# An Appraisal of Demurrage Policies and Charges of Maritime Operators in Nigerian Seaport Terminals: the Shipping Industry and Economic Implications

Procjena politika i trošarina pomorskih operatora na prekostojnice u nigerijskim morskim terminalima: implikacije na brodarstvo i ekonomiju

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DOI 10.17818/NM/2017/3.3 UDK 656.615:330.13 Review / Pregledni rad Paper accepted / Rukopis primljen: 27. 2. 2017.

#### Summary

This research evaluated the demurrage policies and charges of selected shipping companies and terminal operators in the Lagos ports and the implications in the economy and shipping industry in Nigeria. It adopted the survey approach to gather data from the dominant container operators (carriers) and the terminal operators. Demurrage duration and categorization of the demurrage periods and charges for each period by the selected operators were collected and compared using the statistical tool of analysis of variance to determine if there are differences among the charges and charging systems. It was found that, significant differences do not exist in the average rate of demurrage charges per container per day among the shipping companies and terminal operators in Lagos seaports. The study also found that there is no significant difference in the average amount charged as demurrage among the shipping companies and terminal operators in the three differing periods of demurrage duration in Lagos ports, Nigeria. It was recommended among other things that, the Nigerian shippers' council as the governmental body responsible for freight regulation and protection of shippers' interest should by policy fix a uniform container demurrage rate for all terminal operators and carriers operating in Nigeria.

#### Sažetak

U ovom radu procjenjuju se politike i trošarine na prekostojnice odabranih brodarskih kompanija i operatora terminala u lukama u Lagosu te implikacije na ekonomiju i brodarstvo u Nigeriji. U svrhu prikupljanja podataka od ključnih operatora terminala i prijevoznika kontejnera provedeno je anketno ispitivanje. Prikupljeni su podatci o trajanju prekostojnica i kategorizaciji trajanja prekostojnica, kao i trošarina, koje odabrani operatori naplaćuju za svako razdoblje. Ti podatci uspoređeni su statističkom metodom analize varijance kako bi se utvrdilo postoje li razlike između trošarina i sustava naplate. Rezultati su pokazali da nema statistički značajnih razlika u prosječnim trošarinama za prekostojnice po kontejneru dnevno između brodarskih kompanija i operatora terminala u morskim lukama Lagosa. Istraživanjem je također utvrđeno da nema značajnih razlika u prosječnom iznosu koji se naplaćuje za prekostojnice između brodarskih kompanija i operatora terminala u tri različita razdoblje trajanja prekostojnica u lukama Lagosa, Nigerija. Preporučuje se, između ostaloga, da nigerijsko vijeće krcatelja kao vladino tijelo koje je odgovorno za regulaciju vozarina i zaštitu interesa krcatelja treba utvrditi politiku kojom bi se odredio fiksni iznos za prekostojnice na kontejnere za sve operatore terminala i prijevoznike koji posluju u Nigeriji.

#### 1. BACKGROUND OF STUDY / Teorijska polazišta

Ndikom (2004) defines Demurrage on cargo as charges paid by the owner of the goods for the extra days the cargo has overstayed in the port beyond government approved date. Demurrage are charges levied by the shipping companies on

#### **KEY WORDS**

demurrage policies maritime operators seaports shipping industry

# KLJUČNE RIJEČI

prekostojnice politike pomorski operatori morske luke brodarstvo

each of the importer/ shipper for the said imported container for not been able to actually lift, clear and take delivery of the said container, after the statutory 3days of free period allowed by the law to do so at the end. The term demurrage originated in vessel chartering and refers to the period when the charterer remains in possession of the vessel after the period normally allowed for loading and unloading cargo (lay-time). By extension, demurrage refers to the charges that the charterer pays to the ship-owner for its extra use of the vessel. Officially, demurrage is a form of liquidated damages for breaching the lay-time as it is stated in the governing contract (the charter party). The demurrage sometimes causes a loss to the seller as it increases cost of the total freight. After the lay-time has expired and the vessel is on demurrage either to the ship-owner mostly when the vessel is on specific voyage or time charter basis conditions and to the Nation's Ports Authority as Berth's rent having stayed over the mandatory period allowed, hence no exceptions or interruptions to lay time are relevant, even during force majeure events such as strikes, etc. This is based on principle that, if the charterer has completed loading or offloading within the agreed lay-time, the vessel would have left the port before the force majeure event could intervene; hence, the unfair rule that once lay-time elapses, payment of demurrage commences and continues even on holidays until the cargo is taken delivery of away from the port terminals. This could also be seen as berth rent for the Port's Authority on each of the vessels on berth at the end. Demurrage is also usually made payable at a given rate per day of the demurrage days taken by the charterer to load or unload (Ndikom, 2004; Ndikom, 2010). A term for the payment of demurrage will be interpreted as referring only to the loading, or un-loading, at the ports expressly mentioned in the charter party in connection in with demurrage on container by the shipping companies. Koning (2009) notes that where the charter-party provides for demurrage, but no lay days are stipulated, the demurrage will be payable after a reasonable time for loading has elapsed. This was further evident in the opinion of Deakin (1973) who notes the importance of lay-time as the reference point for the determination of demurrage. Interestingly, where lay days are stipulated, and the parties have not agreed to provide for demurrage days, the charterer is in breach of contract if he fails to load, within the lay days. Also, where the parties have agreed to provide demurrage days, failure to load within the lay days does not constitute a breach of any imported container, but merely entitles the ship-owner to demurrage under the charter party; but if the charterer fails to complete the loading within the demurrage days, he is in breach of contract. The exact damages for a breach of the contract to load are frequently known as demurrage, and have even been so called judicially, but the term is inaccurate, where the charterer is in breach, the damages are measured in the usual way, and are not limited to the sum fixed as demurrage, unless it is agreed that this sum shall also be payable as liquidated damages for the breach of contract. The Lay days begin to run against the charterer when he has notice that the ship is ready to load, in the absence of an express term to the contrary, the ship owner is obliged to give notice to the charterer that the ship is ready for loading. Please note that where a ship was an arrived ship, and the charterer delayed in connecting a berth, it was held that the Lay days had commenced from the time of arrival, although after a berth was nominated, they may rely on a strike clause to suspend the Lay days. It is pertinent to note here that most of the shipping companies has different categories of Demurrage period of charges which they place on different sizes of containers, say 1X 20FT and 1X 40FT, delivered by their vessels at ports of discharge depending on location and level of traffic occasioned within the confines of the operational modalities of the port in question. Note that such demurrage charges by the said shipping companies operation are very unique in nature and but duly reflected international modalities in actions and cost spread at the end. For instance, Maersk Line shipping company operations crosses all Maritime nations has a Detention invoice number reflecting varying degrees of demurrage charges both in Nigeria and other nations of the world. In Nigeria, the Detention invoice number/activity Operations is purely anchored on a location basis in which the vessel is expected to deliver her cargo and they are;

- (1) 2Days /6950 NGN per day on each of the containers.
- (2) After 2 6 Days/8325 NGN per day on each of the containers.
- (3) After 6 Days above/9700 NGN per day on each containers.

Obviously, when an importer imports various type of consignment containers which are really ware-housed within the confines of the operational infrastructural facilities owned by the shipping companies, either 1 X 20FT or 1 X 40FT Containers at any port of discharge, which they seem to usually give every importer three days free period to really enable them to access, clear and take delivery of their goods as stipulated by the law. It is pertinent to note that, thereafter the three free days period, it is therefore expected that, the shipping company will now starts counting and charging demurrage on each imported containers. These specific charges of demurrages on containers ranges from 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> period, seem to have different calculated charges for containers and it differs from one shipping company to another as I have stated above, but such demurrage charges for each of the period does not exceed the sum of 12,000 NGN per day of X number of days incurred, no matter the sizes of containers and this excludes whatever deposits paid on each of the containers. It is expected that each container deposits amount paid will cover the demurrage depending when the empty containers will return to the terminal at the end of the day. What this means is that, the first period is the 2days after the 3days free period which attracts the highest charges of 12000NGN that they could not go above, but that of the 2days of demurrage is 6950 NGN. Note that the 2<sup>nd</sup> period is seen as the first 6days after the 2days of the 1st period of demurrage as can be seen on the above table which stands at 8325 NGN per day and the 3periodis the exact 6days after the first 6days of the 2<sup>nd</sup> period which stands at 9700NGN per day charge of each container as it stays under the supervision of the shipping company until the said cargo is cleared and delivery affected to the consignees ware-house. It is very pertinent that the charge differs from one shipping company to another at the end of the day. It is pertinent to state that the Nigerian Port's authority as the Master- Stevedore seem to give 5days free period for ocean- going vessels berthing at its port facility environment, after which, it starts to place Demurrage charges on vessels calling at the ports in Dollar currency, which reflects also the same concept of 1st, 2nd and 3rd period as in the case of the Terminal Operators and the shipping companies as explained above. Interestingly, the operations, activities and modalities of shipping is obviously global and International in nature and content as these are the same in Togo, Ghana, Cotonou and other west and Central African coast. Also, note that the demurrage charges on containers by shipping companies, as rental and clearing charges by Terminal Operators

on Storages on containers ware- housed within its domain of their operational base, indicate that all these charges have serious excruciating effects on the Nigerian economy mostly on the prices of goods within its open consumer markets. This is because, when the consignees or owner of the goods bear some of these excruciating costs/charges from both shipping companies and Terminal Operators, it is therefore a fact that, a business man within the Nigerian hostile business eco-system environment, who may have invested on his business through bank loans with a high interest rates; would ordinarily factor these high costs of clearing back into the market prices of the goods. This obviously has reflected on the high rising prices of the goods in the Nigerian markets, thereby affecting the entire economy of the nations. This also affects the consumers who bear the brunt of hardships and excruciating costs- effects, resulting from the manipulative tendencies and sharp practices of shippers and importers, which is not in conformity to global regulations.

### 1.1. Concept of rental charges on storages by container terminal operators / Koncept troškova iznajmljivanja prostora koje naplaćuju operatori terminala za kontejnere

Rental charges mean the amount of money the consignee who owns the goods that is warehoused by the Port Terminal Operator pays for the offering of services of same for a particular period of time. Such payment of services includes making use of the forklifts, Cranes, gantries, stores, warehouses and provided stacking areas within the confines of the particular Terminal Operators. It is purely on record that, the terminal Operators raises storage charges on containers usually warehoused in its office environment on the following items;

- (1) THC Terminal Handling Charges.
- (2) Storage Charges- (including terminal warehouses and stores).
- (3) Customs Examinations charges and Import Duties.
- (4) Delivery gate charges.
- (5) Stamp duty charges of 50 Nigeria naira per imported container

Interestingly, every terminal operator also gives a 3days grace or free period to enable them do clear and take full delivery of containers in their custody, after which they starts to raise rental charges on storage containers depending on the number of periods it stayed on premises and days usually allows and prescribed by the Management of such a Terminal Operator as the case may be. Note that, such a rental charges on storage are categorized on ranges of 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> periods as in the case of the shipping companies. It is pertinent to state here that, the categorized periods expressed above, do have specific fixed rents and storage charges placed on each of the warehoused containers depending on the sizes of each either 1 X 20FT or 1 X40FT. Please, note that the Tincan Island Container terminal LTD indicates the following;

- (1) 2days X no. of each container at 1200.00 NGN.
- (2) 5days X no. of containers at 8,800.00 NGN.
- (3) 5days X no. of containers at 1,800.00 NGN.

The above statistical table shows that the Terminal Operator gives 3days free period, after which it starts to raise storage charges on each container which falls within the highest range of rates in terms of rents of 12,000 NGN per container for each of the first 2days, of which they cannot go above such an amount as stated by the law. It could be seen that first 2days of rental charges, comes after the 3days free period. Thereafter, the 5daysof 2<sup>nd</sup> period of rental charges on storage of containers stands at the cost of 8,800 NGN per each container. Thereafter, the 3<sup>rd</sup> period of another 5days of rental storage charges commenced at the cost of 1,800.00 NGN per each containers, which actually takes care of the rest of the days the container stays at its premises until the eventual documentation processes, clearing and final delivery of same to the consignees' ware-house. Secondly, the CMA CGM Delmas Nigeria limited which is a Terminal Operator has an obvious different rental storage regime administration reflecting thus;

- 1. 5days of free period for each container
- 2. 5days of X no. of containers at 4,475.00 NGN.
- 3. 5days of X no. of containers at 8,350.00 NGN.
- 4. 6days of X no. of containers at 8,950.00 NGN.

Please do note that these categorized periods as expressed above, have specific fixed rents and charges placed on each container depending on the sizes of each either the 1 X20FT or 1 x 40ft containers. Please also note that some of the rents are different as one can see above from one Terminal operator to the other as the case may be. The facts above reflect that, this Terminal Operator gives 5days of free period not 3days as in other Terminal Operators. This is a good marketing strategy for obvious competitive edge over others in a shrinking and depressed market economy. After the first 5days of free period, it starts to place storage rental charges on each of the warehoused containers which stand at 4,475 NGN. Immediately the first of period of 5 days commences the 2<sup>nd</sup> period of another 5days of storage rental charge standing at a higher rate of 8350.00NGN per container. Thereafter, comes the 3rd period of 6days which reflects a much higher storage rental charge of 8950.00NGN per each container, as this takes care of the rest of the days the containers will stay within the premises of the Terminal Operator until delivery takes place.

Shipping is only a component of the services rendered within a highly complex transport and supply chain industry which encompasses other transport modes as scope or hub corridors involved in securing cargo delivery to the door steps of the shippers; and because it attempts to meet transport needs of the global trade, it is regarded as the most international of all industries. By the highly technical, professional, multidimensional service-oriented, competitive and route-complex (various trade export and import trade routes exist for trade with various global partners by Nigerian shippers) nature of the shipping industry, much money is paid by Nigerian shippers at various stages (containerisation and packaging and renting charges, shipping company freight, import and export tariff, surcharges, cargo handling and stevedoring charges, terminal handling charges, agent fees etc.) to get consignments move by sea to destination ports; non optimal and arbitrary fixing of demurrage charges and its periodisation without due regard to how it affects the shippers and the domestic cost of goods poses a challenge to sustainable shipping industry development. It is labour and capital intensive in nature and also subjected to international conventions and regulations (Ndikom, 2004) which Nigeria must consider in developing local policies. Its operations are international in nature and content, this explains why most countries actively aid their maritime

industry, with the aim of establishing a measure of indigenous control over the terms of shipping services (Ihenacho, 2004). Shipping as a primary logistics service is critical to Nigeria's international trade and economic development. Shipping as a mode of transport continues to represent the cheapest and most efficient means of moving very large volumes of import and export goods. Apart from the facility as a means of trade and economic development, shipping services may also be relied upon as a means of creating significant value-added services in an economy. The shipping industry occupies a very prominent position in the economies of nations all over the world. In its strict sense, the industry embraces all business activities which take place within the maritime environment. These include offshore economic activities such as fishing, salvage, towage, underwater resource exploitation/extraction, and onshore economic activities in ports, shipping activities, ship construction, repair and maintenance. However, shipping stands out as the greatest boost to a nation's economic growth and international status. This is because almost all other maritime activities revolve around shipping; since what is produced in the ocean environment must be pushed out to the market to achieve demand and be consumed in return for revenue. It is only by marine transport (shipping) that such a demand can be met in adequate commercial quantity. Thus, marine transport and shipping sustains majority if not all other marine based operations. The oil and gas industry for instance, depends on shipping, as it is the vehicle that drives it, enabling it to make all the difference in an economy. Due to the close link between shipping activities and economic development, maritime nations such as Nigeria must strive to achieve optimality in determination and implementation of maritime policies such as the demurrage policies. Hence, they consciously intervene in the sector to ensure that their national interests are maximally protected.

It is important to note that based on the demurrage policies and charging systems of the shipping companies and terminal operators in Nigerian seaport terminal as earlier enumerated. We can thus categorize the demurrage duration into three differing periods, depending on the number of days it takes the shipper to take delivery of the container from the terminals after lay-time has lapsed. These are: 2 to 5 days period after lay-time, above 5 days up-to 10 days period after lay-time and above 10 days period after lay-time. Based on the periods as stated, the differing demurrage rates per container per day are determined by the different maritime operators.

#### 1.2. Aim and objectives / Ciljevi istraživanja

The aim of this study is to critically appraise the demurrage policies and charges of major shipping companies and terminal operators in the Nigerian seaports with a view to understanding the effects and implications of the policies and charging system in the shipping industry and economy of Nigeria. Based on the above aim, this research study examines the following objectives.

- To compare the demurrage policy and demurrage charging system of shipping companies and terminal operators in Nigeria and weigh their effects on shippers.
- To determine the existence of differences in demurrage charges per container per day within the different periods of demurrage duration in the Nigerian maritime industry

and the effects on shippers and implication for regulatory authorities.

- To proffer recommendations on the basis of the research findings.

#### 1.3. Research questions / Istraživačka pitanja

- Is there any difference in the amount charged per container per day as demurrage by the various shipping companies and terminal operators in Lagos ports Nigeria?
- Is there a difference in the rate charged as demurrage per container per day by the maritime operators among the three different demurrage periods (demurrage duration) the containers stay in ports after lay-time?

#### 1.4. Hypotheses / Hipoteze

The following hypothesis shall support this study.

 $\rm H_{_{01:}}$  The average amount charged per container as demurrage among terminal operators and shipping companies in Lagos ports does not significantly differ.

 $H_{02}$ : There is no significant difference in the average amount charged as demurrage by the shipping companies and terminal operators in the three periods of demurrage duration in Lagos ports, Nigeria.

#### 2. LITERATURE REVIEW / Pregled literature

Over the years the issue of demurrage charges has been a subject of concern to both importers and freight forwarders alike as it relates to daily documentation and clearance of goods at the ports. Ironically, the issue of demurrage charges as a component of port operations has been heightened as a cargo clearing problem which over the years has added strong operational burden to both importers and freight forwarders alike with a negative attendant problems on the Nigerian economy (Ndikom, 2015). The issue of Nigerian port reform which demurrage was a cardinal component that the port reforms of 2006 was needed to address, but, the takeover of the terminal by present concessionaires has over these years compounded the problem of high rental charges in the operational handling of cargo clearance at the port. It is guite obvious that the segmentation of port terminals in view of the concessioner bids by the terminal operators have worsened the high rental problems in the day to day operational issues. Quite obviously, the present economic regulator (Nigeria Shippers council) has not done much in initiating policies that will handle the over bearing effects of this high rental charges on the shippers which is most unfortunate. This is because the Nigerian shipper needs to be protected from undue hardship effect of these high rental charges by the present Terminal Operators which its attendant effects over the years, has been placed on the door steps of the poor consumers at the Nigeria market (Ndikon, 2015). It is high time that the present economic regulator should as a matter of policy initiate plans and lucid programmes that will protect the Nigerian shippers on the overbearing effects of these unnecessary high rental charges from this terminal operators who have turn the port system over these years of not been consumer and investor friendly as it should be expected. Unfortunately, these rental charges on shippers from the terminal operators does not seen to conform to international mode of procedural operations on port issues which should be checked in other to avoid

continued undue hardships on the shippers by the obvious operational activities of the present Economic regulator of the ports (NSC) . Consequently, this trend of obvious high rental charges over the years by terminal operators has affected port efficiency, output and revenue generation to government and the economy (Ndikom, 2011). Importers and Freight Forwarders have continued to lament over the billions Terminal Operators and Shipping Companies are making out of strangulating effects of terminal and service charges in form of rents they impose on importers and shippers (Chigozie 2015). He also opined that, though the concessionaires claim to be collecting their statutory charges in form of rental charges as contained in their privatisation (concession) agreements, hence, high rental charges stand out as rather inflationary and to some extent illegal and out of order and not in actual conformity to the real tenets of the privatisation (concession) agreements with the governments approved rates.

Recently, in Lagos, leaders of Freight Forwarders operating at Lagos Ports urged the Federal Government to stop Port private terminal operators (Concessionaires) from collecting high rental charges during weekends and public holidays, which over the years have really affected common market prices. This is, obviously, not the first time Freight Forwarders are putting across this demand but government seems to be paying a deaf ear to their petition. Unfortunately too, the economic regulator of the ports, have not seem to do any meaningful operational policy effect in this regard and this has left the shippers and the importers alike to the chagrin and caprices of both the shipping companies and Terminal operators within the confines of the port system at large. Yet, by all standards, this demand is logical. For importers and their agents, therefore, require that the issue of high rental charges and it attendant effects by Terminal operators need to be recognized for the plague it has become on their operational modalities at the ports at the end of the day (Chigozie 2015). He also suggested that the issue of grossly underreported problem of incessant cyber network failure at the terminals, where agents sometimes waste up to one (1) week for network to stabilize and for Nigerian Customs Service (NCS) personnel to confirm payments before giving approvals for release of documents of imported goods which is most unfortunate and has negative cost implications on shippers. Within this one (1) week is the 3 days grace period allowed for cargo clearing by the present terminal operators as against the 5days grace periods before the reforms usually allowed by the ports authority? That means the agent has already incurred 2 days demurrage charges for which he must pay the shipping companies on containers and rent charges on terminal operators. For the terminal operators, rental charges usually incurred are at the rate of N14, 500 for a 40ft TEU container while a 20ft container goes for N10, 500 per day. Yet confirmation of payments by Customs is just one step in the entire process of cargo clearing. Chigozie (2015) further notes that two strong allegations are generally levied against terminal operators. The first is that they rip huge sums of money off importers by delaying the clearing process. The other is that high rental costs add up to very cumulative high port charges which is progressively eroding customer confidence. He is of the opinion that terminal operators claim that because they generate their own electricity, it is more expensive to run Nigerian ports compared to terminals operation in other countries and, to a large extent that is what determines the amount importers are asked to pay as terminal rental charges. Ndikom (2015) does not seem to agree in that opinion because the Nigeria concession agreement with the terminal operators was purely based on Built, Operate and transfer concept which has given the concessionaire the operational latitude to effect changes that will enhance operational efficiency, output and revenue generation through strategic marketing policies that will see the vibrancy of the port system. This is because the BOT agreement empowers the concessionaries to beef up and invest in modern infrastructures that will enhance port operational issues not this excuses they intend to postulate which has no basis as in the for the terminal operators current over bearing high rental charges on the Nigerian shippers. This is also because, the BOT concept of the concession agreement between government and terminal operators should resonate on some level of year's advantage which should not in any way ignite this illegal and harmful effects of rental charges on the Nigeria Shippers by the terminal operators through these obvious extortions which shouldn't be in the first place. Ndikom(2015) is also of the view that the present economic regulator of the port should stand up for the shippers and provide an obvious rescue measure through an enduring policy framework. Chigozie further opined that, there is this excuse of double taxation and levies paid to government, which according to the concessionaires have made them to recoup their investment capital difficult. He also suggested that the multiplier effect of delays and high demurrage charges by shipping companies on containers and also high rental charges by the Terminal operators are already taking its toll on the Freight Forwarders, consumers, Importers, and their businesses. About 30 per cent of container deposits collected for shipping companies by terminal operators are not refunded despite the efforts Importers and their agents make to return empty containers on time and in good condition. Unfortunately, nothing has been done to remedy this ugly trend at the ports as at today, even worse still the economic regulator. This portends great danger to the overall interest of both the shippers and importers alike at the end. At a time when the traffic situation in Apapa and Tin-Can Island has become endemic with many container-laden trucks unable to discharge containers on record time and terminals are not large enough to receive and hold empty containers as they come, talk less of handling the overall rise in cargo throughput. Nothing seem to abate on this ugly trend and there is great need for the Present Economic regulator to initiate positive policy plans to curb some of the excesses of these overzealous terminal operators. He also stipulated that the Freight Forwarders have definitely become a target for anger from their principals - the Importers. And that has often led to job losses which are most unfortunate (Gwandu, 2000; Gumel, 1996).

Erosion of customer confidence impedes performance as patronage is considered to be the most critical index for ports performance evaluation. A cursory glance at the factors that contributed to cargo diversion from Nigerian ports prior to 2006 would show high port charges as taking the centre stage. Like a ripple, high port charges has led to customer apathy and that in turn led to cargo diversion wherein millions of metric tons of Nigeria-bound freight were diverted to neighbouring ports of Cotonou, Lome, Tema, Accra, and the rest. Besides financial losses, capacity under-utilisation and decay of infrastructure resulting from reduced patronage contributed majorly to the rot that informed the Federal Government's decision to concession the ports. Evidently, one study on port utilisation and performance; 1990 - 1999, shows that for the Lagos Port Complex which has 22 berths, the average arrival rate of ships then was 1 ship per day. The cargo throughput at the ports was about 64 per cent of the designed tonnage capacity revealing 36 per cent under-utilization. It is sad to note that today, almost 10 years into the concession regime; concessionaires have the effrontery to still score neighbouring West African ports higher than the Nigerian ports as they were contracted to manage, on the grounds of high running costs, and using same as an excuse to exploit importers, and that is very unfortunate to behold (Chigozie 2015; Bassey, 1996). Some other strains of high demurrage have more serious economic effect on containers as shipping companies should be held responsible. One example is the growing syndicate of touts who forge shipping and freight forwarding documents on the guise of enabling agents to make bank payments ahead of time pending the release of original documents. Incidentally, data available at National Drug Law Enforcement Agency (NDLEA), National Agency for Food and Drug Administration and Control (NAFDAC), Standards Organisation of Nigeria (SON), Nigeria Customs Services (NCS), and other law enforcement and quality assurance agencies attached to the ports show that these touting syndicates go beyond forgery of Bills of Lading. Their sphere of activity now extends to forgery of sensitive documents like the Pre-Arrival Assessment Report (PAAR) which aids agents to obtain illegal release for shipments of arms, hard drugs, and other contrabands. It also enables them to undervalue their consignments and to defraud government heavily on a daily basis. It is pertinent to note here that, in some cases, genuine agents engage in document forgery primarily to beat the Custom's malfunctioning network system, the3days terminal operator's very short grace period, and ultimately culminate into the high rental charges at the end. This proves to be unfair to the Importers whose consignments are liable to confiscation when intercepted by Customs either in the customs Longroom or on the highways by Federal Operations Unit (FOU) (Chigozie 2015). Chigozie is of the view that price inflation for commodities in our markets derives very much from additional costs like demurrage coupled with cost of price of goods, freight, and insurance. Inflation of all kinds devalues everything it infects. It reduces standard of living, promotes crime, puts pressure on government, stimulates counterfeiting and money laundering, and distorts operational modalities. A former German Central banker, Karl Otto Pohl, compared inflation to toothpaste: easy to squeeze out of the tube, almost impossible to put back in. The seaport is the gateway to the economy of every nation. Attempts to increase the overall costs of imports would certainly reflect on the unit price of all goods and services in the market. This is inimical to the welfare and livelihood of citizens of the country. There is no doubt that the rising cost of goods and services in Nigeria is linked to the shylock and inflationary pricing system forced down our throats by a cartel of terminal operators who must recoup their investment by all means and in their own terms. For a fact, sources at Nigerian Shippers' Council (NCS) have it that terminal operators are raking in between N9 billion and N11 billion annually from storage and high rental charges alone.

Terminal operators are on stronger ground when they complain of double taxation and levies by government, and if their claim is anything to go by, one can conveniently say the government is contributing to the distortion of the clearing system and the on-going exploitation at the ports. On the one hand, the shipping companies have identified what they call a dysfunctional clearing system in the nation's ports as responsible for the delay in goods delivery and called on the government to standardise and harmonise the system. On the other hand, the Nigerian Maritime Administration and Safety Agency (NIMASA) was identified as a government agency not taking its role seriously as it takes 4 to 5 days to process ship sailing certificates and 2 days to confirm payments. Nigerian Immigration Service (NIS) is also said to be engaging in armtwisting tactics which involve confiscation of Seaman Passports of crew members in a bid to extort money from shipping companies, while the Nigeria Police is not left out of the usual business of unnecessarily detaining containers at the terminals (Chigozie 2015). There is a third allegation against terminal operators, to which they and their image makers have paid little attention to its damaging effects on their corporate existence. It relates to a recent World Bank report that attributed to long dwell time of cargo and high rental charges to the rent-seeking approach of terminal operators rather than fast-tracking cargo clearance. As it stands, cargo dwell time for Nigerian ports is between 20 and 28 days as against 10 to 15 days for Benin Republic, 12 to 14 days for Ghana, and 8 to 12 days for Togo. Again, data from Nigerian Shippers' Council indicate that while Nigeria has 5 demurrage-free days, Benin Republic has 10 days, and Ghana has 8 (Chigozie 2015).

Concessionaires have made government to believe the wrong notion that stricter terminal charges would put Importers and agents on their toes and speed up the clearing process. But there is no evidence that the clearing process had performed any better since 2006. Instead, terminal operators have continued to milk Importers and agents of hard-earned money by means of a long list of rental charges numbering between 14 and 20 for port and off-dock terminals respectively. Ndikom does not seem to agree with that feeble postulation by the concessionaires because of the fact that there is no obvious outstanding shipping policy at present for obvious reasons of government insensitivity, commitment to customers service delivery and shippers interest which therefore affect port operational efficiency, productivity and output at the end. He also believed that this era of change mantra should have sweeping effects in the radicalization of the appropriate initiation of shipping policies by the joint effect, support and funding of this lucid project by both Nigerian Shippers Council and NIMASA. Ndikom (2011) is also of the opinion that, the initiation of an enduring shipping policy in this dispensation of change will turn things around and postulate a positive effect and benefit to both the port environment and the Nigeria economy. He also opined that this enduring policy framework will checkmate the obvious excesses of the terminal operators and shipping companies in the application of the excruciating demurrage charges on Nigerian shippers and importers alike. It is unfortunate; Ndikom (2011) seems to argue that the continued lip service syndrome by government on cogent issue of an enduring shipping policy is not enough for the growing maritime economy like Nigeria. Looking ahead, the situation is likely to be even worse. Nigerian Shippers' Council – the regulator of ports, has expressed disappointment with the performance of terminal operators and called for the appointment of a Commercial Regulator for the ports. Federal Government should quickly accede to that recommendation. The absence of a Commercial Regulator has created room for a cruel market monopoly at the ports rather than the much-envisaged competitiveness among service providers (Chigozie 2015).

Amiwero (2015) is of the view that the five-day nationwide strike and protests over the removal of fuel subsidy, leading to the shutdown of activities at Nigerian ports, is generating strong controversies among freight forwarders over the demurrage and storage charges by shipping companies on containers incurred while the strike lasted and also the level of high rental charges by terminal operators on the vulnerable Nigerian shippers and importers alike. National President of the National Council of Managing Director of Licensed Customs Agents (NCMDLCA) said that, in line with international best practices, terminal operators and shipping companies are not supposed to charge demurrage, rental charges or storage charges during the strike, since the action was not occasioned by the importer or his or her agent. He also is of the opinion that, "we have lost a lot, and there is no doubt about that. And my opinion on the strike is that issues have been raised about corruption and governance, and these are the things we have been talking on for a very long time and these are the issues we must properly address and of a truth it is expected therefore for the Economic regulator to stand up to some of these issues and finally initiate appropriate policies that will checkmate these obvious abnormities within the confines of the maritime operational system. When a strike action is declared in a nation, demurrages by the shipping companies and rent charges by the terminal operators are waived, because, under the contract of fair treatment, the contract has what are termed Acts of God, strikes and lockouts, and civil commotion. All these makes it impossible for shippers to clear his goods, and, in that process, concession is granted to everybody in terms of rents charges by the terminal operators on containers and others goods all over the world. So, the loss here is enormous, which has been estimated at billions of naira. But the truth about it is not the money we have lost, but we are going to gain when government becomes transparent (Amiwero, 2015). National President of the National Association of Government Approved Freight Forwarders (NAGAFF), notes that, despite the fact that the Nigerian Ports Authority (NPA) claimed to have opened the ports for operations for the five days which the strike lasted, no reasonable shipper or agent will go and clear his or her cargoes and expose them to danger. He said that when operations come into full swing this week, the association will write terminal operators and shipping companies to notify them on the need not to charge demurrages, rental charges or storage charges. National President of the Institute of Freight Forwarders of Nigeria (IFFN) observed that, for the economy to become better, the downstream sector of the Nigerian petroleum industry must be deregulated. He noted that government's initiative will pay off at the end of the day. "Nigerians need this pain, but, until we must all share in this pain, we will never leave our problems. We must all agree to bear the pain, no matter the timing for us to succeed. I am in support to the tune of 200 per cent of the fuel subsidy removal." (Chigozie, 2015) . On the issue of storage, rental charges and demurrage, he said that no shipping company or terminal operator will want to make any extra charges since the action was not caused by the consignee and the agents.

In Nigeria, high demurrage charges stands out as rather inflationary and to some extent illegal business transactions by shipping companies. This is because the operational modalities of the port system is becoming unfriendly and impeding investment rate as terminal operators impose high level of rental charges to importers and shippers alike, on the issues of cargo handling and warehousing of their containers before clearance and delivery, however the terminal operator claimed that their rental charges on containers are in line with the concession agreement of the federal government, even though high charges and rates are part of the major reasons why the port were under concession. Sadly, among the committee of world shipping operations or maritime activities, it is only in Nigeria that terminal operators apply high rental charges on handling of containers within the confines of their operational modalities during the weekend and on public holidays which is contrary to the concession agreement (Folarin, 2009). All this illegal rental charges frustrate shippers' activities, which directly or indirectly led to cargo diversion to other neighbouring port meant for Nigerian ports. Over the years, the operationalization of the Nigeria port activities has been somewhat underperforming due largely to policy inconsistencies, lack of regulatory framework, no price regulation and monitoring standards. Even though the ports have been under concession, the Nigeria port authority and other stakeholders in the industry still have the statutory functions to regulate and monitor activities of the terminal operators (Iheanacho, 2005). However, the absence of all these have led to some illegal and uncompromising activities of terminal operators especially, in the aspect of high demurrage charges imposed on shippers and importers by shipping companies and also high rental charges by Terminal operators.

The implication of this is that, the burden will be transferred to the larger economy/society where final consumers pay high prices for imported goods or even that has increased the cost of production of our local products. This is because, the raw materials use in the production of these goods must have been imported and would have been exposed to high cost of clearing charges, which is highly unfortunate as same has denied our ports the expected hub for west and central African region. It is pertinent to note that apart from policy problem, there are also some operational problems, such as infrastructural problems, bad access road network to the port, congestions of ports, un-streamlined charges, and bad port environment policy conditions. These entire factors are responsible for container laden not been able to load and discharge containers on record time, which all led to high level of rental charges by the Terminal Operators. However, these operational factors are problem of the terminal operators but sadly, the shippers and importers pay for these obvious port inefficiency. For example, take the problem of incessant cyber network failure at the terminals, where agents sometimes waste up to 1 week for network connection to stabilize and for Nigerian Customs Service (NCS) personnel to confirm payments before giving approval for release of imported documents (Abang, 2011). Within this 1 week is the 5days grace period allowed for cargo clearing by the

ports authority. That means the agent has already incurred 3 days rent charges for which he must pay the shipping companies on containers as demurrage and terminal operators as in form of rents. For the terminal operators, rental charges are at the rate of N14, 500 for a 40ft TEU container while a 20ft container goes for N10, 500 per day. Yet confirmation of payment by Customs is just one step in the entire process of clearing. All this above stated factors are progressively eroding customer's confidence and satisfaction in the entire port system.

# 3. Methodology / Metodologija

The research used a survey method to determine the dominant (biggest by size of container trade transactions) terminal operators and shipping companies based in the Lagos ports complex were constitute the population of the study. While the demurrage charges for the majority of the terminal operators show uniformity with the Tin Can Island Terminal Operators Limited they are the highest. The majority of container trade carriages into Lagos seaport terminal are handled by the two major shipping lines of Maersk Line Nigeria Limited, and CMA CGM Delmas Limited. The three maritime operators as mentioned above were sampled and data collected from the companies of three variables which are; demurrage charges per containers that stays the terminal within the demurrage duration. Based on the data collected reflecting the demurrage policy of each company, the demurrage duration was categorized into three based on the date of expiration of laytime and the demurrage rate per container in each demurrage period as collected from the companies noted. The demurrage period include: 2 to 5 days after lay-time (X1), above 5 days upto 10 days after lay-time (X2) and above 10 days after lay-time (X3). The statistical method of analysis of variance was used to analyse the data and to compare the demurrage policy and rates of the maritime operators. Student F-statistics table was used to test the null hypotheses H01 and H02 postulated after analysis was carried out using the ANOVA method of statistical analysis.

### 4. DATA PRESENTATION / Prikaz podataka

Table1 Demurrage charges by selected terminal operators showing the rates of demurrage per container for various periods after lay-time

Tablica 1. Troškovi prekostojnica odabranih operatora terminala s prikazanim cijenama prekostojnica po kontejneru u različitim periodima nakon stojnica

S/NO.	INDEPENDENT VARIABLE: NO.OF TERMINALS SAMPLED	NAME OF TERMINAL OPERATORS	DURATION OF CONTAINERS IN DAYS/ CHARGES			
			2-5DAYS X <sub>1</sub>	ABOVE 5 DAYS- 10 DAYS X <sub>2</sub>	ABOVE 10 DAYS X <sub>3</sub>	
1	3	MAERSKSEALAND NIGERIA LTD	6950	8325	9700	
2	3	TINCAN ISLAND TERMINAL OPERATORS LTD	12000	8800	8950	
3	3	CMA CGM DELMAS LTD	4475	8350	1800	

Source: field data sourced from the concerned companies during survey.

# 4.1. Data analysis and results / Analiza podataka i rezultati

Table 2 Result of the ANOVA analysis carried out using table1 Tablica 2 Rezultati ANOVA analize podataka iz tablice 1.

SUMMARY	Count	Sum	Average	Variance		
Row 1	3	24975	8325	1890625		
Row 2	3	18950	6316.667	19640833		
Row 3	3	14625	4875	10845625		
Column 1	3	12625	4208.333	8318958		
Column 2	3	25475	8491.667	71458.33		
Column 3	3	20450	6816.667	19015833		
ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Rows	18014306	2	9007153	0.979086	0.450706	6.944272
Columns	27955972	2	13977986	1.519421	0.322937	6.944272
Error	36798194	4	9199549			
Total	82768472	8				
IUtai	02/004/2	U				

Source: authors computation based on analysis of table1.

# 5. DISCUSSION OF RESULT / Rasprava

The result of the analysis indicates that the shipping companies (Maersk line and CMA CGM) charges an average of eight thousand three hundred and twenty fine(8,325) naira and four thousand eight hundred and seventy five (4875) naira respectively as demurrage per container that over stays by 2days to above 10 days duration after lay-time. The terminal operators charge an average of six thousand three hundred and sixteen (6316) naira as demurrage per container that exceeds lay-time by 2days to above 10 days duration. The implication is that on the average, within the same seaport and trade zone (Lagos port complex), demurrage charges and charging policy varies among the shipping companies, it also differs between the shipping companies and the terminal operators. Though the significance level of the of the difference is to be tested yet, but the reality about the difference in the charges as seen in the analysis is that a risk of economic and financial burden is imposed on the shippers by this system of charging and these economic burden depicted by the average demurrage charges are passed onto the cost of imported goods and services in the economy, thus causing inflation. The test of hypothesis H<sub>at</sub> which test the significance of the difference shows an F-score of 0.9790, F-critical of 6.944 and p-value of 0.4507. Since 0.9790 < 6.944, we accept the null hypothesis  $H_{n1}$  that there is no significant difference in rate demurrage charges per container per day among the shipping companies and terminal operators in Lagos seaports. Further, though the hypothesis confirms an insignificant variation in the demurrage charging system among the operators, the difference in average amount paid as demurrage per container over the same duration as earlier mentioned, supports the findings of Abang (2011). The implication on the side of the regulators (Nigeria Shippers Council, NSC) whose duty it is to regulate and harmonize freight charging policies and systems of operators (shipping companies and terminal operators) is that she has failed in the

proper implementation of her legal mandate and functions to protect shippers against unjust policies by operators. The insignificance of the difference as shown by the test of  $H_{01}$  and the differing average demurrage charges between the shipping companies and between the shipping companies and the terminal operators suggest an oligopolistic feature in the Nigeria shipping market, giving room for collusive behaviour of the few operators to take a common or similar economic front in their favour, but to the disadvantage of the shippers and the economy of Nigeria.

Comparison of the demurrage policy of the terminal operators and shipping companies which led to the categorization of the demurrage durations into three (3) demurrage period: 2 - 5 days demurrage period, above 5 days -10 days demurrage period and above 10 days demurrage period indicates that each container that overstay by 2 - 5 days after lay-time pays an average of four thousand two hundred and eight (4208.33) naira as demurrage, containers that enters into the next demurrage period; above 5 - 10 days pay an average of eight thousand four hundred and ninety one (8491.66) naira per day, while containers the enters the last demurrage period - above 10 days pays an average of six thousand eight hundred and sixteen (6816.667) as demurrage per day. The implication is that the demurrage policy of the operators is such that shippers pay least within the first 2 to 5 days after lay-time and pay more after the fifth day to the 10<sup>th</sup> day, the charges declines after the 10<sup>th</sup> day to an average amount per day less than the amount in the first demurrage period (2 - 5 days). The test of hypothesis H<sub>02</sub> which seeks to test if significant difference exists among the average demurrage charges in the three demurrage periods shows F- score of 1.519421, an F-critical of 6.94427 and P-value of 0.322937. Since f-score is less than f- critical ( 1.519421 < 6.94427), we accept the null hypothesis  $H_{n_2}$  and conclude that there is no significant difference in the average amount charged as demurrage by the shipping companies and terminal operators in the three periods of demurrage duration in Lagos ports, Nigeria. This result is in agreement with the findings of Abang (2011). The implication of the insignificance in the difference in the charging policies and systems during the demurrage duration is that there is no justification in the increment from 4208.33 naira per container per day in the first demurrage period to 8491.66 naira per container per day in the second (above 5 days to 10 days) and the subsequent decline in the third demurrage period (above 10 days) to 6816.667 naira per container per day, proving further that the Nigerian shippers council (NSC) in its mandate to protect shippers through regulations against unjust demurrage policies of operators have fared well in regulating of the demurrage policies and practices of operators in the Nigerian maritime domain. There is need to revert by policy regulation to a uniform demurrage charge per container per day by all operators, a common demurrage rate /charge per container per day, which begins to count once lay-time has lapsed. Thus differing charges/rate based on periods/days of stay in port is unhealthy and extortionary. This is not good for the economy as the excess charges paid by the importers and cargo owners as demurrage are transferred to the final consumers of imported products, leading to inflation in the economy.

# 6. CONCLUSION / Zaključak

From the foregoing, it obviously clear that the average demurrage rate charged per container per day among the shipping companies and terminal operators in the Nigerian market differ, similar difference was also found in the average demurrage rate per container per day within the three (3) periods of demurrage duration. However this study concludes inline to the result of the test of hypotheses that; there is no significant variation in rate demurrage charges per container per day among the shipping companies and terminal operators in Lagos seaports. The average demurrage charge/rate per container per day in the three of demurrage periods also did not show any significant difference.

#### 7. RECOMMENDATIONS / Preporuke

The basic principles of shipping trade require that demurrage policies/charges should not be the basis and strategy for market completion among shipping companies (carriers) and terminal operators to disadvantage of the shippers and port users. The aim and strict objective a sound demurrage policy and charging system must be to attract, encourage and strategically push the shipper to take delivery of her consignment (container) out of the port terminal in good time without attracting too much extra cost; to help solve congestion and space problems in port as well as limit inflation rate. Demurrage policies and charging systems should therefore not be allowed to constitute mechanisms for profit making/maximization and /or improvement and extortion. To do this, it is recommended in line to the findings of the research that:

- The Nigerian shippers council as the agency of Government responsible for freight regulation and protection of shippers interest should fix a uniform container rate of demurrage for all terminal operators and carriers operating in Nigerian. The insignificance in the differing average container demurrage rate being charged in the industry at present suggest that there is need for the difference in rate, rather a uniform rate acceptable to all stakeholders, inclusive of shippers should be determine and fixed as a compulsory rate approved by regulation.
- The insignificance in the differing average container demurrage rate per day among the three demurrage duration periods suggest that there is no need for the arbitrary periodization (categorization into periods) of the demurrage duration. There regulation should determine a single demurrage rate for the demurrage period commencing immediately lay-time has lapsed until the containers are taken delivery of by the owners. Government should by policy ensure that the operations of demurrage charges and rental charges by the terminal operators should conform to international regulations and operations modalities.
- Government should make policies that will make the shipping companies and terminal operators to increase the lay-time for shipper's delivery of their container to 5 days, similar to the prevailing policy between the NPA and the ship owners and/or agents. The shippers should equally not be coerced to pay demurrage for lapse of lay-time due to the fault of the carriers and terminal operators, Acts of God, strikes and lockouts.

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