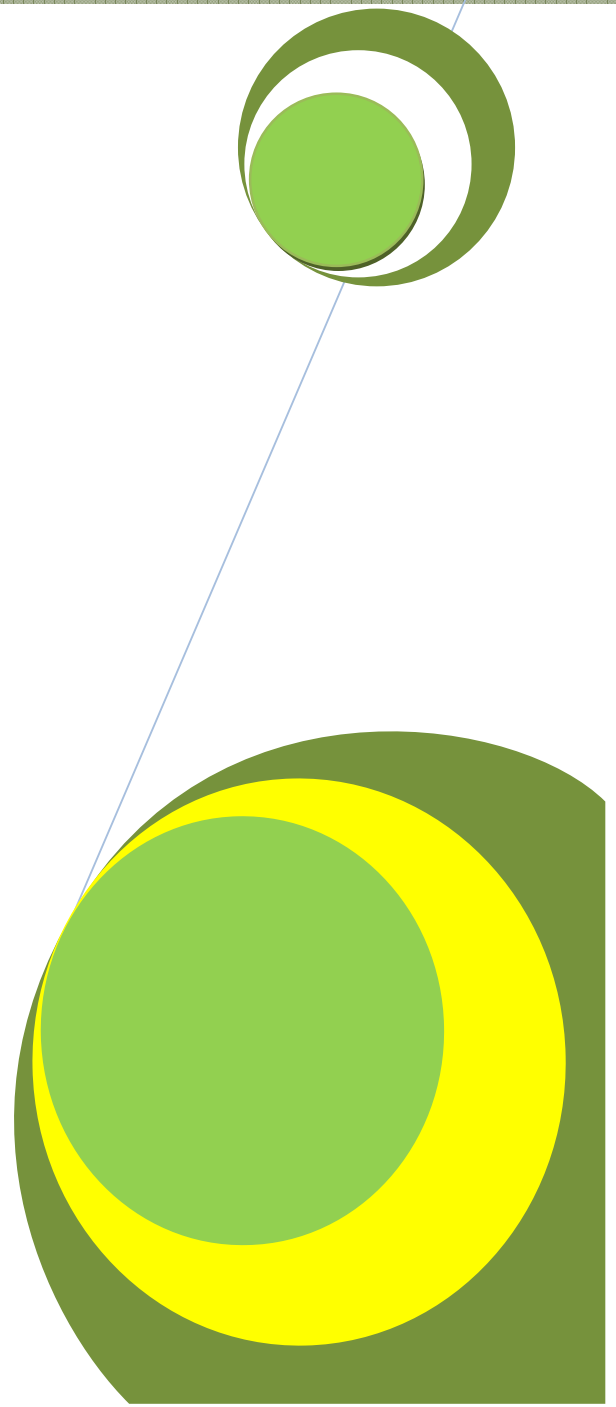


A Critical Assessment of Port Privatization Policy and Port Productivity in Nigerian Maritime Industry

By

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Research Article

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ABSTRACT

This paper “A Critical Assessment of Port privatization Policy and Port Productivity in Nigerian maritime Industry” highlights the role of seaports in the socio-economic development of Nigeria; and it further explained port privatization policy which is a globalized concept that involves private sector participation in the operation of the port. The work is aimed at evaluating the productivity of the Nigerian ports since the inception of port privatization policy in Nigeria, and the performance indicators which represents the cargo throughput in Nigeria between 1999 and 2009, which showed that the policy has not been a failure as cargo throughput has increased between 2006 and 2009 than before. Further findings using the Chi-square method of data analysis showed that there is a strong relationship between port privatization policy and port productivity and the revenue generated at the seaports which has increased also, since the inception of port privatization policy in Nigeria. The research findings also showed that, the port privatization policy has been effective in Nigeria but there is still a need for improvement. For this policy to be more effective therefore, there is a need for constant review of this policy from time to time and also the need to make the ports more user friendly by putting in place strategies that will have positive impact in the operation of the port, such as cost reduction strategy and time reduction strategy (which includes time of vessels in berth, and ship turn-round time. Therefore, effort shall be made in this study to review the benefits and challenges of the policy as it relates to ports operational performance and productivity within the confines of the ports-maritime industry at the end of the day.

Keywords: Ports, Maritime Industry, Ports Productivity, Performance, Efficiency, Privatization Policy, Cargo throughput and globalization concept.

BACKGROUND INFORMATION

In the words of flere (1992), a port is a gateway from the modern perspective. We used the word port to mean seaport and sometime rivers port.

That is a gateway between land and water. One side of gateway is used by ships, coasters and sometimes air crafts, the other by railways, motors scanners and perhaps barges, through such gate ways; constantly passes some port of the traffic would.

That is grades of passengers or both. It is indeed the fundamental characteristics of a port that it should be able to accommodate ships on one hand, and inland transport vehicles on the other hand.

That is why every port is equipped to look two ways outward over its economic interland (Ndikom, 2008).

In one respect the analogy of the gate way become somewhat strained flamely in the case of coast-wise vessel and inland waterway carries receiving cargo direct from ocean going ships. (Ihenacho, 2005).

However, the port hinterland interaction suffers a significant set back when the sea side traffic is halted by virtue of anomalies, such as port congestion Ndikom, (2004) Maintains that privatization is a -- globalized concept that has to do the with initiation of privates sector participation in the business of government owned public enterprise. It is also a strategy where government owned public enterprises functions and management is transferred o the private sector. Then privatization policy is a policy that is reflective of an outright transfer or sale of state ownership of public infrastructure into private hands. This policy does not mean that government stays always from the economic spare, rather it hangs its role from that of a regulator (Ndikom, 2008).

Productivity on the other hand, is measure of how efficiently inputs are being used within the economy to produce out puts.

Productivity is commonly defined as ration of outputs to a volume measured of inputs to a volume measured of input. Growth in productivity means that an industry can produce more output from the same amount of input. Productivity growth is an important contribution factor to a relation long-term material standard or living. Productivity measure can be either single factor relating a measure of output to a single measure of input.

The purpose of this degree of research is to evaluate the degree to which port privatization policy affects port productivity in Nigeria (Iheanacho, 2005).

Problem Statement

Over the years, the management and control of the overall port operations have been left in the hands of managers who seem not to understand the rudimentary challenges of the industry. This has had serious economic implications on port efficiency and productivity culminating into negative trends which is not in the interest of the entire port operation. The primary goal of privatization and commercialization programmes of the Federal government of Nigeria is to make the private sector the leading engine of economic growth in the country. Overtime, through direct massive investment and participation by government, Nigeria has developed a large public sector economy. In spite of the image investment, public enterprise such as ports has failed woefully to perform the functions and attain the objectives for which they were set-up. The gross failure of the ports to live up to the expectations is partly responsible for the current move towards economic liberalization, competition and privatization. The philosophy behind the privatization programme, therefore, is to restructure and naturalize the ports sector not only to lessen the dominance of unproductive investment in the sector but also to initiate the process of gradual transfer to the private sector of public enterprises, which are better elevated through private sector initiatives.

Objectives of the Study

The aim of this study is to assess the effect of port privatization policy and port productivity in Nigeria. While the specific objectives are as follows:

- i. Reduction in the number of agencies at the ports
- ii. To increase efficiency and productivity
- iii. To determine the effects of government policy inconsistencies in Nigeria ports
- iv. Reintroduction of certain agencies at the ports, such as NAFDAC
- v. Making policies recommendation
- vi. To encourage cheaper and user friendly operational concepts
- vii. To induce consistent increases in healthy port competition

Research Questions

In order to achieve the objective of this research, the study will attempt to provide answers to the following research questions.

- a. How does port privatization policy affect port productivity?
- b. What is the difference between port privatization policy in 2008-2010 and that of the years before?
- c. How can port productivity in Nigeria be enhanced?
- d. How can we determine good quality services through entrenchment of privatization policies in ports operation?

Research Hypothesis

H₀₁: There is no significant relationship between port privatization policy and port productivity.

H₀₂: There is no significant relationship between port privatization, port operational performance and efficiency in service delivery.

H₀₂: There is no significant relationship between port privatization policy and increased port revenue generation.

H₀₃: There is no significant relationship between port privatization and increased services delivery.

Justification of the Study

This project work will critically assess the effect of privatization policy on the increased operational performance of the port. It also helps to reduce incidence of operational ship practices in the port and enhanced service deliver at the end.

It will also assist in evincing port's efficiency and productivity at the end. It will help private sector investment on infrastructural facilities and equipment that will reduce berth occupancy rate of vessel at the port.

METHOD

Research Design: The cross-sectional survey research design, which involves the use of questionnaires and interviews were adopted in this study using simple randomly sampling technique; a total of two hundred respondents were drawn from Apapa and Tincan Island Ports, Lagos, Nigeria. This design was chosen because it provides appropriate methodology for opinion and perception of human behaviour and operations of the shipping lines services to her customers.

Instrumentation

A self- developed close-ended 21-item questionnaire entitled, "A critical assessment of port privatization policy and port productivity in Nigerian maritime industry" was developed and used for data collection. This questionnaire was structured to generate information with respect to the research questions earlier stated. Content validity for the instrument was ascertained by technocrats and professionals within the maritime industry. The reliability was ascertained using the test-retest method with an intervening interval of one week between the first and second administrations of the questionnaire. The reliability coefficient of 2.36 was obtained.

Method of Analysis

Obviously, only 180 copies out of 200 questionnaires distributed which were properly completed were analysed for study. The data derived from the procedures were analysed using frequency counts, mean, pie charts, simple percentages and chi-square was used to test the hypothesis at 0.05 alpha levels.

Data Analysis

The one hundred and eighty copies retrieved from the respondents represent 90% response. The questionnaire for the purpose of clarity of objective is divided into personal data and other variable data. Both the personal and other variable data will be analyzed separately.

Section A (Personal Data)

Response	Number
Ap moller terminal	37
Nigeria port Authority (NPA)	43
Association of custom Agent	39
MOL shipping	39
NIMASA	22

The table above shows that a reasonable number of respondents returned the completed questionnaire.:

Question 2 Age

Response	Number	Percentage
20 - 29	24	13.3%
30 - 39	77	42.8%
40 - 49	45	25 %
50 - 59	28	15.6%
60 and above	6	3.3%
TOTAL	180	100%

As shown in the table above, 42.8% of the respondent are in the age bracket of between 30 and 39 years, while 25% of the respondent are between the ages of 40 and 49years, which means that those in the maritime industry are still at the very productive age.

Question 3 Level of Education

Academic Qualification	No of Respondent	Percentage
School certificate	28	15.5%
OND/NCE	72	40%
HND/BSC	69	38.3%
Others	11	6.1%
TOTAL	180	100%

Table 3: Above shows that a greater proportion of those involved in the maritime industry are OND/NCE holders which include technical colleges polytechnics etc, and they account for 40% while those with HND/ BSC amount to 38.3%.

Question 4: Number of Years Worked in the Industry

No of Years	No of Respondents	Percentage
1 - 2 Yrs	9	5%
3- 5yrs	52	28.9%
6- 10yrs	56	31.1%
11 yrs and above	63	35%
TOTAL	180	100%

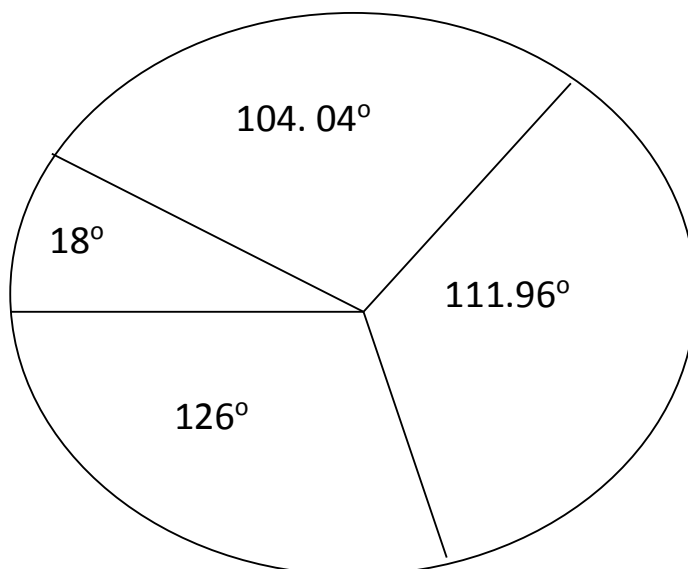
This can also be represented in a pie chart

$$1 - 2\text{yrs} = \frac{5}{100} \times 360 = 18^\circ$$

$$3 - 5\text{yrs} = \frac{28.9}{100} \times 360 = 104.04^\circ$$

$$6 - 10\text{yrs} = \frac{31.1}{100} \times 360 = 111.96^\circ$$

$$11 \text{ yrs} = \frac{35}{100} \times 360 = 126^\circ$$

Pie Chart

The pie chart above shows that majority of the respondents have 11 years and above working experience, which shows that the productivity level of the manpower should be high because of the working experience.

Questions

How does port privatization policy affect port productivity?

Performance Indicators

Cargo through Pre and Post Concession

Year	Import (MT)	Export(MT)	Throughput (MT)
1999	15,751,331	6,481,605	22,232,936
2000	19,230,496	9,702,384	28,932,880
2001	24,668,791	11,271,901	35,940,692
2002	25,206,380	11,780,861	36,987,241
2003	27,839,293	11,926,652	39,765,945
2004	26,907,075	13,909,72	40,816,947
2005	29,254,761	15,697,312	44,952,073
2006	31,937,804	17,235,520	49,173,324
2007	33,722,488	20,918,560	54,641,048
2008	41,385,973	23,806,946	65,192,919
2009	47,204,752	18,948,056	64,188,808

Sources: Nigeria Ports Authority

Port performance and productivity are anchored on increased cargo throughput, and the relevance and efficiency of any port are tied to the degree of cargo traffic in that port.

From the table above, It can be seen that cargo throughput in Nigeria port increased from 2006 to 2009, and this is as a result of port privatization where private operators now handles the port operation. By increased cargo throughput, we can say the ports are more productive and the revenue generated will also increase. The pre-concession period covers 1999 to 2005 and the post concession period covers 2006 to 2009.

Test of Hypothesis Using Chi-Square

H_0 : Refers to null hypothesis

H_A : Refers to alternative hypothesis

The researchers' hypothesis is as follows

1. H_0 : There is no significant relationship between port privatization policy and port productivity.
 H_A : There is a strong relationship between port privatization policy and port productivity.
2. H_0 : There is no significant relationship between port privatization policy and increased port revenue generation.
 H_A : Port privatization policy and increased port revenue generation are related.
3. H_0 : Port privatization policy has not been effective since its inception in Nigeria

a. The Chi-square test of independence was used in this analysis and it goes by this formula.

$$\chi^2 = \sum \frac{n(O - E_i)^2}{E} \quad n = 1$$

Where O = Observed frequencies
 E = Expected frequencies
 N = No of variables

b. The level of significance used is 0.05

c. Degree of freedom (df) = (n - 1)

Hypothesis 1

H₀: There is no significant relationship between port privatization policy and port productivity.

Table 6: Statistical Computation of Data Obtained

Category	Observed (O)	Expected (E)	(O - E)	(O - E) ²	$\frac{(O - E)^2}{E}$
Strongly agree	6	36	-30	900	25
Agree	8	36	-28	784	21.8
Disagree	60	36	24	576	16
Strongly disagree	98	36	62	3844	106.8
Undecided	8	36	-28	784	21.8
Total	180		180		191.4

Solution

I carried out a chi-square test of independent on the hypothesis below

H₀: There is no significant relationship between port privatization policy and port productivity.

H_A: There is a strong relationship between port privatization policy and port productivity.

2. Let X level of significance be 0.05

3. Critical value = (n - 1) = 5-1=4

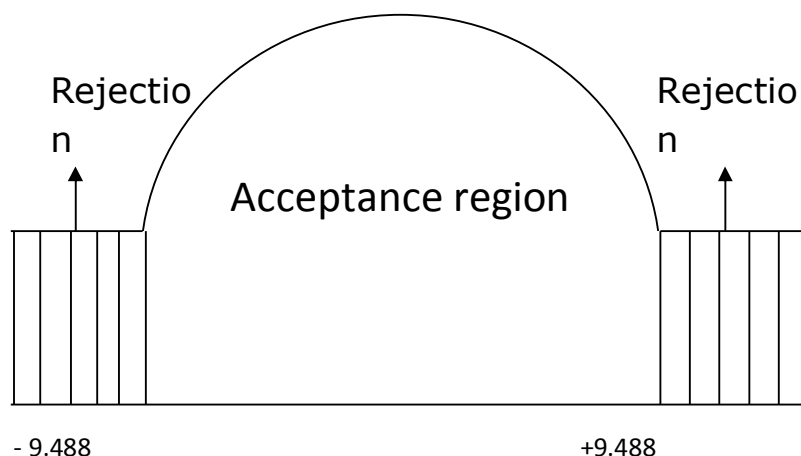
Hence, the critical values is

$$X^2_{0.05} (4) = 9.488$$

4. Computed value of the above table = 191.4

5. Decision rule; 191.4 > 9.488

This is represented graphically below



With $X^2_{0.05} (4) = 9.44$, the calculated value $X^2 = 191.4$ which falls in the rejection region thus we reject H_0 and accept H_A and conclude that; there is a strong relationship between port privatization policy and port productivity in Nigeria.

This hypothesis also agree with the performance indicter in table 5, which show that since the inception of port privation policy, cargo throughput in the Nigerian ports have increased which means that there is an improvement in productivity.

Furthermore, port productivity according to Ndikom (2006) play complementary roles to one another to achieve the expected efficiency and performance for instance, an increase in the performance of ship turnaround time will lead to an increase in cargo throughput, which in turn will affect the annual generated revenue of the port, this therefore proves that there is a relationship between port privatization policy and increased port revenue generation. We therefore reject the null hypothesis of the second hypothesis and accept the alternative one.

Hypothesis 3

H_0 : Port privatization policy has not been effective since its inception in Nigeria.

Table 7

CATEGORY	OBSERVED (O)	EXPECTED (E)	(O -E)	(O -E) ²	(O- E) ²
Effective	118	60	58	3364	50.1
Ineffective	40	60	-20	400	6.7
Neither effective	22	60	-38	144	24.1
		Non ineffective			
TOTAL	180	180			80.9

Solution 3

- H_0 : Port privatization policy has been very effective since its inception.
 H_A : Port privatization policy has been very effective since its inception. Let X level of significance be 0.05

Critical value = $(n - 1) = 3 - 1 = 2$

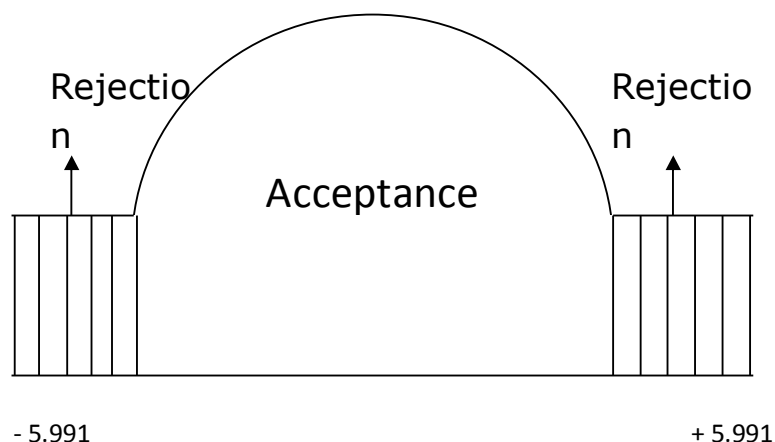
Hence, the critical values is

$\chi^2_{0.05} (2) = 5.991$

Computed value = 80.9

Decision rule, $80.9 > 5.9991$

This is represented graphically below



With $X^2_{0.05}(2) = 5.991$, the calculated value $X^2 = 80.9$ which falls in the rejection region, thus we reject H_0 and accept H_A the alternative hypothesis and conclude that port privatization policy has been very effective since its inception.

DISCUSSION OF FINDING

The findings revealed that majority of the respondents were between the ages of 30 and 39 which shows that the workforce is still very productive and creative, further findings showed that majority of the respondents had worked for a good number of years in the maritime industry and each had at least a first school leaving certificate which means that most of them were eligible to answer any question in the questionnaire.

The performance indicator showed the cargo throughput 1999 and 2009 before and after port privatization. And the table showed that after port privatization in Nigeria, cargo throughput increased more than ever before and this can be seen in the year 2006, 2007, 2008, and 2009. It therefore shows that the ports were more productive in those periods whereby vessels could berth on time, discharge on time and sail. And this can be attributed to improved cargo handling facilities and more dedication on the part of port workers.

A test carried out on the hypothesis showed that port privatization policy and port productivity are related, which means that productivity in the ports would improve when there are proper policies put in place and this can be seen in the performance indicator table on cargo throughput, which shows that port privatization policy has been effective. And a further finding showed that as a result of improved productivity, the revenue generated at the port will also increase because increase in cargo throughput would mean more earnings for the ports. This could be as a result of more patronage. Before the privatization of the Nigerian ports, many importers had to divert their cargoes to neighbouring ports as a result of poor performance, but with privatization of the ports, new facilities, new management, improved dedication on the part of workers has reduced the number of days cargoes spend in the shed. And this has made many importers to start patronizing the Nigerian ports.

CONCLUSION

In this study, this research has been assessed in collaboration with the existing concepts. More so, the research has also adopted the quantitative approach of research analyzed. The result of the analysis in this study has provided adequate answers to the research questions and has validated the research hypothesis. Finally, valid conclusions have been made or drawn towards achieving the objectives of this research.

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