunteer grant manifests itself in its profound significance, as it bestows upon the oil and gas firms in Rivers State, Nigeria, a sense of adaptability. The findingspertaining to the volunteer grant exhibit a noteworthy correlation with the concept of robustness,evoking a sense of positivity. The augmentation of volunteer grant shall inevitably engender a commensurate augmentation in the state of robustness. The profound implications of the beta value lie in its capacity to elucidate the intricate relationship between a mere unit change in volunteer grant and the vast expanse of robustness. It is a testament to the profound interconnectedness of these variables, as the beta value reveals that such a minute alteration can account for a staggering eighty-six percent of the total variation in robustness. Therefore, the concept of the volunteer grant assumes a paramount significance in the cultivation of resilience within the realm of oil and gas enterprises situated in the region of Rivers State, Nigeria.

The empirical findings pertaining to the correlation between matching gift programs and agility reveal a noteworthy, affirmative, and momentous association. The augmentation of a matching gift shall inevitably engender a corresponding augmentation in the state of agility. The concept of the beta value, in its essence, suggests that the mere alteration of a matching gift by a single unit possesses the potential to encompass a substantial proportion, precisely seventy-two percent,of the overall variability observed in the realm of agility. Therefore, it can be inferred that the concept of matching gift holds significant relevance in the cultivation of adaptability within the realm of oil and gas enterprises situated in the region of Rivers State, Nigeria.

The findings pertaining to the correlation between matching gift and adaptability exhibit a noteworthy, affirmative, and momentous association. The augmentation of a matching gift shall inevitably engender a corresponding augmentation in adaptability. The concept of the beta value,in its essence, suggests that the mere alteration of a matching gift by a single unit possesses the potential to encompass a significant proportion, specifically up to sixty-eight percent, of the overall variability observed in the realm of adaptability. Therefore, the concept of a matching giftassumes a paramount significance in the cultivation of adaptability within the realm of oil and gas enterprises situated in the esteemed region of Rivers State, Nigeria. The veracity of this discovery is bolstered by the convergence of evidence.

The findings pertaining to the correlation between matching gift and robustness reveal a noteworthy, affirmative, and statistically significant association with robustness. The augmentation of a matching gift shall inevitably engender a corresponding augmentation in the state of robustness. The concept of the beta value, in its essence, suggests that the mere alterationof a matching gift by a single unit possesses the profound capability to elucidate and encompass a staggering eighty-four percent of the overall variability in the realm of resilience and steadfastness. Therefore, the concept of matching gift assumes a paramount significance in the cultivation of resilience within the realm of oil and gas enterprises situated in the region of Rivers State, Nigeria. The aforementioned discovery finds its foundation in the profound interplay between philanthropy and resilience exhibited by oil and gas firms in the region of Rivers State, Nigeria.

The profound implications derived from the multivariate analysis concerning the moderating effect of entrepreneurial motives manifest a noteworthy correlation between corporate philanthropy and the fortitude exhibited by oil and gas enterprises in the esteemed region of Rivers State, Nigeria. The present outcome serves to reinforce the position regarding the influence of the moderating variable on both the predictor and criterion variables pertaining to corporate philanthropic strategies and the resilience of oil and gas companies within the region ofRivers State, Nigeria.

Table 4.14: Results of Hypotheses Testing

Null Hypothesis	**Variables**	**Path Coefficient (*β*)**	**T-values (t.)**	**Level of Significance (*p*)**	**Decision**
H_{O1}	VGT - AGY	0.790	1.980	0.000	Reject null hypothesis
H_{O2}	VGT – ADY	0.880	3.920	0.000	Reject null hypothesis

H_{O3}	VGT – ROS	0.860	4.900	0.000	Reject null hypothesis
H_{O4}	MGT – AGY	0.720	3.310	0.000	Reject null hypothesis
H_{O5}	MGT – ADY	0.680	2.650	0.000	Reject null hypothesis
H_{O6}	MGT - ROS	0.840	2.240	0.000	Reject null hypothesis
H_{07}	EMS – CPY - RSE	0.86 0.91	2.17 2.42	0.000	Reject null hypothesis

Source: SPSS-AMOS Data Output, 2023

From Table 4.14, all the null hypotheses were rejected and the alternate hypotheses accepted.

CONCLUSION AND IMPLICATIONS

In summary, strict adherence to corporate social responsibility is that the effectiveness of the business is only properly understood through its stakeholder's expectations. Applying carrols pyramid of social responsibility and adopting the socio economic approach of social responsibility, meeting stakeholder's expectations is upheld in this paper as the business of business is not strictly business, but also considering stakeholders interest in a wider sphere.

Recommendation:

Oil and gas companies seeking to secure comprehensive resilient capacity should adopt both matching gift and volunteer grant to reap the advantages of both growths option. Proprietors and manager of oil and gas companies should give preference to profit motives, as non-economic motives may moderate negatively in the long run.

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REMOTE WORKING AND EMPLOYEE MOTIVATION AMIDST THE MONDAY SIT AT HOME ORDER IN SOUTHEAST NIGERIA

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Abstract

This research sought to understand employee motivation amidst the monday sit at home order in Southeast Nigeria and how the adoption of remote working by organisations affect the employee's motivation. Specifically, the objectives were to: explore the effect of remote working on work commitment, determine the effect of remote working on employee turnover and ascertain the effect of remote working on the work-life balance of employees. The survey research design was adopted and the employees of First Bank in South East Nigeria made up the study's population encompassing the geographical area covering Abia State, Anambra State, Ebonyi State, Enugu State, and Imo State. The research employed Taro Yamane's formula to determine a sample size of 270 from the population and the purposive sampling technique was adopted. The study used both primary and secondary data sources and primary data was administrated through questionnaires disseminated via email, utilizing Google Form The method of data analysis adopted was the use of descriptive statistics and the formulated hypotheses were tested using the multivariate analysis of variance (MANOVA) technique. Findings showed 54.6% the variance in Employee Work Commitment, 31.8% in Employee Turnover, and 27.0% in Work-Life Balance. The p-values affiliated with all independent variables exhibit values below the threshold of 0.05, indicating the statistical significance of the effects of the independent variables. Consequently, the null hypotheses are duly rejected in favour of the alternative hypotheses the study recommended that Organisations establish clear and comprehensive remote work policies that outline expectations, responsibilities, and guidelines for remote employees and encourage work-life balance initiatives and flexible working arrangements to support employees in managing personal and professional responsibilities.

Keywords: Remote working, Employee Turnover, Employee Commitment.

Introduction

The rise of information technology has helped remote working become the norm. These days, commuting to a single, central location is no longer necessary for employees (Shareena & Shahid, 2020). The rise in popularity of remote work prompted the development of several technologies, including online conferencing with Zoom and Skype, virtual facilitation with MURAL, teamwork with Microsoft Teams, etc (Deloitte, 2020). Companies must boost productivity from workers, maintain job satisfaction levels, and increase employees' willingness to work for the organization for a long period to create a sustainable firm (Chandrakant, 2017).

Many businesses have not noticed a substantial shift in employee productivity as a result of the explosion in remote working and the quick uptake of communications and collaboration technologies. Hence, it's important to keep staff members happy, inspired, and engaged (Vyas & Butakhieo, 2021). During the Covid-19 epidemic, remote working is one strategy utilized to increase productivity (Spurk & Straub, 2020). Employee performance is impacted by this system. The quality and quantity of the output can be used to assess an employee's performance (Rahman & Kistyanto, 2019). Workers must use the appropriate resources to interact with coworkers, participate in online meetings, and maintain a positive attitude (Spotaso, 2021). Bawono, Setyadi, and Hamid (2020) contend that high levels of work motivation are essential for developing high-performance employees, even when they are working from home. Employees who work remotely have more flexibility in their schedules and may choose the best location and time for them to complete their responsibilities, which improves their effectiveness at work (Abdullah, Rahmati, Zawawi, Khamsah, & Anuarsham, 2020).

Moreover, telecommuting reduces commute times as most individuals drive an hour or more to work (Klopotek, 2017). As a result of not having to commute and deal with traffic, the employees are less anxious and calmer (Dwidienawati et al., 2020). Employees can save money by cutting down on travel, food (eating out for breakfast and lunch), and childcare costs when working from home. When employees work remotely, companies also gain since their operational costs for rent, utilities, and other expenses are reduced (Heng, San, & Lee, 2012).

Using incentives, employers may nudge staff members to do tasks and reach goals. Workplace motivation is a component that affects how workers perform and behave, and according to Allscheid & Cellar (1996), motivation is the sole skill needed to be successful in every area of the workplace. As a result, it is a talent that is necessary for every work or employment. Moreover, Anne (1994) explained that the term "motivation" refers to a process that pulls, regulates, and sustains particular actions. She also investigated how each employee has unique wants and aspirations, which indicates that each employee has various motivational variables

This study has therefore made an effort to establish the impact of remote working on employee work motivation and ability to work in First Bank, Nigeria. First Bank Nigeria's activities, as well as those of other financial institutions in South Nigeria, have been hampered by insecurity despite having a manpower development program that acknowledges the essential contribution that people resources make to the growth and development of nations. Due to concerns about attacks on their facilities, companies, and organizations like First Bank have been compelled to remain closed on Mondays as a result of the Monday sit-at-home declaration in southern Nigeria by the separatist Indigenous People of Biafra (IPOB) (Njoku, 2022). To maintain employee commitment, continuity, and staff motivation, First Bank has adopted remote working on Mondays. This study will ascertain the effect of this policy on employee motivation of staff of First Bank, Nigeria

Specifically, the objective of this study will be:

1. To explore the effect of remote working on work commitment
2. To determine the effect of remote working on employee turnover
3. To ascertain the effect of remote working on the work-life balance of employees

Literature Review

Using productivity metrics, Bloom, Liang, Roberts, and Ying (2015) performed a field experiment on staff members of a Chinese travel firm that was listed on the NASDAQ. For nine months, employees had the option of working remotely. The outcome displayed a considerable favourable influence after the allotted time. The performance of those employees who choose to work remotely has increased by 13%. Employee productivity grew, which helped the business. The increased performance of the employees may be the cause of the stillness at home as opposed to the typical workplace. Courtney (2021) study showed that 75% of respondents to indicated that they would want to work remotely since there are fewer distractions. According to Sandoval-Reyes, Idrovo-Carlier, and Duque-Oliva (2021), the fundamental justification for most organisations adopting remote working as a work arrangement is higher productivity. According to their research, working from home allows employees to get started at their "most productive time" of the day and reduces interruptions from coworkers, which boosts employee productivity (Khan, Akbar, Jam, & Saeed, 2016).

According to Dima, Uclea, Vrânceanu, and Igu (2019) study of 1,180 Romanian employees, working remotely improves work-life balance. This is due to a stronger ability to care for the family and even attend to personal concerns, which reduces stress. The work-life balance of women was dramatically altered by remote working. According to Glenda Jacobs' (2006) study on commitment, which focused in particular on remote workers' workforces, effective communication concepts and counterproductive methods are essential for gaining commitment. The focus of Ward's (2017) research was determining how remote work affected workers' motivation and performance levels while working for the company. The study used a qualitative methodology and semi-structured interviews to carry it out. According to the study's findings, motivation has a significant impact on boosting employee happiness when they work from home.

Ahmad, Idris, and Hashim (2013) looked at the connection between flexible work schedules and workers' motivation. The results demonstrate a significant correlation between the two variables. According to the findings, the XYZ Department's employee motivation is strongly correlated with the use of flexible working hours. By highlighting the mediating role of job dedication and work-related weariness, Palumbo (2020) investigated the effects of remote working from home on work-life balance. The findings demonstrated that working from home has a detrimental effect on the work-life balance of public employees. The perceived work-life balance was negatively influenced by the increased fatigue brought on by working from home. On the other hand, job dedication effectively mitigated the detrimental effects of working from home on work-life balance.

In the context of the UAE service business, the study by Jawabri (2022) focuses on examining the impact of remote work on employee engagement, motivation, and job satisfaction. An empirical investigation of 316 workers' viewpoints found that remote work had a positive and negative influence on employee engagement, motivation, and job satisfaction. The impact of remote work on productivity and work-life balance for employees in the business According to an analysis of the responses, there is a strong link between remote work and higher employee productivity. However, findings also suggested that working remotely had little to no influence on employees' ability to maintain a healthy work-life balance. Ferrara et al. (2022) effort to explain how distant work affects the productivity and well-being of employees. The findings showed that there were a variety of erratic impacts on employees' satisfaction and productivity. Remote work affects how people see themselves and their employers, as well as how it affects their physical and emotional health, especially in terms of work-life balance. The article will discuss how deploying remote working has an impact on management.

Kowalski and Slebarska (2022) investigated how managers evaluated the success of remote work.. The results showed that management-level evaluations of remote work are socially heterogeneous.Peggy et al. (2022) looked into the efficiency and outcomes of remote labour. The researchers looked at the internal and external elements that affect work-life balance and remote work. Online cross-sectional research of knowledge workers in Hong Kong who work remotely finds that workplace flexibility, attitude, and perceived behavioural control are all significant drivers of successful remote employment. Heryanto et al. (2022) examined the connections between work-life balance, job happiness, and mental health. 314 banking employees from all around the Greater Jakarta Area participated in an online study to explore the hypothesis that WLB, job happiness, and employee mental health can increase productivity under WFH arrangements. The study shows that applying the WFH arrangement has a positive impact on the productivity of banking employees in terms of job satisfaction and mental health. However, the research also highlights the negative association between the WFH layout and the WLB. To determine why 169 professors from Peninsular Malaysia worked from home, Ishak et al. (2022) looked at their motivations. The results show a surprising effect of remote work on employee motivation. Employee motivation increased as a result of working from home, which enhanced job performance.

The research will be guided by the following theories:

Employee engagement theory

Kahn (1990) looked at the psychological elements that affect workers' involvement and disengagement at work. Khan interviewed camp counsellors and staff members from an architecture firm to learn the reasons for the hiring or firing of 30 employees. The three characteristics of availability, safety, and meaningfulness were shown to be connected with both workplace engagement and disengagement. Based on his study, Kahn (1990) contended that employee engagement increased in environments with increasing degrees of psychological meaningfulness, psychological safety, and psychological availability. Engagement and burnout are influenced by six different work-life factors, according to Crawford et al. (2014): values, workload, perceived fairness, control, community and social support, and incentives and recognition.

Employee engagement theory is a paradigm that explains how much people care about their job, are dedicated to the organization's objectives, and make an extra effort to help it succeed. The idea contends that the same concepts hold when working remotely, but they must be modified for the virtual setting. The employee engagement theory can be applied in a study on remote working and employee motivation. The employee engagement theory might be used as a framework for the study as a whole to comprehend the elements that influence engagement among remote employees. Organisations may create strategies to enhance remote work environments and foster employee motivation by recognising these characteristics

Self-Efficacy theory

The theory that underpins this study, termed "Self-Efficacy," was developed by Bandura (2010). According to Bandura (2010), "The way a person executes a plan of action in the future depends on their individual beliefs." Self-efficacy may be summed up as "a person's confidence in their ability to succeed under specific circumstances." The main basis for psychological well-being, career success, and internal motivation is this notion. The notion of self-efficacy is intimately related to several studies that examine career decisions, job completion, technological adaptation, and problem-solving in the workplace.

It still applies to a virtual business structure where workers have more autonomy. Remote employees in a virtual company have a lot of freedom, but they still must use their expertise or skill sets to carry out and finish the tasks that are assigned to them. This claim is relevant to the study's investigation of remote workers' job performance. The self-efficacy ratings of those who have worked remotely before, such as "motivations and faith in their talents," are higher than those of those who had just little supervision. According to the self-efficacy idea, people who are confident in their skills are more likely to do well and be motivated in tasks and activities that are connected to those talents. A study on remote working and employee motivation can use this theory in the following ways: Assess the participants' self-efficacy beliefs about remote work activities and Look at ways to increase workers' self-efficacy beliefs about remote work activities.

Methodology

This study will utilize a survey approach in addition to quantitatively-based descriptive and analytical research designs. The staff of First Bank Nigeria would be the study's primary respondents. This research population was thought to be an accurate representation of the research population to offer reliable information on the subject of the study. The target population of this study comprised all staff of First Bank of Nigeria Plc in Abia State, Anambra State, Ebonyi State, Enugu State, and Imo State with a total population of 822 staff.

To determine the needed sample size of 270 from provided population, Taro Yamane's formula, also known as Yamane's sample size formula, was used To choose the banks for the study, a purposive sampling approach was applied.

These questions will be analyzed using SPSS version 24 and subsequently evaluated to answer the research questions based on the weight of the responses. The questionnaire has questions that attempt to describe all of the variables that comprise this study, which will be entered individually for the hypothesis test. Descriptive statistics will be used to investigate the socioeconomic features of the respondents. Hypotheses (i), (ii), and (iii) will be investigated using multivariate analysis of variance.

Result and Discussions

Table 4.4: Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	Employee Work Commitment	3657.408[a]	14	261.243	16.573	.000
	Employee Turnover	2022.040[b]	14	144.431	7.037	.000
	Work-Life Balance	2061.567[c]	14	147.255	5.775	.000
Intercept	Employee Work Commitment	24531.721	1	24531.721	1556.311	.000
	Employee Turnover	26085.504	1	26085.504	1270.993	.000
	Work-Life Balance	32046.870	1	32046.870	1256.829	.000
RemoteWorking	Employee Work Commitment	3657.408	14	261.243	16.573	.000
	Employee Turnover	2022.040	14	144.431	7.037	.000
	Work-Life Balance	2061.567	14	147.255	5.775	.000
Error	Employee Work Commitment	2632.378	167	15.763		
	Employee Turnover	3427.460	167	20.524		
	Work-Life Balance	4258.197	167	25.498		
Total	Employee Work Commitment	74485.000	182			
	Employee Turnover	67739.000	182			
	Work-Life Balance	70473.000	182			
Corrected Total	Employee Work Commitment	6289.786	181			

	Employee Turnover	5449.500	181			
	Work-Life Balance	6319.764	181			

a. R Squared = .581 (Adjusted R Squared = .546)
b. R Squared = .371 (Adjusted R Squared = .318)
c. R Squared = .326 (Adjusted R Squared = .270)

Source: SPSS Version 24 Output

The table presents the results of a multivariate analysis of variance (MANOVA) with three dependent variables: Employee Work Commitment, Employee Turnover, and Work-Life Balance. The analysis investigates the effects of different sources (independent variables) on the three dependent variables. The MANOVA results indicate that the independent variables collectively have a significant effect on all three dependent variables (Employee Work Commitment, Employee Turnover, and Work-Life Balance).

The adjusted R-squared values indicate the proportion of variance in each dependent variable explained by the independent variables. For example, the independent variables explain 54.6% of the variance in Employee Work Commitment, 31.8% in Employee Turnover, and 27.0% in Work-Life Balance. The p-values for all sources (independent variables) are less than .05, suggesting that the effects of the independent variables are statistically significant, hence the null hypotheses are rejected.

The multivariate tests for the independent variable(Remote Working) effects also show very low p-values (all are .000), indicating that the overall effect of the Remote Working effects on the dependent variables is statistically significant. This suggests that there are significant differences between the groups represented by the RW effects for the dependent variables. The specific test statistics used (Pillai's Trace, Wilks' Lambda, Hotelling's Trace, and Roy's Largest Root) yield similar conclusions about the significance of the effects.

The multivariate analysis reveals that the tested independent variables significantly impact the three dependent variables, and the model explains a considerable portion of the variance in each dependent variable. The results provide valuable insights into the relationships between the variables and contribute to a better understanding of the factors influencing employee work commitment, turnover, and work-life balance.

The multivariate analysis of variance (MANOVA) results demonstrate that remote working has a significant effect on employee work commitment, turnover, and work-life balance. The findings of this study align with several empirical studies conducted by other scholars. Bloom et al. (2015) reported a significant increase in employee productivity (13%) when given the option to work remotely. This finding supports our study's positive perceptions of remote working and its impact on employee work commitment. Similarly, Sandoval-Reyes et al. (2021) emphasized that remote working leads to higher productivity due to reduced distractions and increased flexibility, which aligns with the positive perceptions of increased flexibility reported by our respondents.

Regarding work-life balance, the study by Dima et al. (2019) among Romanian employees revealed that remote working improves work-life balance by providing employees with more time to care for their families and attend to personal matters, which reduces stress. This finding supports our respondents' perception of remote working as providing increased work-life balance opportunities. Moreover, the study by Ward (2017) highlighted that remote work positively impacts employee motivation and performance, which resonates with our study's positive perceptions of remote working's effects on employee commitment. Felstead and Henseke (2017) also emphasized the positive correlation between remote working and organizational dedication and well-being, which aligns with our study's positive perceptions of remote working among First Bank employees.

The study by Ahmad et al. (2013) identified a significant correlation between flexible work schedules and employee motivation, indicating that flexible working hours positively impact motivation. This finding supports our study's positive perceptions of remote working's effects on employee motivation and dedication. On the other hand, Palumbo (2020) explored the impact of remote working on work-life balance and found that while working from home may negatively influence work-life balance due to increased fatigue, job dedication effectively mitigates these effects. This finding aligns with our study's mixed perceptions of remote working's impact on work-life balance.

Jawabri (2022) investigated the impact of remote work on employee engagement, motivation, and job satisfaction, and their findings indicated both positive and negative effects. Our study's mixed perceptions of remote working's impact on employee commitment and work-life balance resonate with the diverse findings of Jawabri's study. Raneses et al. (2022) studied the impact of remote work on productivity and work-life balance among employees in Dubai and found a strong link between remote work and higher employee productivity. However, our study's mixed perceptions of remote working's impact on work-life balance align with Raneses et al.'s finding that remote work had little to no influence on maintaining a healthy work-life balance.

The empirical studies reviewed in comparison to our current study reveal similar patterns and support the positive perceptions of remote working's impact on employee work commitment, motivation, and productivity. However, there are also mixed perceptions regarding its effects on work-life balance, indicating that the impact of remote working can vary depending on individual and organizational factors. The findings from these previous studies provide valuable context for interpreting the results of our study and contribute to the growing body of research on remote working practices in various organizational settings.

Recommendations

Based on the findings and conclusions of this study, the following recommendations are proposed for First Bank Nigeria and other organizations aiming to optimize remote working arrangements and enhance employee motivation:

1. Develop Clear Remote Work Policies: Establish clear and comprehensive remote work policies that outline expectations, responsibilities, and guidelines for remote employees. A well-defined policy can provide structure and clarity, leading to improved work commitment and accountability.
2. Promote Work-Life Balance: Encourage work-life balance initiatives and flexible working arrangements to support employees in managing personal and professional responsibilities. Creating a healthy work-life balance is essential for employee well-being and can enhance overall productivity and job satisfaction.
3. Invest in Technology Infrastructure: Organizations should invest in robust technology infrastructure to ensure seamless remote work experiences for employees. Providing the necessary tools and resources can help mitigate challenges associated with technology barriers and improve remote employees' productivity.
4. Offer Social Connection Opportunities: Create virtual social events and opportunities for remote employees to interact and build connections with their colleagues. Socializing with coworkers can enhance a sense of belonging and positively impact employee motivation and engagement.
5. Regularly review and evaluate remote work practices and their impact on employee motivation and performance. Be open to making adjustments and improvements based on employee feedback and changing circumstances.

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