

# Operation of Public Procurement Act 2007 and Its Effect on Government Inventories: Evidence from Selected MDAs in Nigeria

ENO G. UKPONG (*Doctor of Accounting*)

*Senior Lecturer, Department of Accounting, Faculty of Management Sciences, Akwa Ibom State University, (AKSU), Obio Akpa Campus, Akwa Ibom State, Nigeria.*

***Abstract-*** *This study determined the effect of the Public Procurement Act (PPA) 2007 on inventory management performance of ministries, departments and agencies of the federal government in Akwa Ibom State. The PPA procedures studied were stock control management procedures and material acquisition procedures. The descriptive survey was used for the study. Purposive sampling technique was used to sample 165 respondents drawn from five Ministries, Departments and Agencies at the federal secretariat, Uyo, Akwa Ibom State. The instrument for data collection was a questionnaire. The instrument was validated by experts and the reliability ascertained through test- retest procedure. Simple linear regression was used to answer and test the hypotheses, at a 0.05 level of significance. The findings of the study shows that material acquisition procedures and stock control management procedures have positive relations on inventory management performance of MDAs. Furthermore, there is a significant influence of material acquisition procedures and stock control management procedures on inventory management performance of selected MDAs in Akwa Ibom State. It was recommended that procurement departments of MDAs should determine the availability of stocks before depletion of each category and the management of inventory on the levels of stock availability.*

***Indexed Terms-*** *Inventory management, material acquisition, stock control, Economic order quantity, public procurement guidelines*

## I. INTRODUCTION

One way in which the government stimulates the economy is through spending. This goes beyond

salaries, but mostly through projects and acquisitions by Ministries, Departments and Agencies (MDAs). Governments and state-owned enterprises purchase a wide variety of goods, services and public works from the private sector, from basic computer equipment to the construction of roads. Public procurement is a key economic activity of governments that represents a significant percentage of the Gross Domestic Product (GDP) generating huge financial flows, estimated on average at 10-15% of GDP across the world. An effective procurement system plays a strategic role in governments for avoiding mismanagement and waste of public funds (OECD, 2016).

The federal Government of Nigeria in its quest to ensure sanity in public expenditures and in the realization that failure in the procurement process contributes to corruption in governance, invited the World Bank to work with it to first conduct a nationwide assessment of the public procurement law and practice. The result of that assessment carried out in conjunction with a national task force, Country Procurement Assessment Report (CPAR) 2000, formed the basis of the Public Procurement Bill later sent to the National Assembly, revised and enacted into law in 2007 as the Public Procurement Act, 2007 (Ekpenkhio, 2003).

The Public Procurement Act 2007 was established in Nigeria as a global best practice to sanitize public procurement process in Nigeria. The Act stipulates that all public procurement in Nigeria, as from the date of its promulgation, must follow due process, that is, must be certified okay by public procurement office established specifically to analyse public procurement and issue a certificate of 'NO OBJECTION'. This is because procurement is a major cost centre of any

nation and is important in infrastructure provision (Ndeto, 2017).

Nonetheless, procurement has always been shrouded in secrecy and corruption. The challenge with procurement in Nigeria has always been that of transparency and authenticity. The large buying power of the public sector has led to the consideration of using public procurement as a stimulus to foster innovation and manage government inventories. Government inventories are large and often account for most of government capital and recurrent expenditures. Inventory management is a long-standing challenge for many federal, state, and local government agencies. As inventory often accounts for a substantial portion of the assets at these agencies (Adindu, Ekung, & Ukpong, 2022), ineffective inventory management impedes service delivery and constrains operating budgets (Munyao & Moronge, 2017).

The primary objective of fiscal rules such as the PPA is to enhance budgetary discipline, they can also foster policy coordination between different levels of government depending on their institutional coverage. Additionally, fiscal rules as enshrined in the PPA may further contribute to the reduction of uncertainty around government inventories. However, fiscal rules can only yield these benefits if appropriate institutions for monitoring and enforcement mechanisms are in place, or if they are supported by strong political commitment (Adam, 2015).

- *Statement of the Problem*

Government procurement involves a high risk of corruption because of the great size of financial turnover and the complexity of many procurement processes in which businesses interact very closely with politicians and civil servants (Kanu, Benedict & Akuwudike, 2020). The implementation of the public procurement act was supposed to make government inventories a lot easier to manage. However, year in and year out, public sector procurements run into millions of Naira and yet those procurements are never successfully delivered. There have been upward reviews of contract prices; yet, these contracts are never delivered as planned (Kanu, et al, 2020). The public procurement practice and system have been acclaimed, based on empirical evidence, as the best

means of guaranteeing the provision of public goods for the citizen and public expenditure management. However, poor implementation and subvention of the process by MDAs are leading to bottlenecks when it comes to government inventories.

According to Ndeto (2017), the duration of contracts and limited flexibility in contracting in the public sector can also impede the adoption of effective inventory practices. With respect to inventory management, another key challenge for the public sector is the lack of standardized inventory processes. While government agencies often issue guidelines regarding inventory management practices and responsibilities, in reality, many inconsistencies exist across agencies and facilities so that standardization is never achieved (Ukpong, 2012; Ukpong, & Ukpke 2023).

- *Objectives of the Study*

The broad objective of the study is to determine the influence of the public procurement act provisions on government inventories among MDAs. Specifically, the study seeks to;

- i) determine the influence of material acquisition procedures on inventory management performance of selected MDAs in Akwa Ibom State.
- ii) determine the influence of stock control management procedures on inventory management performance of selected MDAs in Akwa Ibom State.

- *Research questions*

The following research questions are stated for the study

1. What is the influence of material acquisition procedures on inventory management performance of selected MDAs in Akwa Ibom State?
2. What is the influence of stock control management procedures on inventory management performance of selected MDAs in Akwa Ibom State?

- *Research hypotheses*

The following hypotheses guided the study

H<sub>01</sub>: There is no significant influence of material acquisition procedures on inventory management performance of selected MDAs in Akwa Ibom State.

Ho<sub>2</sub>: There is no significant influence of stock control management procedures on inventory management performance of selected MDAs in Akwa Ibom State.

## II. LITERATURE REVIEW

- *Public procurement*

According to the World Bank (2015), public procurement is the process by which governments and other publicly-funded entities acquire goods, works, and services needed to implement public projects. It accounts for at least 15% of the world's gross domestic product (GDP), and even more in African countries.

In Nigeria, public procurement is a major activity of government that generates important financial resources and has been viewed as part of a wider reform agenda targeted at improving public financial management. According to Senzu and Ndebugri (2017), effective financial management and procurement systems have been major developmental challenges facing most developing countries in Sub-Saharan Africa. Financial management, Uford, Mfon and Charles (2023) especially public financial management is an attempt made by government to ensure that consistently, the budget is either in balanced or a surplus type. These are largely achieved through ensuring adequate receipts from taxes and non-tax sources, and reducing public expenditure levels.

- *Public Procurement Act 2007*

Public procurement reforms is necessitated in Nigeria by transparency and accountability related issues due to rampant public procurement fraudulent practice in addition to conflict of interest, and this has remained the sole reason for reforming public procurement processes in most of the countries that passed through the public procurement transformation process (Jibrin Ejura, & Augustine 2014). The Federal Government of Nigeria instituted a robust Public Procurement System (PRS) for the execution of all government projects, works and services. This, it did through the enactment of Public procurement Act (PPA) 2007 as amended in 2018 (Kanu, Benedict & Akuwudike, 2020).

In Nigeria, Public Procurement Act therefore, is the primary legislation which establishes the National Council on Procurement and Bureau of Public Procurement (BPP) as the regulators responsible for due process in Nigeria's procurement activities. public procurement Act serves as a guide to the implementation of any public procurement that derive at least 35 percent funds appropriated or proposed to be appropriated from the consolidated Revenue Funds (Udoma & Osagie, 2012; Enofe, Okuonghae & Onobun, 2015).

- *Compliance to the Public Procurement Act of 2007*

The compliance to the Public Procurement Act 2007 is stated in (section 2, section 15 and 16). This will result to harmonization of the existing government policies and practices on public procurement to ensure probity, accountability and transparency in the procurement process.

The provisions of the Act apply to all procurement of goods, works, and services carried on by federal government, all procurement entities and all other entities which derive at least 35% of the fund appropriated for procurement from the federal share of Consolidated Revenue Fund. An exemption is procurement of special goods, works, and services involving national defense or national security (section 15). The basic principles of procurement are set out in section 16 of the procurement plans, lowest evaluated responsive bid, supported by prior budgetary appropriations. No procurement shall be formalized until the procurement entity has ascertained sufficiency of funds to meet the obligations and subject to the threshold in the regulation, and has obtained from the Bureau a "certificate of No objection to contract award". Some public procurement instruments that the government is using to support the Act, are material acquisition procedures and stock control management procedures

- *Material acquisition procedures*

The main role of public procurement was to obtain inventory (goods and services). This process must follow prescribed procedure that gives a major weight on fairness and equity and is subjected to oversight by the legislature and public audit. Several attempts are being made to regulate global procurement practices (Kleyn et al., 2012).

According to Ndeto (2018), the Public Procurement and Asset Disposal Act, 2015 indicates that a procuring entity shall use standard procurement and asset disposal documents in all procurement and asset disposal proceedings. In addition, the Act dictates that the tender documents used by a procuring entity shall contain sufficient information to allow fair competition among those who may wish to submit tenders. Furthermore, the head of procurement function shall maintain and continuously update lists of registered suppliers, contractors and consultants in various specific categories of goods, works or services according to its procurement needs (PPADA, 2015).

The Act also indicates that submission of tender documents whether in electronic or manual form, shall be in writing and signed. In the case of manual submission, they shall be sealed in an envelope. A procuring entity may, in writing, request a clarification of a tender from tenderer to assist in the evaluation and comparison of tenders. An evaluation committee may, after tender evaluations, but prior to the award of the tender, conduct due diligence and present the report in writing to confirm and verify the qualifications of the tenderer who submitted the lowest evaluated responsive tender to be awarded the contract in accordance with this Act (PPADA, 2015). All these procurement/material acquisition procedures are meant to ensure value for money earned, smooth flow of goods and services and efficiency of service delivery.

- *Stock Control Management Procedures*

Stock control entails how much stock is kept at any given point in time, and how to keep track of it. Efficient control means that funds are not tied up unnecessarily, that the threat of stock losses is reduced and the quality of the products and services is maintained thus ensuring that there is sufficient stock to meet the demands of customers (Purchasing & Stock Control, 2013).

Holding stock or inventory is a very expensive business, particularly where the goods are of high value. However, for small value items, the cost can be high if the quantities involved are large enough. The alternative to holding stock is to operate a Just in Time (JIT) policy where stock arrives just as and when it is needed (Buyukkaramikli, Ooijen & Bertrand, 2015).

The Public Procurement and Asset Disposal Act, 2015 indicates that an Accounting Officer of a procuring entity shall manage its inventory, assets and stores for the purpose of preventing wastage and loss, and continuing utilization of supplies. To avoid unprofitable lock-up of funds, the Act indicates that stocks shall be kept to the minimum necessary for the efficient conduct of the procuring entities. In addition, the Accounting Officer of a procuring entity may employ inventory management and control software to assist it meet the objectives of sound supply chain management. Furthermore, an Accounting Officer of a procuring entity shall set up an inventory management system which shall be managed by the head of the procurement function, for the purpose of control and managing its inventory, stores and assets (PPAD, 2015). Policies on stock control management are meant to ensure that government ministries enjoy value for money earned, and smooth flow of goods and services and efficiency of service delivery.

- *Concept of inventory*

Inventories encompass goods purchased and held for resale including, for example, merchandise purchased by an entity and held for resale, or land and other property held for sale. Inventories also encompass finished goods produced, or work-in-progress being produced, by the entity. Inventories also include (a) materials and supplies awaiting use in the production process, and (b) goods purchased or produced by an entity, which are for distribution to other parties for no charge or for a nominal charge, for example, educational books produced by a health authority for donation to schools. In many public sector entities, inventories will relate to the provision of services rather than goods purchased and held for resale or goods manufactured for sale. In the case of a service provider, inventories include the costs of the service.

Inventories in the public sector may include: (a) Ammunition; (b) Consumable stores; (c) Maintenance materials; (d) Spare parts for plant and equipment, other than those dealt with in standards on Property, Plant and Equipment; (e) Strategic stockpiles (for example, energy reserves); (f) Stocks of unissued currency; (g) Postal service supplies held for sale (for example, stamps); (h) Work-in-progress, including: (i) Educational/training course materials; and (ii) Client services (for example, auditing services), where those

services are sold at arm's length prices; and (i) Land/property held for sale.

There are however, challenges to government inventories. The contracting process managed by the bureau of public procurement (BPP) often contributes to the inefficiencies noted for inventory management. Compared to the private sector, public sector supply chain decisions have to comply with many and often varied rules (e.g., federal, state, and/or local) that are designed to advance non-procurement-related social-political goals and also to ensure a level playing field and nondiscrimination (Gilbert, Gary & George, 2016).

- *Inventory management*

Inventory management refers to all the activities involved in developing and managing the inventory levels of raw materials, semi-finished materials and finished good so that adequate supplies are available and the costs of over or under stocks are low (Kotler, 2012). Inventories are essential for keeping the production wheels moving, keep the market going and the distribution system intact. They serve as key drivers for production and distribution systems of organizations. A simple definition of inventory management state that it is a collection of processes and practices that intersect with procurement or supply chain management. An extended explanation is that it is a means of optimizing the inventory of a business or procurement team to facilitate uninterrupted sales, procurement, production, and service without compromising cost. There are four primary components that are applied to inventory management. The first one is supply chain or procurement management, which is what has been discussed throughout.

In today's competitive world, cost control remains a vital tool in ensuring sustainability in the market. Inventory management is seen as an important mechanism that ensures control in an organization financial statement, in this fast growing market. When inventories are properly managed, they productively produce capital inventory management impact on organization financial performance either directly or indirectly (Vipulesh, 2015).

### III. THEORETICAL FRAMEWORK

This study was guided by The Economic Order Quantity theory Wagner 1883 theory of government expenditure.

- *Economic Order Quantity (EOQ) Theory: by F. W. Haris in 1913.*

Economic Order Quantity (EOQ) model was developed by F. W. Haris in 1913. It is an inventory management system that demonstrates the quantity of an item to reduce the total cost of both handling of inventory (Handling Cost) and order processing (Ordering Cost). The model has shown increase in some costs as other costs decline, an example of ordering costs decline with the inventory holdings, while holding costs rise and the total inventory associated costs curve have a minimum point. It is also known as the point where total inventory costs are minimized. EOQ is the level of inventory that minimizes the total of inventory holding costs and ordering costs. Assumptions that are necessary to calculate EOQ as follows: That stock holding costs are known, and constant; there is a known, constant ordering costs; the rate of demand are known and constant; lead time cycle is known and constant; the price per unit constant; the replenishment is made instantaneously, the whole batch is delivered at once and no stock-outs are allowed.

The basic EOQ model, with all assumptions in consideration, deal with two types of costs:

- 1) Procurement cost or buying cost
- 2) Inventory carrying cost

These costs are moving in opposite directions, when certain numbers of quantities are ordered for storage purpose. Therefore, it is important for a business to find a trade-off point of ordering quantity in order to minimize the total cost of both. In this context, the quantity to be ordered to minimize the total cost of both Inventory cost and Procurement cost is known as the Economic Order Quantity (EOQ).

$$\begin{aligned} \text{Procurement cost/year} &= \text{No. of orders placed in a year} \\ &\times \text{Cost per order} \\ &= \frac{A \times P}{Q} \end{aligned}$$

Inventory carrying cost = Average value of Inventory in a year X Annual inventory carrying cost/ item =  $\frac{Q \times C}{2}$

Therefore, Total Cost =  $\frac{A \times P}{Q} + \frac{Q \times C}{2}$

This cost is minimum when  $\frac{A \times P}{Q} = \frac{Q \times C}{2}$  translating to

$$Q = \left(\frac{2AP}{C}\right)^{1/2}$$

Hence most economic ordered quantity =  $\frac{\sqrt{2AP}}{C}$

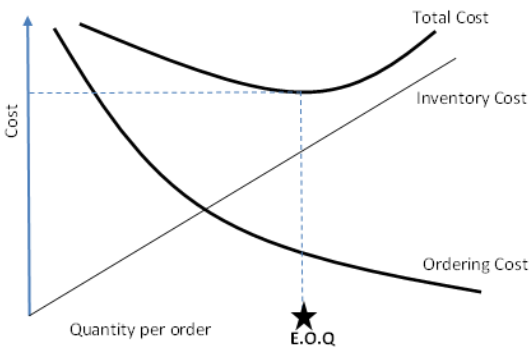


Figure 1 Economic Order Quantity

Also, Wagner (1883) proposed a theory of government expenditure in economic literature. The law states that as the per capita income of a country rises, the share of public spending to gross domestic product also rises - which connote direct positive relationship between them. Put differently, industrialization-driven growth in per capita income incentivizes government to increase its expenditures with direct bearing on social welfare (education, health, etc.), which in turn encourages industries to produce more goods and services as aggregate demand goes up. Increased industrial production finally raises aggregate output. Since the emergence of Wagner's law, there has been debate over the role of government spending on the performance of an economy both at theoretical and empirical level.

- Empirical Review

Ndeto (2018) studied the effect of public procurement policy framework on inventory management performance in the government ministries in Kenya. The study adopted a cross sectional survey design. The target population of this study was 680 supply chain management officers in all the 20 Government ministries in Kenya. This study made use of semi-structured questionnaires to collect primary data. Secondary data was extracted from records availed by

the targeted population. The data collected from the ministries headquarters, which form the largest buyers in terms of government financial allocation was both qualitative and quantitative. The study also found that there is a positive and significant relationship between material acquisition procedures and inventory management performance in government ministries in Kenya. The study further established that there is a positive and significant relationship between stock control management procedures and inventory management performance in government ministries in Kenya.

Marege (2011) conducted a research on factors affecting the effectiveness of inventory management practices in the public sector; a case study of the Cabinet Affairs Office in the Presidency in Kenya. The study found that regulatory framework, staff competencies and use of technology affect inventory management practices. The researcher thus recommends that further research should be done on the forecasting of inventory management, storage space and storage equipment with a view of improving the quality of the practices.

Kagendo (2016) studied the effects of Public Procurement and Disposal Act on Procurement in Parastatals in Kenya. The specific objective was to establish the effect of PPADA, 2015 on the procurement process in Parastatals in Kenya and to find out the challenges to the implementation of the Act. The study adopted a cross sectional descriptive research design. The sample population was all parastatals in Nairobi County. The study established that PPADA improved the competitiveness of the procurement processes among parastatals. In addition, PPADA improved the quality of services and goods delivered, and finally it promoted ethical standards among parastatals in procurement. On the challenges of PPADA, the study concluded that corrupt officers, unresponsive bids, ignorance of the PPADA guidelines, inefficiency of the PPRA on enforcing the penalties to the offenders and lack of organizational incentives and pressures for public procurement guidelines implementation posed significant challenges.

Owuoth and Mwangangi (2015) conducted a study on the effect of public procurement regulations on

procurement performance in public sector in the Rural Electrification Authority (REAK). The study employed a descriptive research design. The target population was 160 staff of the Rural Electrification Authority in Kenya. The findings of the study indicated that there is lack of compliance to Public Procurement Regulation in 38 the public sector, which led to poor procurement performance. Logically, one can argue that the current phenomenon of poor procurement performance in the public sector can be reversed if the public procuring entities ensure transparency in procurement procedures, application of competitive bidding in tendering process, use of professionals and ensuring quality sourcing. The procurement staff must also be willing to comply with Public Procurement Regulation to improve procurement performance.

- **Research Gaps**

Various studies have been conducted on public procurement and inventory management both globally and locally. However, for studies conducted in developed countries, there are differences in procurement legal framework, organizational structures and economic capabilities, and their finding cannot be generalized to Nigeria and other developing nations. In addition, the studies did not show how the procurement legal framework influences inventory management performance in public institutions. Thus, this study intends to fill this gap. Whereas previous studies have always examined at compliance and non-compliance of public procurement policy framework, not all factors have been dealt with within the institutions in Nigeria, as captured in (Thomas, Ukpung & Usoro 2022).

#### IV. RESEARCH METHODOLOGY

- *Research Design*

The study employed the descriptive survey research. This allowed the researcher to study the phenomenon by sampling a representative portion of the population (Uford, 2017). This type of design is used in preliminary and exploratory studies to allow researchers gather information, summarize, interpret and present results for the purpose of clarification. The descriptive survey design was selected so as to enable the researcher construct questions that helped to solicit the desired information, identify the means

by which the research was conducted and obtain data from a representative proportion of the population.

- *Population of the Study*

The target population for the study constitutes workers at the federal secretariat, Uyo, Akwa Ibom State.

- *Sampling and Sampling Technique*

The sample size of the study is 165 respondents drawn from five Ministries, Departments and Agencies at the Federal Secretariat, Uyo, Akwa Ibom State. Purposive sampling technique was used to sample accounting professionals and procurement officials with knowledge and job duties related to procurement and inventory management. This allowed the researcher to work with people with direct roles and responsibilities with respect to procurement and inventory.

- *Sources of Data Collection*

Both the dependent and the independent variables were collected through primary data. The researchers developed instrument titled “Public Procurement Act Guidelines and Inventory Performance Questionnaire” and it was used for data collection. The study made use of primary data. Workers were interviewed and questionnaire administered to ascertain their opinion on the effect of the PPA on inventory performance. The instrument was validated by three experts in the Department of accounting, Akwa Ibom State University. Thereafter, the instrument was trial tested for reliability using the test retest method on 30 respondents. The data collated was tested through Pearson product moment correlation, which gave a value of .84.

- *Method of Data Collection*

The instrument was administered to the respondents in the study area by the researcher and briefed research assistants who helped the researcher to cover the study area and reach out to the sampled population on time. The workers responded to the items on the questionnaire. This took a period of 4 weeks. 127 copies were fit for analysis, this represented 77% return rate. Their responses were then collated and coded for data analysis.

- *Method of Data Analysis*

Frequencies and descriptive statistics were used to summarize the data. Simple linear regression was used to answer the research questions and to test the hypothesis, at a 0.05 level of significance as recommended by (Etim & Uford, 2019).

**Model specification**

For simple linear regression the simple model is

$$Y = a + \beta X_1 + \beta X_2 + \varepsilon$$

Where

$Y$  = inventory management performance (IMP) the dependent variable

$X_1$  = MAP = material acquisition procedures

$X_2$  = SCMP = stock control management procedures

$a$  = constant

$\beta$  = coefficient of variable

$\varepsilon$  = error term

$$IMP = \beta MAP + \beta SCMP + \varepsilon$$

**Data presentation, analysis and discussion of findings**

Table 1 Summary of characteristics of respondents

		N	Total	%
Gender	Male	73		57.48%
	Female	54		42.52%
Age	30-35	23		18.11%
	36-40	26		20.47%
	41-45	36		28.35%
	46-50	30		23.62%
	>50	12	127	9.45%
Marital Status	Married	68		53.54%
	Single	37		29.13%
	Separated	5		3.94%
	Widowed	17	127	13.39%
Department	Procurement	15		19.69%
	Accounting	40		31.50%
	Administration	23		18.11%
	Technical	39		30.71%
Years of service	1-5yrs	20		15.75%
	6-10yrs	47		37.01%
	11-15yrs	33		25.98%
	16yrs and above	27	127	21.26%

The total respondents for the study were 127. This was made up of 15 staff from procurement, representing 19.69%, Accounting, 31.5% of the respondents while 18% were in Administration. 30.7% were in Technical departments. 57% of respondents were males while 43% were females.

Table 2: Correlation matrix

		IMP	MAP	SCMPP
IMP	Pearson Correlation	1		
	Sig. (2-tailed)			
	N	244		
MAP	Pearson Correlation	.335**	1	
	Sig. (2-tailed)	.000		
	N	244	244	
SCMP	Pearson Correlation	.202**	.368**	1
	Sig. (2-tailed)	.002	.000	
	N	244	244	244

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

Table 2 reveals a correlation index of .335 between material acquisition procedures (MAP) and inventory management performance (IMP). This indicates that there is a positive relationship between MAP and IMP. The result also indicates a positive correlation index of .202 between stock control management procedures (SCMP) and inventory management performance (IMP).

**V. RESEARCH HYPOTHESES**

H01: There is no significant influence of material acquisition procedures on inventory management performance of selected MDAs in Akwa Ibom State.

Table 3: Summary of regression test for influence of material acquisition procedures on inventory management performance



Model	Unstandardized Coefficients		Standardized Beta	t	Sig.
	B	Std. Error			
(Constant)	10.113	.865		11.697	.000
MAP	.300	.054	.335	5.524	.000

r=.335, R<sup>2</sup>=.112, Adjusted R<sup>2</sup>=.108

The summary of the linear regression test for influence of material acquisition procedures on the on inventory management performance is presented. The result shows that as material acquisition procedures increases by a unit, changes in inventory management performance also rise by .149. This shows that material acquisition procedures have positive effects on inventory management performance. The result also shows that the R<sup>2</sup> value is .112, indicating that 11.2% changes in inventory management performance is as a result of material acquisition procedures of the public procurement act. This result is significant at .05. Thus, there is a significant influence of material acquisition procedures on inventory management performance of selected MDAs in Akwa Ibom State. Ho<sub>2</sub>: There is no significant influence of stock control management procedures on inventory management performance of selected MDAs in Akwa Ibom State.

Table 4: Summary of regression test for influence of stock control management procedures on inventory management performance

Model	Unstandardized Coefficients		Standardized Beta	T	Sig.
	B	Std. Error			
(Constant)	12.621	.701		18.002	.000
SCMP	.173	.054	.202	3.207	.002

r=.202, R<sup>2</sup>=.041, Adjusted R<sup>2</sup>=.037

The summary of the linear regression test for influence of stock control management procedures on the on

inventory management performance is presented. The result shows that as stock control management procedures increases by a unit, changes in inventory management performance also rise by .173. This indicates that stock control management procedures have positive effects on inventory management performance. The result also shows that the R<sup>2</sup> value is .202, indicating that 20.2% changes in inventory management performance is as a result of stock control management procedures of the public procurement act. This result is significant at .05. Thus, there is a significant influence of stock control management procedures on inventory management performance of selected MDAs in Akwa Ibom State.

## VI. DISCUSSION OF FINDINGS

The findings of the study are hereby discussed as follows:

- *Material Acquisition Procedures and Inventory Management Performance*

The result gives a coefficient of .149, indicating a positive effect of material acquisition procedures and inventory management performance. The result also shows that the R<sup>2</sup> value is .112, indicating that 11.2% changes in inventory management performance is as a result of material acquisition procedures of the public procurement act. This result is significant at .05. Thus, there is a significant influence of material acquisition procedures on inventory management performance of selected MDAs in Akwa Ibom State. This is finding is in agreement with Ndeto (2018) who studied the effect of public procurement policy framework on inventory management performance. He found that found that there is a positive and significant relationship between material acquisition procedures and inventory management performance.

- *Stock Control Management Procedures and Inventory Management Performance*

The result shows that as stock control management procedures increases by a unit, changes in inventory management performance also rise by .173. This indicates that stock control management procedures have positive effects on inventory management performance. The result also shows that the R<sup>2</sup> value is .202, indicating that 20.2% changes in inventory management performance is as a result of stock

control management procedures of the public procurement act. This result is significant at .05. Thus, there is a significant influence of stock control management procedures on inventory management performance of selected MDAs in Akwa Ibom State. This finding is in tandem with Kagendo (2016) and Owuoth and Mwangangi (2015) who found that the PPA improved the quality of services and goods delivered, and finally it promoted ethical standards among parastatals in procurement.

#### CONCLUSION

Based on the findings of the study, it is concluded that the public procurement act 2007 has a significant positive effect on inventory management performance. There is a positive relationship between material acquisition procedures and inventory management performance. There is a positive relationship between stock control management procedures and inventory management performance.

#### RECOMMENDATIONS

Based on the findings of the study, the following recommendations are made

1. Procurement departments of MDAs should determine the availability of stocks before depletion of each category and the management of inventory on the levels of stock availability.
2. MDAs should engage in training and retraining of supply chain management staff so that the officers can keep abreast with the dynamic stock control management procedures.

MDAs should automate their procurement procedure to imbibe e-procurement services.

#### REFERENCES

[1] Adam, A. (2015). Challenges of Public Finance Sustainability in the European Union. *Procedia Economics and Finance* 23, 298 – 302.

[2] Adindu, C., Ekung, S & Ukpong, E. (2022). Green cost premium as the dynamics of project management practice: A critical review. *Journal of Project Management*, 7(3), 133-146.

[3] Adu, F., Joseph, O. M., & Ackah, I. (2014). Government Expenditures and Economic Growth dynamics in Ghana. *International Journal of Economics and Empirical Research (IJEER)*, 2(5), 180-190.

[4] Aigheyisi, O. S. (2013). The Relative Impacts of Federal Capital and Recurrent Expenditures on Nigeria's Economy (1980-2011). *American Journal of Economics*, 3(5), 210–221. <https://doi.org/10.5923/j.economics.20130305.02>.

[5] Bovis, C. (2016). The regulation of public procurement as a key element of European economic law. *European Law Journal*, 4(2), 220.

[6] Buyukkaramikli, N., Ooijen, H., & Bertrand, J. (2015). Integrating inventory control and capacity management at a maintenance service provider. *Annals of Operations Research*, 231(1), 185-206.

[7] Enofe, A. O., Okuonghae O. & Onobun I. S. (2015). The impact of public procurement act on government accountability in Nigeria. *Journal of Political Science and Leadership Research*, 1(8),12-21.

[8] Etim, G. S. & Uford, I. C. (2019). Measuring the Contributions of Sources of Employee-Based Brand Equity (EBBE) to the Market Performance of Deposit Money Banks in Nigeria. *Business and Management Studies*, 5(2), pp. 21-33.

[9] Gilbert, N., Gary, J. & George, M. (2016). *Federal Government of Nigeria, Public Procurement Act, 2007: Ten Actions to Improve Inventory Management in Government*. IBM Center for the Business of Government, Washington, USA.

[10] Horngren, C.T., Foster G. & Datar, S.M. (2011). *Cost Accounting: a Managerial Emphasis*, (10th Ed.), New Delhi, Prentice Hall Of India.

[11] International Public Sector Accounting Standard (IPSAS) (2006). IPSAS 12—Inventory. <https://www.ifac.org/system/files/publications/files/ipsas-12-inventories-2.pdf>

[12] Jibrin M., Ejura, S. & Augustine N. (2014). The Public Procurement Reforms in Nigeria: Implementation and Compliance Challenges; *Journal of Asian Business Strategy*, 4 (11), 149-162.

- [13] Kagendo, N.M. (2016). Effects of Public Procurement and Disposal Act on Procurement in Parastatals in Kenya. Retrieved from <http://erepository.uonbi.ac.ke>
- [14] Kanu, S., Benedict, A. & Akuwudike, H. (2020). Effectiveness of Public Procurement Act (PPA), in Curbing Corruption in the Public Service in Nigeria: A Study of Selected MDAs in FCT, Abuja. *International Journal of Management Science and Business Administration*, 7(1), 42-58.
- [15] Kenneth, U. (2020). E-procurement systems in public sector: implications for corruption and development in Nigeria. *International Journal of Strategic Research in Public Administration and Organizational Process*, 2(1), 1-13.
- [16] Kleyn, N., Abratt, R., Chipp, K., & Goldman, M. (2012). Building a strong corporate ethical identity: key findings from suppliers. *California Management Review*, 54(3), 61-76.
- [17] Klitgaard, R., Abaroa, M. R., & Paris, H. L. (2000). *Corrupt cities: A practical guide to cure and prevention*, California: CUP.
- [18] Kotler, P. (2012). *Marketing Management*, millenium edition: Custom Edition for University of Phoenix: Pearson Custom.
- [19] Marege, O., V. (2011). Factors affecting the effectiveness of inventory management practices in the public sector. a case study of ministry of presidency and cabinet affairs. Retrieved from [www.jkuat.ac.ke](http://www.jkuat.ac.ke).
- [20] Munyao, K.V. & Moronge, M. (2017). Effect of public procurement framework on disposal of obsolete stock in the public sector in Kenya: A Case of the Judiciary of Kenya. *The strategic Journal of Business and Change Management*, 2(37), 660 – 675.
- [21] Ndeto, C. (2017). Effect of public procurement policy framework on inventory management performance of government ministries in Kenya. Unpublished Ph.D Thesis, department of Business Administration (Procurement and Supply Chain Management), Jomo Kenyatta University of Agriculture and Technology.
- [22] Nwadihoha, C. (2017). Effect of public procurement act 2007 on outsourcing decisions of public sector organizations in Nigeria (1998-2015). Unpublished PhD Dissertation, Department Of Accountancy, Faculty Of Management Sciences, Nnamdi Azikiwe University, Awka.
- [23] OECD (2016). OECD Principles for Integrity in Public Procurement. OECD Publications, Geneva.
- [24] Onchoke, B. N., & Wanyoike, D. M. (2016). Influence of inventory control practices on procurement performance of agrochemicals distributors in Nakuru Central Sub-County, Kenya. *International Journal of Economics, Finance and Management Sciences*, 4 (3), 117-126.
- [25] Owuoth, G. G & Mwangangi, P. (2015). Effect of public procurement regulations on procurement performance in public sector in Kenya: A case of rural electrification authority. *International Journal of Social Sciences Management and Entrepreneurship*, 2(1), 171-184.
- [26] Public Procurement and Asset Disposal Act, (2015). Public Procurement and Asset Disposal Act, 2015, Nairobi: Public Procurement and Asset Disposal.
- [27] Purchasing & Stock Control, (2013). A guide to help you broaden your understanding of the purchasing and stock control functions in the context of a small business. Retrieved from <http://www.failteireland>.
- [28] Raiborn, A.C., Barfield, T.J. & Kinney R.M. (1999). *Managerial accounting, 3rd Ed.*: New York: South western college publishing.
- [29] Salam, S. (2019). Public Procurement Act and Economic Performance. Evidence from Nigeria. *Confluence Journal of Economics and Allied Sciences (CJEAS)*, 2(2), 172-186.
- [30] Senzu, E. & Ndebugri, H. (2017). Evaluating the effectiveness of the Procurement Acts in public financial administration; the case study in Ghana MPRA Achieve.
- [31] Thomas, C. D., Ukpong, E. G. & Usoro, M. U. (2022). Ergonomics and Organizational Sustainability: A Study of Peacock Paint Limited, Ikot Ekan, Etinan LGA Akwa Ibom State. *International Journal of Business and Management Review*, 10(4), 75- 94.
- [32] Udoma, U. & Belo-Osagie. (2012). Public Procurement- NIGERIA. Lex Mundi

- Publication. Lex Mundi Ltd Retrieved from. <http://www.lexmundi.com/Document.asp?DocID=497>.
- [33] Uford, I. C. (2017). *Customer and employee-based brand equity driving United Bank for Africa's market performance*. Ph.D. Dissertation, University of the Witwatersrand, Johannesburg, South Africa, pp. 1-227.
- [34] Uford, I., Mfon, A., & Charles, I. (2023). Review of COVID-19 Crisis and Telework: Measuring the Performance of Banks' Marketers in Akwa Ibom State, Nigeria. *European Journal of Management and Marketing Studies*, 8(2), pp. 105-123. Available at: <https://oapub.org/soc/index.php/EJMMS/article/view/1515>>. Date accessed: 22 July 2023.
- [35] Ukpong, E. G. (2012). Cognitive apprenticeship instructional models and students' performance in Financial Accounting in Akwa Ibom State. *Unpublished Ph. D. Thesis University of Uyo, Uyo*.
- [36] Ukpong, E. G., & Ukpe, E. A. (2023). Assessment of Dividend Policy Practices and the Performance of Firms: Evidence from Listed Nigerian Companies. *European Journal of Business, Economics and Accountancy*, 11(2), pp. 54-68.
- [37] Vipulesh, S. (2015). Impact of Inventory Management on the Financial Performance of the firm. *IOSR Journal of Business and Management*, 17(4), 01-12.
- [38] Wagner, A. (1883). *Finanzwissenschaft*, 1883. Leipzig, Peacock.
- [39] World Bank (2015). Good practice paper on procurement capacity development. The OECD Development Assistance Committee (DAC)-World Bank 3rd joint round table on strengthening procurement capacities in 24 developing countries, 30 November – 2 December, 2004, Johannesburg, South Africa.