NIMASA

Nigeria's
Maritime Industry Forecast

2019 - 2020

HARNESSING THE MARITIME AND SHIPPING SECTOR FOR SUSTAINABLE GROWTH

Content

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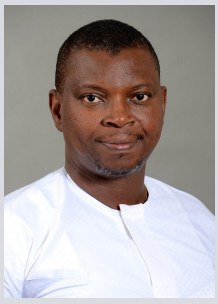

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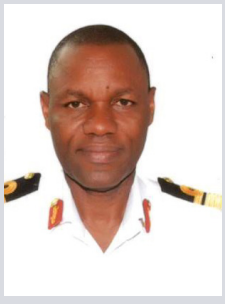

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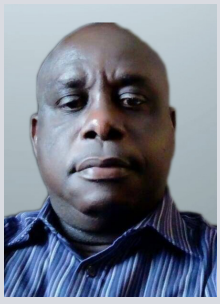

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Foreword by the Honourable Minister of Transportation

RT. Hon. Chibuike Rotimi Amaechi
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The Nigerian Economy holds many opportunities, in the maritime sector alone there is focus on sustainable use of ocean resources for economic growth, and jobs and ecosystem health.

This concept referred to as the Blue Economy holds the key to streams of opportunities in the industry in areas such as: renewable energy, fisheries, maritime transport, waste management, tourism, and climate change. Wherever one is inspired to invest, the opportunities are limitless. The Federal Government more than ever is committed to creating the enabling environment for people to prosper, grow the economy, sustain the country's infrastructural development and keep our society safe.

Considering that the maritime industry is dynamic and susceptible to global socio-economic changes, having an investment guide would be of immense help in navigating through successfully. Therefore, NIMASA's presentation of the Nigeria's Maritime Industry Forecast for 2019 – 2020 period is not only timely but very informative. With the theme "Harnessing the Shipping and Maritime Sector for Sustainable Growth", the forecast builds on the identified opportunities and challenges of 2018 to highlight areas with great potentials, that will yield good returns on investments as it offers suggestions that could guide investment decisions in harnessing the potentials of the sector.

Despite 2019 being an election year, there are enormous potentials in the sector which remain untapped. I therefore urge all-stakeholders, industry players and local and international investors to pay attention to the indices highlighted in the forecast and take advantage of the huge potentials as well as identified opportunities for investment as Government will sustain its efforts in formulating and driving policies to ensure growth of the maritime and shipping sector.

January 29, 2019

Preface by the Director-General/CEO

Dr. Dakuku Peterside
Director General/CEO
Team NIMASA

The first Nigeria's Maritime Industry Forecast which covered the period of 2018 – 2019 highlighted key developments in the Nigerian economy as well as in the maritime industry, and offered an outlook on key parameters driving the industry. It revealed areas of emerging opportunities and challenges of the country's maritime industry in order to provide better assessment and guide to investors (Foreign and Local).

The Nigeria's Maritime Industry Forecast 2018 – 2019 predicted an 8.15% to 8.72% growth in demand for non-oil tankers and an upward increase in demand for container vessels simultaneously. Nigeria is going to export more non-oil-and-gas-based cargoes over the next 3 years and with the expected completion of NLNG Train 7 which will be done in country by mostly Nigerian companies. It will also export more liquefied gas within the period in context. The Maritime Sector holds a lot of promise for Nigeria and Nigerians.

The 2019 – 2020 Forecast is focusing on harnessing the shipping and maritime sector for sustainable growth. Essentially, the forecast will be addressing: how emerging trends in the global maritime industry affect the maritime sector in Nigeria; and what domestic factors will influence the maritime sector in Nigeria. The maritime sector has the potential of contributing at least 10% of Nigeria's GDP in no distant future as Nigeria has the biggest market in African; and generates about 65-7-% of cargo throughput in West Africa, and 65% of all cargo heading for these regions will most likely end up in the Nigerian market.

To enable Nigerians play major roles in the Maritime and Shipping Sector, two things are critical. The first is asset building/acquisition and the second is human capacity development. It is a known fact that Shipping is capital intensive, the Cabotage Vessel Financing Fund (CVFF) is not adequate to address the huge demand for maritime asset, so in addition, NIMASA is looking at other Ship Financing Models. That is why we have been engaging with government at the highest level to push for special intervention fund, special interest rate and other incentives that will drive optimal performance in the Sector. We shall not relent in our drive to put the right framework together to help beneficiaries and investors have good return on investment. The Country is also making huge investments in human capacity development in the Sector which means that more Nigerians will get involved in shipping especially in shipping operations.

There has been consistent effort by the government to drive changes in the maritime and shipping sector through regulatory and infrastructural developments. The main public bodies regulating the maritime and shipping sector have all keyed into the government's strategies to reform the operating environment and improve on her ease of doing business index which has the potential of attracting more businesses to the maritime industry.

The year 2018 offered government opportunities for strategic changes in policies so as to restore growth in the economy, invest in our people and build a globally competitive economy. The regulators and the stakeholders will continue to push for these reforms as our interest remains to develop indigenous capacity in the shipping and maritime sector to ensure a high-level playing field for operators to tap into the vast economic benefits inherent in shipping and we are happy to project a 2019 – 2020 period full of hope for investors and sustainable growth.

January 29, 2019

Executive Summary

Global maritime trade grew 4% in 2018, its fastest pace in five years, as robust growth in global economic activity and trade buoyed the global shipping industry. This presents the backdrop to the second edition of the Nigerian Maritime Industry Forecast 2019–2020. This edition builds on the inaugural edition from last year (which provided forecasts on key maritime sector indicators running from 2018 to 2020), inspired by the recognition of the strategic importance of the maritime sector as an agent of sustainable national economic growth and development.

The forecasts of maritime sector indicators rely on baseline and alternate scenario forecast estimates of macroeconomic indicators underpinned by current realities, which required adjustments to projections made in the Economic Recovery and Growth Plan (ERGP), in order to give them a credible bearing in 2019. This includes adjustments to the ERGP's foreign exchange (FOREX) reserves estimate which has been adjusted to reflect the actual size of reserves in 2018, Foreign Trade estimate for 2018 (in the absence of Q4–2018 foreign trade figures), Crude Oil price and production based on the 2019 FG Draft Budget oil price (reasonably in line with international oil price expectations) and production assumptions.

The empirical Forecast model employed relies on data running from 1981 to 2018 covering domestic macroeconomic indicators, Nigeria's merchandise goods trade with the rest of the world, maritime industry characteristics, and demand for use of maritime industry facilities. It further elaborates on the opportunities and challenges within the maritime industry and its position as an enabler and facilitator of economic growth and prosperity.

Setting the context is the Review of Economic Conditions, which reports an acceleration of growth in 2018 to a cumulative rate of 1.76% based on data from the first three quarters of the year, with the economy relying on the Transport and ICT sectors to compensate for significant deceleration in the primary sectors responsible for catalysing its recovery – Agriculture and Oil & Gas. International trade continued to recover in 2018, expanding by 33% year-on-year, driven by a 45% and 18% increase in exports and imports respectively. This culminated in a merchandise goods trade surplus average of 5.7% of GDP across the first three quarters of 2018.

The outlook for the economy's performance in 2019 reflects, on the global side, concerns about a substantial global economic growth slowdown, likely higher US interest rates, a stronger dollar and volatile oil prices (possibly averaging below US$60pb), and the impact of sentiment surrounding the 2019 general elections and post-electoral transition on the domestic side.

Against this backdrop, the empirical analysis projects the growth of the total fleet size in 2019 over 2018 to be 10.33%, easing to 8.75% for 2020. Oil tanker fleet size is projected to decrease by 11.2% for both 2019 and recover to a positive growth of 0.11% by 2020. The projections for non-oil tanker fleet size is estimated to increase by 14.3% in 2019 and 10.2% in 2020, while Oil Rig count is projected to increase by 6.98% and 6.5% for 2019 and 2020 respectively.

This report focuses on the role of the maritime industry as a driver for the Nigerian economic and business environment while considering the challenges and opportunities it faces in order to provide a veritable estimation of its performance in 2019-2020.

The 2018 Nigerian Maritime Industry profile lends credence to the fact that it is indeed a vital aspect to the Nigerian economy. Though a predominantly oil producing and exporting nation, the country is however heavily dependent on imports. Hence the sector is a pivotal to the stability and growth of the economy. It possesses the potential of being the most competitive on the continent if significant improvements are made. This has been the focus of the present administration with the aim of repositioning the ports coordinated by the Presidential Ease of Doing Business Council (PEBEC) through a series of Presidential Executive Orders targeted at efficiency.

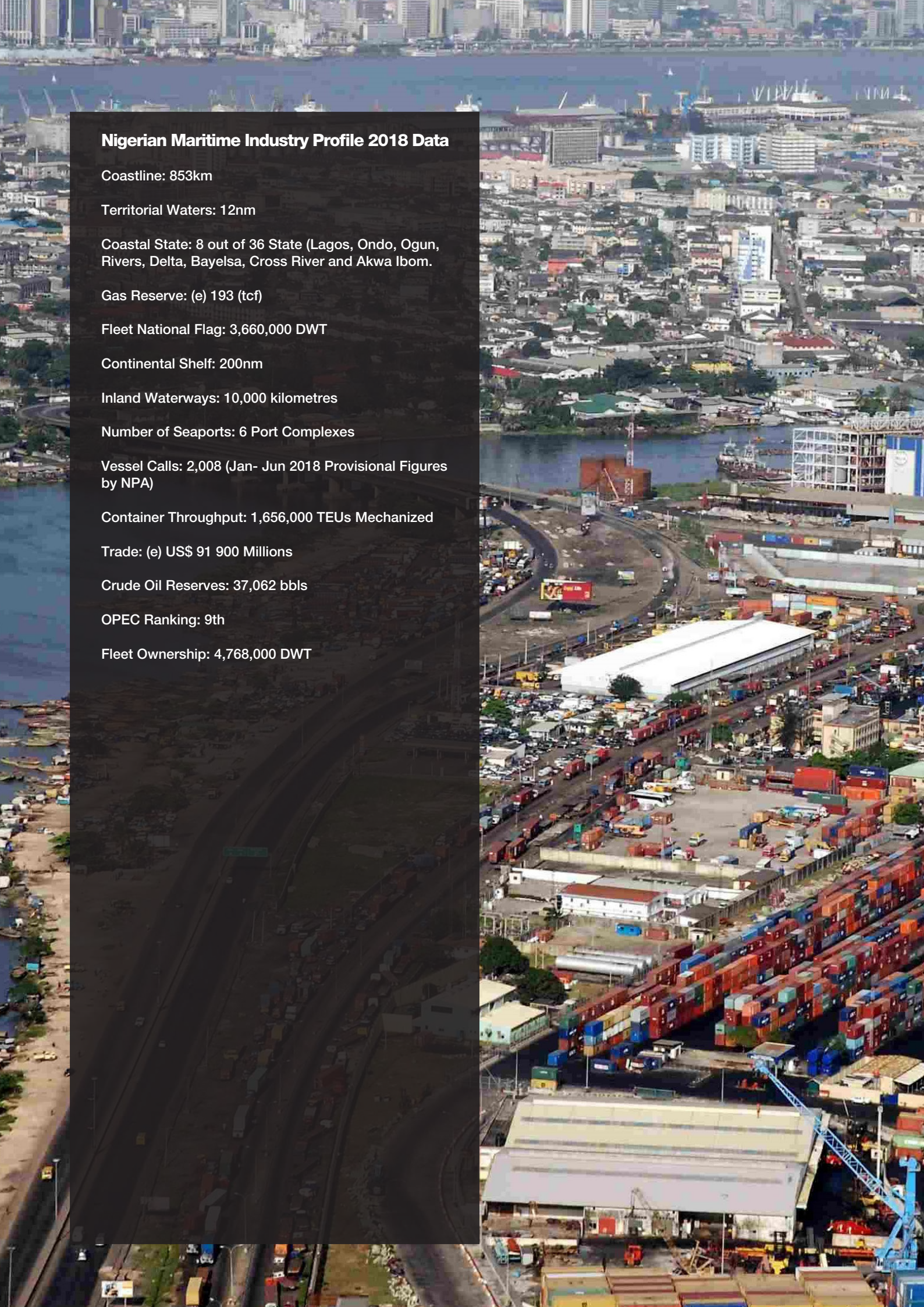
Regulatory Developments Relevant in 2019

It is expected that the Suppression of Piracy and other Maritime offenses Bill (Anti-Piracy) will be passed into law within the margin of the 8th National Assembly to provide a robust and detailed framework to criminalize and punish piracy and unlawful acts in the Nigerian maritime domain as well as give further expression to the relevant provisions of the International Maritime Convention on maritime security to which Nigeria is a party. This will also provide the necessary assurance to foreign investors that Nigeria and the Gulf of Guinea to a large extent is a safe hub for International trade. Other Bills that would impact on the sector are National Transport Commission Bill, Petroleum Industry Governance Bill, National Inland Waterways Authority Amendment Bill, Coastal and Inland Shipping (Cabotage) Amendment/Revised Bill and Ports and Harbour Bill.

Emerging Opportunities and Challenges Within the Nigerian Maritime Industry

Nigeria possesses vast natural maritime resources with an 853km coastline, 10,000km of inland waterways, 12 Nautical Miles of Territorial Waters, 200 Nautical Miles of Exclusive Economic Zone (EEZ), Six (6) functional seaports, inland ports and river ports as well as 275 identified jetties and wharfs in 8 coastal states. Furthermore, Nigeria's location is strategic in the Gulf of Guinea which could serve as a conduit for land-locked East and Central African Nations. The blue economy has an inescapable role as a facilitator for growth and prosperity in the Nigerian economy which is yet to be fully harnessed.

Presently, the ongoing construction of the Lekki Deep Seaport is poised to increase maritime capacity for the country and serve as a hub for the West African Sub-region and would require (in addition to existing ports) linkages to hinterlands by road and inland waterways. Other opportunities lie in financing and acquisition of assets for coastal and international trade, manpower development, maritime safety, ship building/repairs/recycling, marine insurance and support services. The fact remains that there are loads of opportunities for investors in the maritime and shipping sector regardless of whether you want to play in the financing space, leasing or service sector. Where ever you want to step into, the space is huge and the return on investment enormous.



Nigerian Maritime Industry Profile 2018 Data

Coastline: 853km

Territorial Waters: 12nm

Coastal State: 8 out of 36 State (Lagos, Ondo, Ogun, Rivers, Delta, Bayelsa, Cross River and Akwa Ibom.

Gas Reserve: (e) 193 (tcf)

Fleet National Flag: 3,660,000 DWT

Continental Shelf: 200nm

Inland Waterways: 10,000 kilometres

Number of Seaports: 6 Port Complexes

Vessel Calls: 2,008 (Jan- Jun 2018 Provisional Figures by NPA)

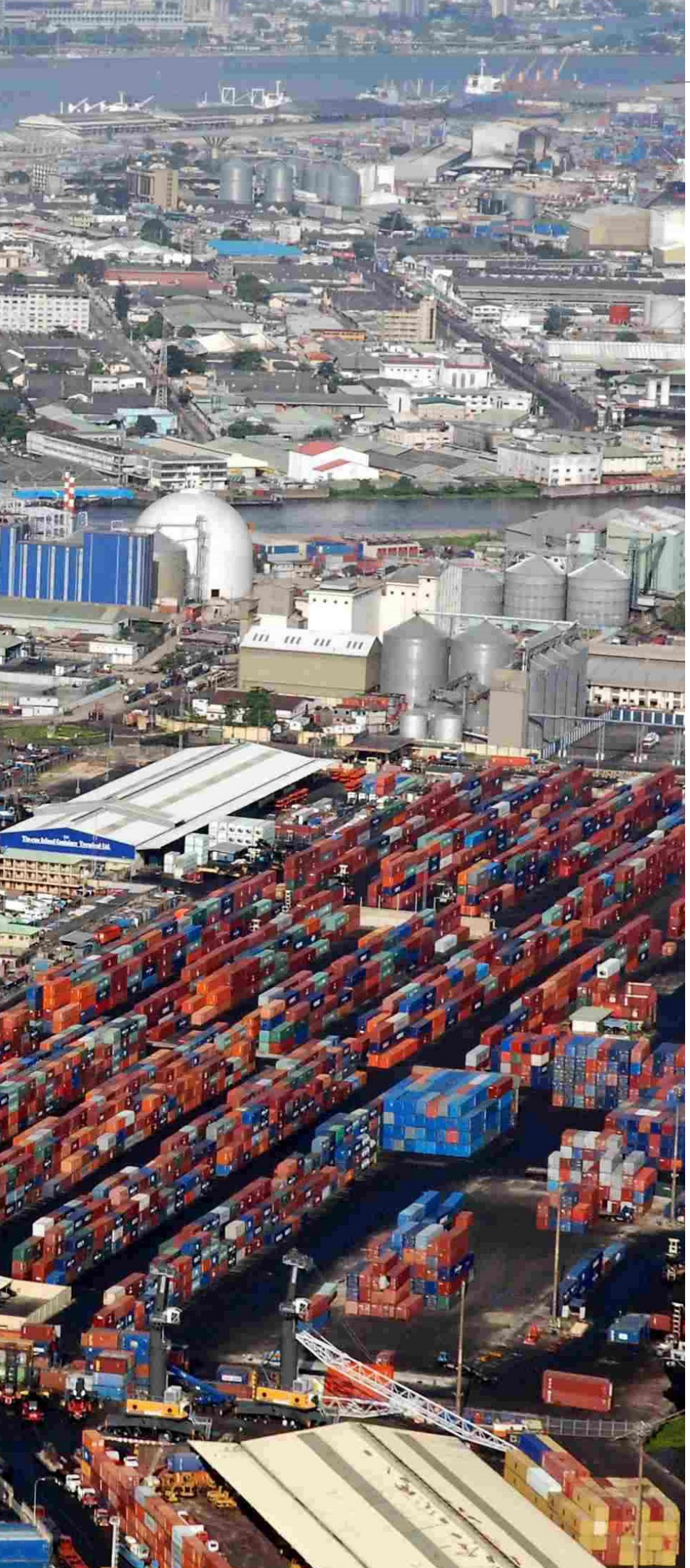
Container Throughput: 1,656,000 TEUs Mechanized

Trade: (e) US$ 91 900 Millions

Crude Oil Reserves: 37,062 bbls

OPEC Ranking: 9th

Fleet Ownership: 4,768,000 DWT



1

Introduction

In fulfilment of our commitment to the maritime and shipping community in 2018, the 2019 – 2020 Nigeria's Maritime Industry Forecast (NMIF) is coming as the Second Edition of what has become an annual Nigeria's Maritime Sector outlook led by the Nigerian Maritime Administration and Safety Agency (NIMASA) in collaboration with relevant other Agencies and Stakeholders. Indeed, we are together in our drive to reposition the maritime and shipping sector and that is the reason th`e theme "Harnessing the Maritime and Shipping Sector for Sustainable Growth" was carefully chosen for the 2019–2020 forecast. Our renewed commitment to strengthening ties with our stakeholders and valued partners has led to a number of reforms and drive for change in policies that will reposition the maritime and shipping sector.

Essentially, key issues for considerations in the outlook will revolve around:

1. How emerging trends in the global Maritime Industry affect the Shipping and Maritime Sector in Nigeria;
2. Domestic factors that will influence the sector;
3. Progress on the drive to mitigate challenges inherent and emerging within and pertaining to the sector.

In reviewing the impact of emerging opportunities and challenges of the sector as presented in the First Edition of the Annual Forecast Series (2018 – 2019, NMIF), key macroeconomic developments indicated that the single biggest historical driver of Nigeria's economy has been its resource wealth which is most visible in terms of the country's oil production profile. However, potentials in the maritime and shipping

sector show strong prospects for diversification of the Nigerian economy.

Our economic realities have created a sense of urgency for diversification as tremendous opportunities continue to emerge in other sectors particularly the maritime and shipping sector but concrete gains have been modest at best. However, for the sector to contribute significantly to economic growth, priority must be given to maritime asset acquisition, human capacity building within the sector, infrastructural development and institutional reforms.

The Nigerian Content in maritime sector is two prolonged. The first is asset building and acquisition, and the second is human capacity development. In the area of acquisition of assets, NIMASA is seeking government intervention on the following to enhance the competitiveness of Nigerians in trade facilitation;

1. Review of Trade Terms (Export and Import)
2. Dedicated Intervention Fund for vessel acquisition and ancillary service
3. Special interest rates (single digits) for maritime assets acquisition
4. Establishment of Maritime Development Bank
5. Special duties for Shipping Imports
6. Review of Fiscal Policies

The tax and fiscal concerns are the biggest worry for investors. As a country, quick action is required to attract the right level of capital to ensure the massive potential in the maritime and shipping sector is harnessed.

Heavy investments have been deployed in human capacity development in the sector to enable more Nigerians get involved in shipping and shipping operations. Nigeria is trying to re-float a national shipping fleet and reform the ship registration office to make it competitive and attract more ship owners to register their vessels in Nigeria to increase tonnage. In 2018 the Nigerian Ship Registry recorded commendable growth in Tonnage with registration of two high index vessels an FPSO and a Crude Oil Tanker. As the Country's oil and gas exploration continue to migrate deep offshore, there will be a lot of demand for FPSOs, FSOs, Offshore Support Vessels, Tankers and Platforms. Indigenous operators must strategically reposition to harness the opportunities that will come with the demand.

Maritime transport is a catalyst for commerce, and the economic growth of any nation including Nigeria is tied to its imports and exports. Therefore, the maritime sector is critical to trade facilitation and for this reason we are reforming our maritime laws and bringing them up to date. We are also pushing for critical bills that will drive the Sector such as the Suppression of Piracy and Other Maritime Offences Bill to be passed by the 8th Assembly. It is our drive that persons involved in merchant are protected against piracy and other maritime crimes.

A number of players in the maritime and shipping sector are competing effectively but the footprint need to be increased. Shipping is a global business and new trends continue to emerge. Players must be willing to invest in innovation and development of new technological approach to remain buoyant.

A comprehensive maritime security architecture developed by the Federal Government under the Deep Blue Project is expected to ensure full domain awareness and expedite response to incidents and threats. Government is mindful of the importance of attracting and sustaining investment in the sector and as such initiated reforms to improve Nigeria's business environment. The work of the Presidential Enabling Business Environment Council culminating in Executive Order 001 specifically targeted at improving the business environment in Nigeria has had tremendous impact on the activities in the sector. As the relevant government agencies continue to drive reforms geared towards harnessing the potentials of the Blue Economy, it is expected that the innovations and reforms will help the sector achieve stability and growth.

As the theme of this year's outlook suggests, the projection is that the opportunities and challenges of the past year will drive sustainable growth from 2019 and beyond. Again, we are confident that the insights, data, forecast analysis and estimates provided in this document through the collaborative effort of our Sister Agencies and Stakeholders will spur help attract the right investors and the overarching interest to develop Nigeria's shipping and maritime sector for sustainable growth.

2

Overview of the Nigerian Macro Environment in 2018

Chracteristics of the Nigerian Economic Environment

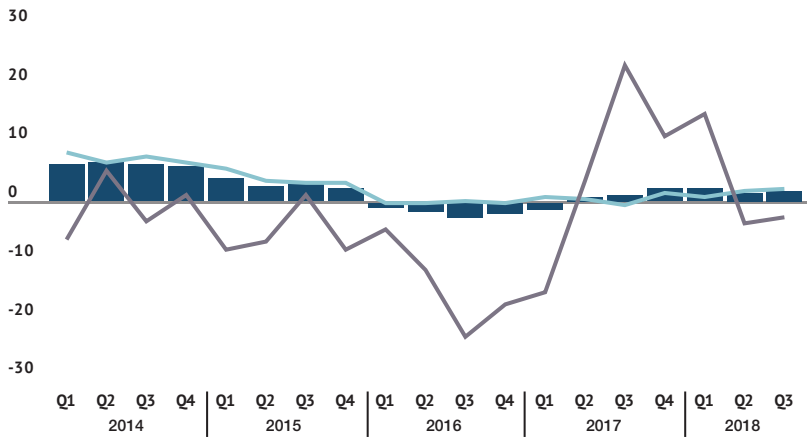
After exiting recession in 2017, the Nigerian economy quickened its growth pace in 2018. Based on three quarters of available data, GDP has grown at a cumulative pace of 1.76% and is expected to reach 1.9% (FY-2018) after estimates of fourth quarter GDP are released. This will mean that the pace of growth has more than doubled, although growth remains short of the projections made in the Economic Recovery and Growth Plan (ERGP).

In 2017, the economy was reliant on a recovery in the Oil and Gas sector and the resilience of Agriculture to deliver the impetus for its recovery from the 2016 recession. These major primary sectors slowed down considerably in 2018. Cumulatively, across the first three quarters of 2018, Agriculture has grown 2% over the corresponding quarter of 2017. This leaves it poised to record its slowest growth since 2013. To blame is a combination of flooding and the eventual manifestation of the impact of farmer-herdsmen clashes in the Middle Belt on food production.

After starting the year strong with a 14.8% growth in the first quarter, Oil and Gas contracted in the second and third quarters, as a result of breaches of oil installations as the year wore on. The cumulative effect has been a 2% growth in the sector year-to-date, compared with a 4.7% growth in full year 2017.

Consequently, the sustenance of the economic recovery in 2018 has relied on the acceleration of recovery in other sectors, the most notable of which is the ICT sector, led by Telecommunications, which have grown by 8.4% and 9.3% respectively, reversing contraction in 2017, by -1% and -2% respectively. At present, the economy's fastest growing sector is the Transport sector (15.8%), led by the Aviation sub-sector (19.5%). Other major sectors such as Manufacturing (2%) remain slow-growing, whilst Distribution (-1.2%), the second largest sector of the economy behind Agriculture, continues to contract.

GDP Growth YoY %



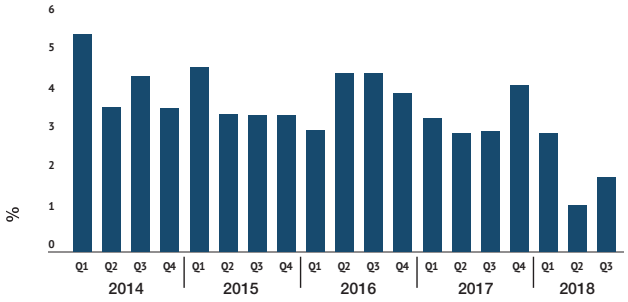
International trade also recovered fairly well in 2018, when assessed on the basis of three quarters of available data. Total trade increased 33% when compared to the corresponding period in 2017. The expansion of trade has been broad-based, driven by a 45% increase in exports and an 18% increase in imports in the period under review.

When disaggregated, the data reveal that non-oil exports rose 47%, this despite oil production disruptions in the outgone year. Oil prices were ascendant for most of the year leading up to the end of the third quarter, before a significant correction occurred in the fourth quarter, and likely supported the continued expansion of oil exports. Non-oil exports are, however, growing impressively, more than doubling in the period under review.

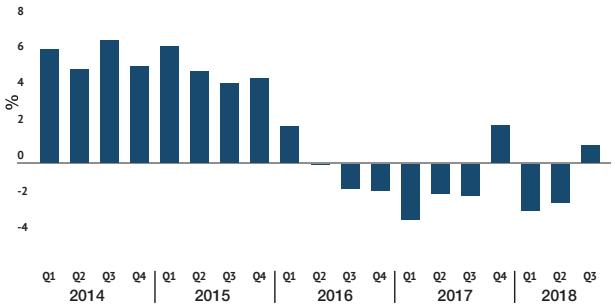
Whilst conditions in the trade of goods merchandise improved considerably for Nigeria in the outgone year – with the cumulative merchandise goods trade surplus average of 5.7% of GDP across the three quarters, services trade has not likewise been robust. The current account surplus averaged 0.9% of GDP in the first three quarters, weaker than the 2.4% of GDP recorded in 2017.

A resurgence of domestic appetite for imports placed pressure on the current account, and likewise contributed to elevated demand for foreign exchange (FOREX). Although the FOREX reserves buffer continued to be rebuilt in 2018 as it had been in 2017, imports demand, coupled with pressure by foreign investors seeking to exit the Nigerian market in the face of (i) higher interest rates in the US

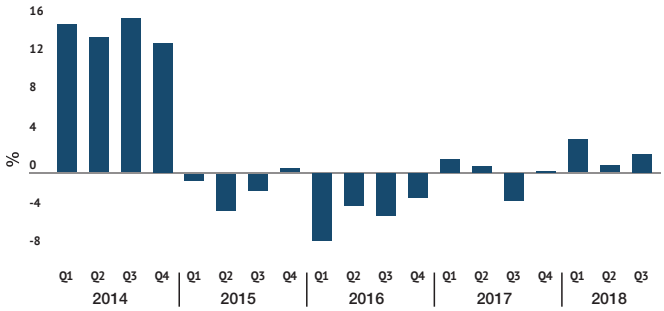
Agriculture



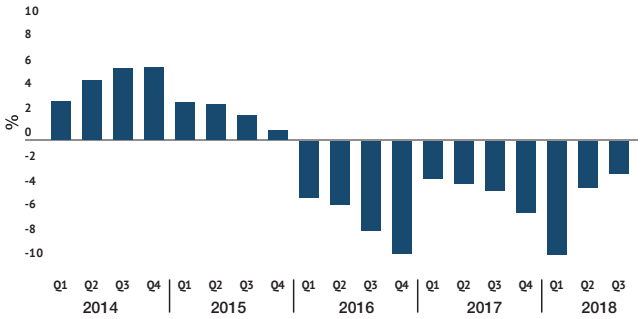
Distribution



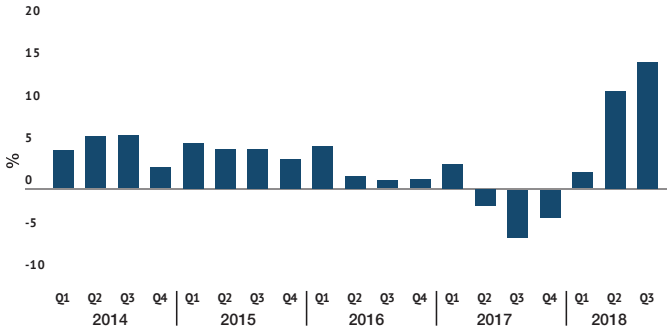
Manufacturing



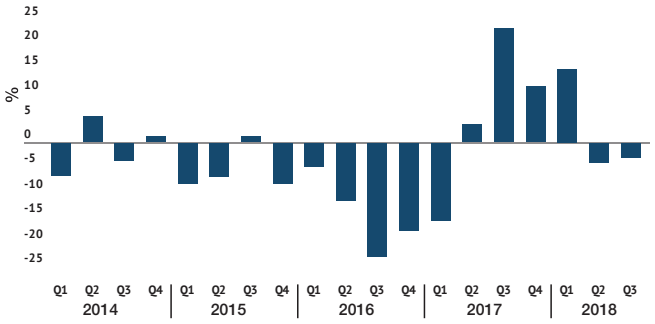
Real Estate



Telecomms



Oil & Gas

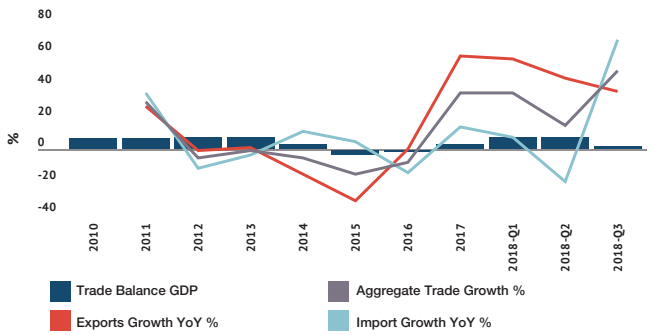


and other Advanced Economies as global monetary policy tightened (ii) uncertainty surrounding the 2019 upcoming general elections, constrained accretion to FOREX reserves. Gross FOREX reserves stood at US$43.1bn at yearend 2018, up US$4.3bn from US$38.8bn at the end of 2017.

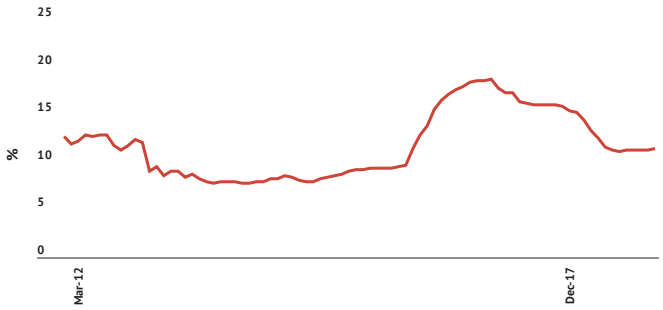
Exits of portfolio investors from the domestic market manifested in a loss of 19% in the value of Nigerian equities in 2018. The exits contributed to pressure on the Naira in secondary markets – at the Investors and Exporters' Foreign Exchange (I&E FX) Window (where the local currency moved into the N/$364-365 range toward the end of the year) as well as in Parallel market.

Notwithstanding exchange rate pressures, Inflation in consumer prices moderated for most of the year, dropping to 11.4% at yearend 2018 versus 15.4% at yearend 2017. The 2018 annual inflation average (12.2%) is more than 4 percentage points lower than the 2017 average (16.6%).

External Trade Performance



Inflation YoY %



Key Drivers of Economic Conditions in 2019

Projections of the performance of the economy in 2019 would rely on a set of assumptions, including the following:

- The Nigerian economy remains driven by global conditions, which are presently unfavourable as is seen in:
- the likelihood of higher US interest rates and a stronger US dollar.
- Volatile oil prices, potentially averaging below US$60pb.
- Successful 2019 general elections and post-electoral transition.

Headwinds which bear troubling implications for Nigeria are building from the global economy:

- The United States:
- Headwinds which point to the possibility of a slowdown in US growth in 2019, potentially even a lapse into recession, are building. This will contribute to slowing commodities demand (including and especially oil).
- The US budget deficit has risen to within 4% of GDP for the first time since 2013. Coupled with tight US monetary policy (although the pace of tightening by the US Federal Reserve could be moderated by a weaker growth outlook), US interest rates are headed higher. Higher interest rates in the US will limit Nigeria's attractiveness as a destination for portfolio capital, particularly in an election year.
- The Chinese economy recorded its slowest growth in 28 years in 2018 (6.6%). The slowdown is likely to persist into 2019, largely as a consequence of its trade disputes with the United States, unless those are resolved amicably and quickly. A slowdown augurs badly for commodities demand overall and energy demand in particular.
- Volatility in Crude Oil Prices: Heading towards the close of 2018, oil prices eased to as low as $50pb by yearend, after reaching US$86pb some three months earlier. 2018 was marked by significant volatility in oil prices. Going into 2019, such volatility is again expected. There will be three key drivers of oil prices: (I) A slower economic growth outlook, thus weaker demand (ii) The Organization of Petroleum Exporting Countries' (OPEC) response to weaker demand through production cuts and their degree of effectiveness (iii) US Sanctions on Iran and countermeasures by Iran and its allies.

Domestic Pressures

- Electioneering and electoral uncertainty could lead domestic investors to adopt a cautious approach to investment, whilst inspiring foreign capital providers to stay in holding patterns offshore.
- Given the likelihood of restrained oil prices, domestic oil production will be critical. The commencement of production at the 200,000bpd Egina deep water oil field should boost production substantially. However, Nigeria's willingness to adhere to OPEC quotas will come into sharp focus in 2019. Optimistic oil production projections will also have to assume production breaches in the Niger Delta which occurred in 2018 are not repeated this year, especially given the elections.
- Agriculture, alongside oil, is the second major growth driver. This sector will have to recover sharply for growth to be sustained or to improve.

3

Review of the Maritime Industry (Global and Domestic)

3.1. Global Maritime Industry Review

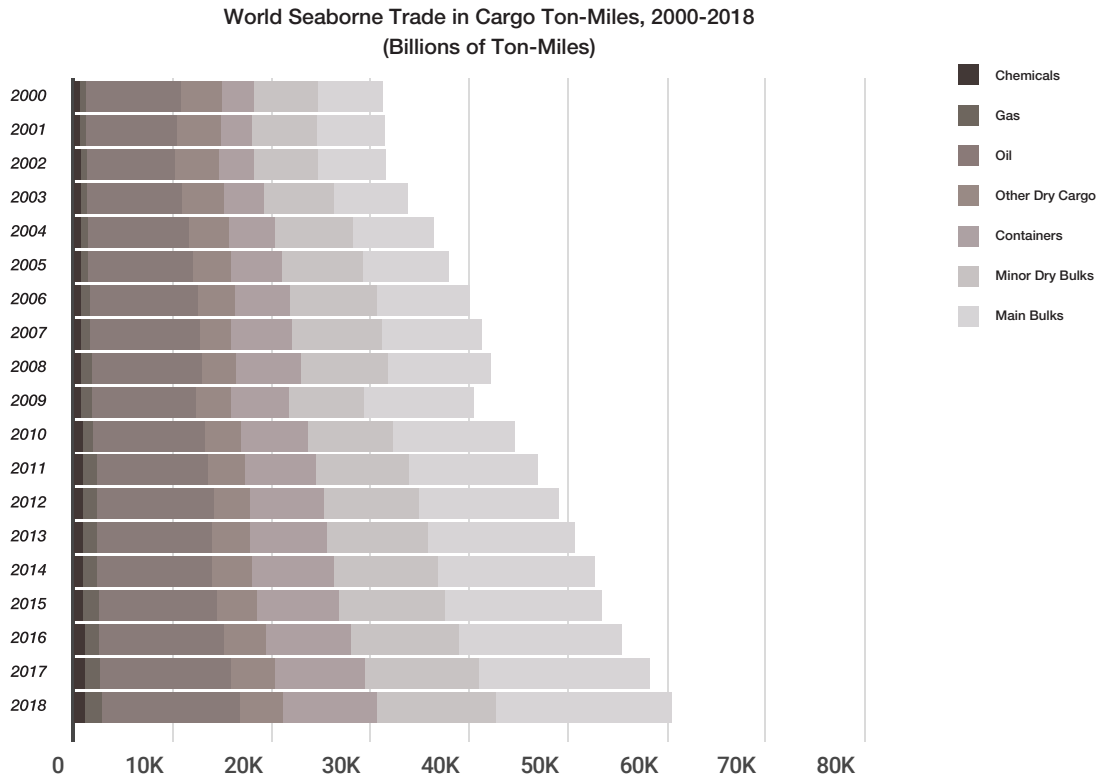
According to the United Nations Conference on Trade and Development (UNCTAD/RMT/2018), global seaborne trade is doing well, supported by the 2017 upswing in the world economy. Expanding at 4 percent, the fastest growth in five years, global maritime trade gathered momentum and raised sentiment in the shipping industry. Total volumes reached 10.7 billion tons, reflecting an additional 411 million tons, nearly half of which were made of dry bulk commodities.

Global containerized trade increased by 6.4 percent, following the historical lows of the two previous years. Dry bulk cargo increased by 4.0 percent, up from 1.7 percent in 2016, while growth in crude oil shipments decelerated to 2.4 percent. Reduced shipments from exporters of the Organization of Petroleum Exporting Countries were offset by increased trade flows originating from the Atlantic basin and moving eastward towards Asia. This new trend has reshaped crude oil trade patterns, which became less concentrated on usual suppliers from Western Asia. Supported by the growing global refining capacity – especially in Asia – and the appeal of gas as a cleaner energy source, refined petroleum products and gas increased by a combined 3.9 per cent in 2017.

Prospects for seaborne trade are positive; UNCTAD projects volume increases of 4 per cent in 2018, a rate equivalent to that of 2017. Contingent on continued favourable trends in the global economy, UNCTAD is forecasting a 3.8 percent compound annual growth rate between 2018 and 2023. Volumes across all segments are set to grow, with containerized and dry bulk commodities expected to record the fastest growth at the expense of tanker volumes.

In discussing the industry outlook and their implications, UNCTAD identifies the key trends that are currently transforming the maritime transport landscape and shaping the sector's outlook. They necessitate the following challenges and opportunities, which require continued monitoring and assessment for efficient and effective policy making:

- ***Uncertainties due to Trade Policy Risk:*** This will likely have a negative impact on maritime trade. Of immediate concern are inward-looking policies and rising protectionist sentiment that could undermine global economic growth, restrict trade flows and shift their patterns.
- ***Technological Advancements:*** The continued unfolding of digitalization and e-commerce and the implementation of the Belt and Road Initiative. These bear major implications for shipping and maritime trade.
- ***Competition for Market Share:*** The sudden emergence of overly optimistic carriers competing for market share may lead to excessive new capacity, thereby producing worsened shipping market conditions. This will result in to an upset in the supply and demand balance and have consequences on freight-rate levels and volatility, transport costs and earnings.
- ***Increases in Shipping Consolidations through Alliances and Mergers:*** Liner shipping consolidation through mergers and alliances continues to rise in response to lower demand levels and oversupplied shipping capacity dominated by mega container ships. However, the implication for competition levels, the potential for market power abuse by large shipping lines and the related impact on smaller players remain a concern.
- ***Restructuring Alliances and Vessel Deployment:*** Another major factor currently redefining the relationship between ports and container shipping lines in the maritime space is alliance restructuring and vessel deployment. Competition authorities and maritime transport regulators are therefore advised to scrutinise the impact of market concentration and alliance deployment on the relationship between ports and carriers.



Source: UNCTAD Review of Maritime Transport 2018

3.1.1 Developments in International Seaborne Trade

World seaborne trade is blooming, strengthened by the solid improvements in the global economy since 2017. Growing at 4 percent, the fastest growth in five years, global maritime trade gathered thrust and elevated sentiment in the shipping industry. Total volumes reached 10.7 billion tons, reflecting an additional 411 million tons, nearly half of which were made of dry bulk commodities.

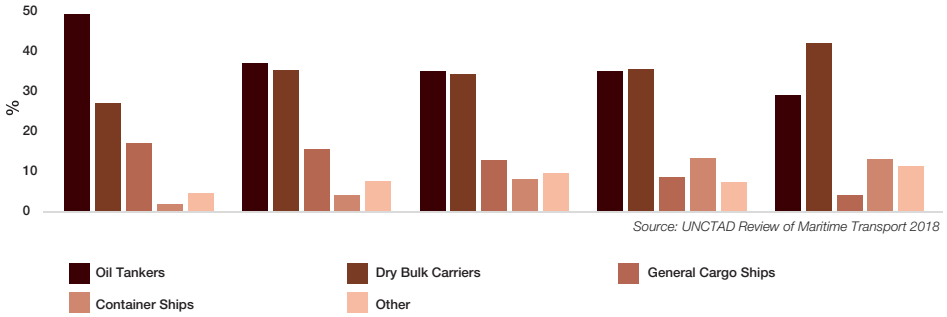
Global containerized trade recorded an increase of 6.4 percent, after seeing historical dips in two previous years. Dry bulk cargo increased by 4.0 per cent, up from 1.7 per cent in 2016, whereas growth in crude oil shipments slowed to 2.4 per cent. There was a rebalancing in shipments by exporters of Organization of Petroleum Exporting (OPEC) Countries, as reduced shipments were offset by increased trade flows originating from the Atlantic basin and moving eastward towards Asia. This has led to a restructuring in crude oil trade patterns, which has become less focussed on usual suppliers from Western Asia. Supported by the growing global refining capacity – especially in Asia– and the appeal of gas as a cleaner energy source, refined petroleum products and gas increased by a combined 3.9 per cent in 2017.

Prospects for seaborne trade remain positive as UNCTAD projected volume increases of 4 per cent in 2018 which was a rate equivalent to that of 2017. Conditional on continued favourable trends in the global economy, UNCTAD is forecasting a 3.8 per cent compound annual growth rate between 2018 and 2023. Additionally, volumes across all segments are set to grow, with containerized and dry bulk commodities expected to record the fastest growth at the expense of tanker volumes. UNCTAD projections for overall seaborne trade are consistent with historical trends, whereby seaborne trade increased at an annual average rate of 3.5 per cent between 2005 and 2017. Projections of rapid growth in dry cargo are in line with a five-decade-long pattern that saw the share of tanker volumes being displaced by dry cargoes, dropping from over 50 per cent in 1970 to less than 33 per cent in 2017.

3.1.2 Structure, Ownership and Registration of the World Fleet

Global fleet recorded expansions for the first time due to improvements 2017 after five years of slow growth. According to UNCTAD, 42 million gross tons were added to world tonnage, equivalent to 3.3% in growth. This trend shows a slight impulse in deliveries of new constructions and a reduction in the activity of demolition of ships with the exception of the tanker market where the demolition if it has increased. The expansion in the supply capacity of the ships was overcome by a greater growth in the volume demanded by international maritime transport, altering the market balance and improving both freight and revenue.

Share Of World Fleet In Dead-Weight Tonnage By Principal Vessel Type 1980–2018 %



Source: UNCTAD Review of Maritime Transport 2018

Additionally, a view of the global logistics chain shows that Germany remains the country with the largest containerized fleet, although in 2017 it lost some steam. Accordingly, this led to an expansion in the market share of shipowners from Canada, China and Greece. The Marshall Islands emerged as the second largest country of registry of ships after Panama and Liberia. 90% of shipbuilding was generated in China, Japan and the Republic of Korea while 79% of ship demolitions were carried out in Southeast Asia, particularly in Bangladesh, India, and Pakistan.

A major observation evidenced in the industry was the demonstration of greater co-operation through mergers, acquisitions, and restructuring of alliances. According to UNCTAD, despite the evidenced trend in market concentration the number of operators serving islands, developing states and vulnerable economies decreased from 2017 to 2018.

In a saturated market, consolidation is expected to continue. Two-thirds of the new constructions of containerized ships belong to vessels of more than 14,000 TEUs and only large lines and alliances have the possibility of filling the capacity of these vessels.

Level of Maritime Connectivity, 2018

	Best Connected Countries and/or Territories	2018 Index	Least Connected Countries and/or Territories	2018 Index
Global Leaders	1. China	187.8	1. Norfolk Island	0.6
	2. Singapore	133.9	2. Christmas Island	0.9
	3. Korea, Rep.	118.8	3. Cayman Islands	1.2
	4. Hong Kong (China)	113.5	4. Bermuda	1.5
	5. Malaysia	109.9	5. Tuvalu	1.6
	6. Netherlands	98.0	6. Wallis and Futuna Islands	1.6
	7. Germany	97.1	7. Nauru	1.9
	8. United States	96.7	8. Cook Islands	2.0
	9. United Kingdom	95.6	9. Greenland	2.3
	10. Belgium	91.1	10. Timor-Leste	2.5
Africa	1. Morocco	71.5	11. Montserrat	3.0
	2. Egypt	70.3	12. Montenegro	3.0
	3. South Africa	40.1	13. Albania	3.0
	4. Djibouti	37.0	14. Anguilla	3.2
	5. Togo	35.9	15. Palau	3.3

Global top 20 owners of container-carrying world fleet, 2018

Country	20-foot equivalent units	Market Share (%)	Number of ships	Average age per ship (years)	Size of largest ship (20-foot equivalent) units)	Average size per ship (20-foot equivalent units)
Germany	4,207,388	20.22	1,131	10.6	18,800	3,720
Denmark	2,220,911	10.68	317	10.5	20,568	7,006
China	2,150,700	10.34	485	10.8	19,224	4,434
Greece	1,891,234	9.09	418	11.7	14,424	4,524
Hong Kong	1,583,036	7.61	258	8.8	21,413	6,136
Japan	1,455,580	7.00	278	8.7	20,150	5,236
Switzerland	1,260,807	6.06	207	15.5	14,000	6,091
France	1,038,824	4.99	135	9.4	17,722	7,695
Taiwan	985,495	4.74	255	13.1	8,626	3,865
UK	870,632	4.18	199	10.8	15,908	4,375
Singapore	658,654	3.17	230	11.9	15,908	2,864
Korea	532,670	2.56	186	12.5	13,100	2,864
Cyprus	253,392	1.22	70	10.2	19,200	3,620
Norway	208,262	1.00	48	9.9	13,102	4,339
United States	207,894	1.00	70	19.4	9,443	2,970
Indonesia	172,711	0.83	205	17.4	3,534	842
Israel	170,434	0.82	31	8.7	10,062	5,498
Turkey	159,855	0.77	90	14.0	9,010	1,776
UAE	110,265	0.53	61	17.0	4,498	1,808
Netherlands	92,815	0.45	87	10.8	3,508	1,067
Subtotal	20,231,559	97.25	4 761	11.1	21,413	4,249
Rest of World	572,912	2.75	383	12.6	6,572	1,496
World Total	20,804,471	100.00	5,144	11.9	21,413	2,004

Source: UNCTAD Review of Maritime Transport 2018

3.1.3 Port Traffic Volumes, Port Operations and Performance

After two years of weak performance, global port activity and cargo handling recorded it first expansion in 2017. According to 2017 estimates, the top 20 global ports handled 9.3 billion tons, up from 8.9 billion tons in 2016, mirroring total global seaborne trade volumes. UNCTAD estimated that 752.2 million TEUs were moved at container ports worldwide in 2017. This mirrors the total volume of containers handled in a year through the port with the highest handling in the world, Shanghai in China.

The outlook for global port-handling activity remains positive overall, supported by projected economic growth and port infrastructure development plans. However, downside risks weighing on global demand and related uncertainty continue to diminish global port activity. Additionally, global ports and terminals need to track and measure their performance so as to allow for better strategic planning and decision making as well as reporting on investments and future financing.

Ports remain the fundamental link in the supply chains of countries as well as integrators of the global economy, hence the importance of monitoring and measuring operational, financial, economic, environmental and social performance.

3.1.4 International Shipping Commitment to Reduced Greenhouse Gas Emissions

Grounded on the Paris agreement under the UN climate change convention and the 2030 agenda for Sustainable Development, in particular, objective 13, take urgent action to combat climate change and its impacts. Additionally, the International Maritime Organization achieved the determination of the reduction in the participation of international maritime transport of greenhouse gas emissions. Originally, the first reduction strategy was adopted in April 2018 and projected a 50% reduction by 2050 compared to 2008.

This identifies short, medium and long-term measures with their deadlines and impacts in the industry, taking into account the needs of developing countries. It also recognises support measures including capacity development, technical cooperation, research, and development. Innovative emission reduction mechanisms, including market-based measures, have been proposed for the medium term and will be decided between 2023 and 2030. Parallel to the long-term measures after 2030.

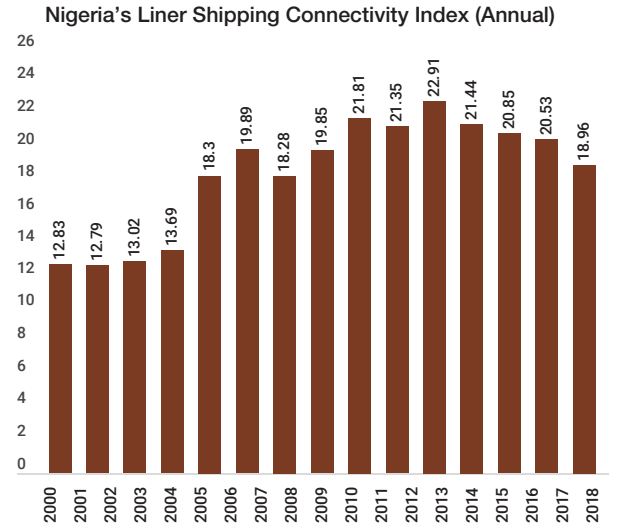
Regulatory developments include the entry into force of the amendments to the International Convention for the Prevention of Pollution of Ships, 1973/1978, to force the collection of data in fuel consumption systems on ships of 5,000 tons and above. Likewise, the limit of sulphur in fuel will be established at 0.5% as of January 2020 under the Sulphur 2020 rule. This measure will improve the health of people and the environment close to ports.

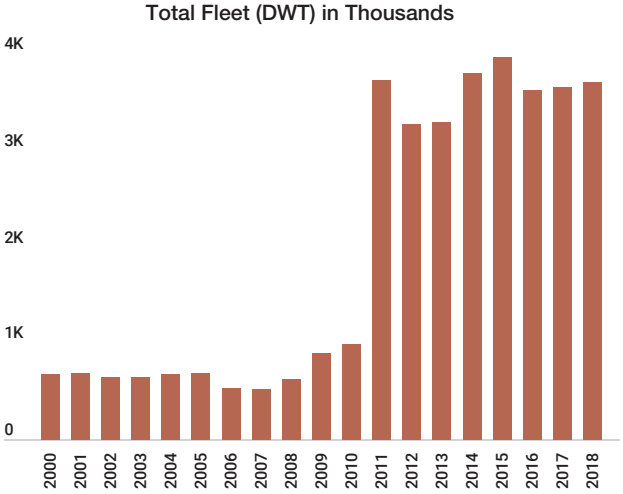
3.2 Domestic Maritime Industry Review

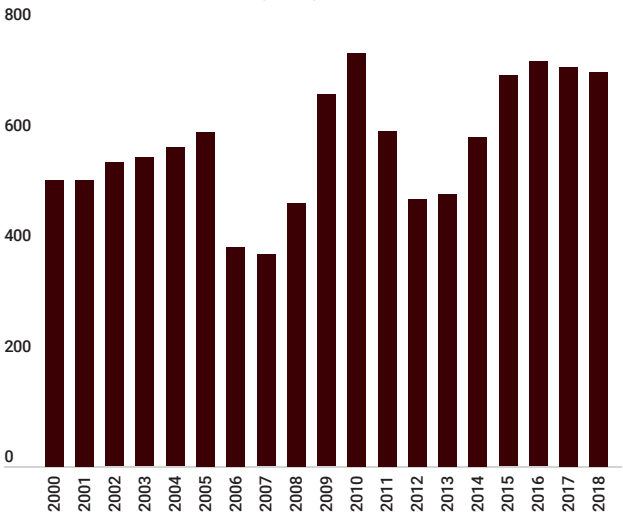
3.2.1 Nigerian Maritime Profile in 2018

The maritime industry remains a very vital aspect of the Nigerian economy. Though the Nigerian economy remains an oil story (an oil producing and exporting nation), Nigerians are heavily dependent on foreign goods which are mostly imported through the sea ports. Hence, the maritime sector holds the key to the country's growth and development. The maritime value chain plays a crucial role in the Nigerian economy, as around 80% of Nigerian trade is transported by sea and via ports. In today's highly interdependent world economy, business and societies depend on the efficient clearance of vessels and goods in ports worldwide to function, develop and prosper. Therefore, the strategic importance of the Nigerian Maritime sector to the stability and growth of the economy cannot be overemphasised.

Nigeria is a Member of the International Maritime Organisation (IMO) together with 40 other African countries. Nigerian







Source: UNCTAD Review of Maritime Transport 2018: Shipping Liner Connectivity consists of five components of the maritime transport sector: number of ships, their container-carrying capacity, maximum vessel size, number of services, and number of companies that deploy container ships in a country's ports. The index generates a value of 100 for the country with the highest average index in 2004.

Maritime Industry could be the most competitive maritime economy on the Continent, as all economic maritime performance indices show strong potential, however, there is significant need for improvement.

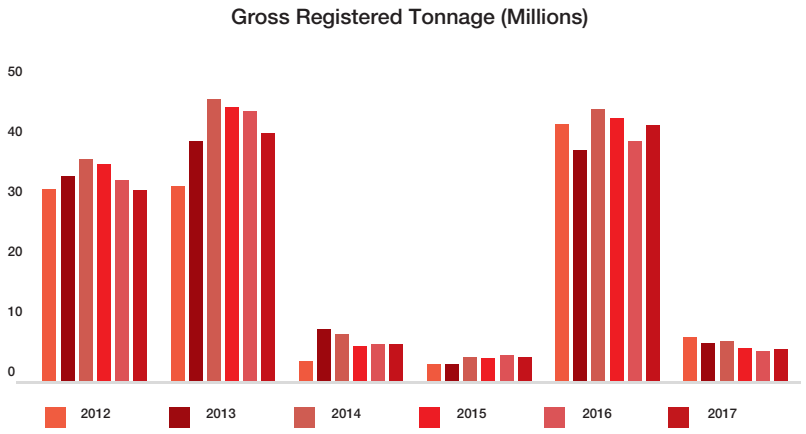
To this end, the Nigerian maritime industry continues to receive support from stakeholders in repositioning it for efficiency and global best practices. For instance, over the last two years, the present administration has focused on repositioning the ports through the National Action Plans on cross border trading coordinated by Presidential Ease of Doing Business Council (PEBEC) and the series of Presidential Executive Orders targeted at ports efficiency.

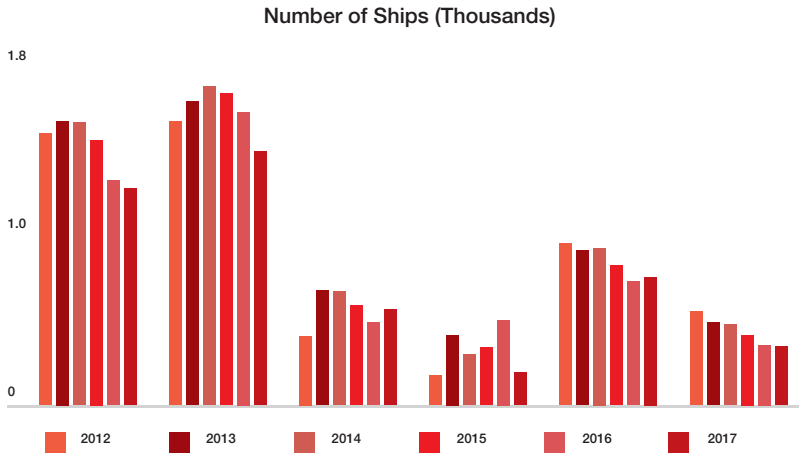
This has therefore resulted in improvements in some of the maritime industry indicators such as the Liner Shipping Connectivity Index (which captures how well countries are connected to global shipping networks). Liner shipping connectivity index (maximum value in 2004 = 100) in Nigeria was reported at 18.93 in 2018, according to the UNCTAD collection of maritime transport indicators representing a marked increase in Liner Shipping Connectivity from the Port Liberalisation Reforms of the 2005 to 2015.

While roads serve as the primary conduit within the country, most of Nigeria's merchandise trade (bulk, commodities or containers) occur via the sea. The vast majority of the containers arrive at either Apapa Port, Tin Can Island Port or Onne Port, with the three ports accounting for about 90% of market share in 2017 according to the National Bureau of Statistics (NBS) port statistics report 2012-2017.

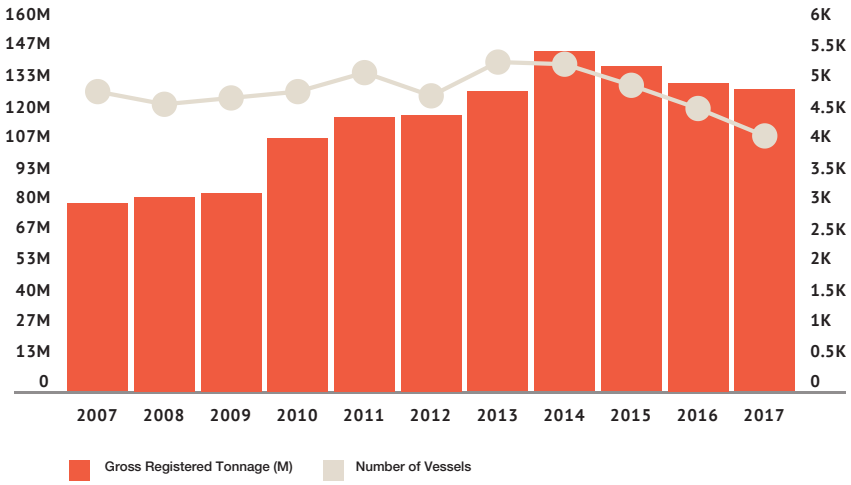
Port usage nevertheless has seen a decline in recent years according to the Nigerian Ports Authority (NPA), which owns the eight port complexes across the country. According to data sourced from the website of the Nigerian Ports Authority, while (cargo throughput excluding crude oil) rose to its highest point in 2014 with 84.9m tonnes, there has been a decline in preceding years with provisional data for 2018 standing at 35.9m tones (January to September).

Ship Traffic: Gross Registered and Numbers Tonnage (GRT) of Ocean-Going Vessels



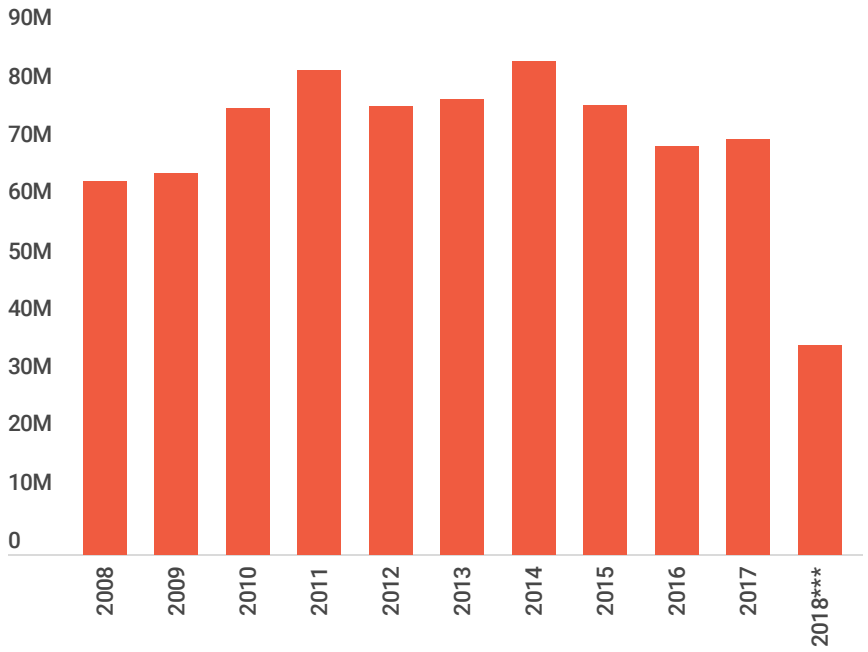


Arrival at Nigeria Ports, 2007-2017

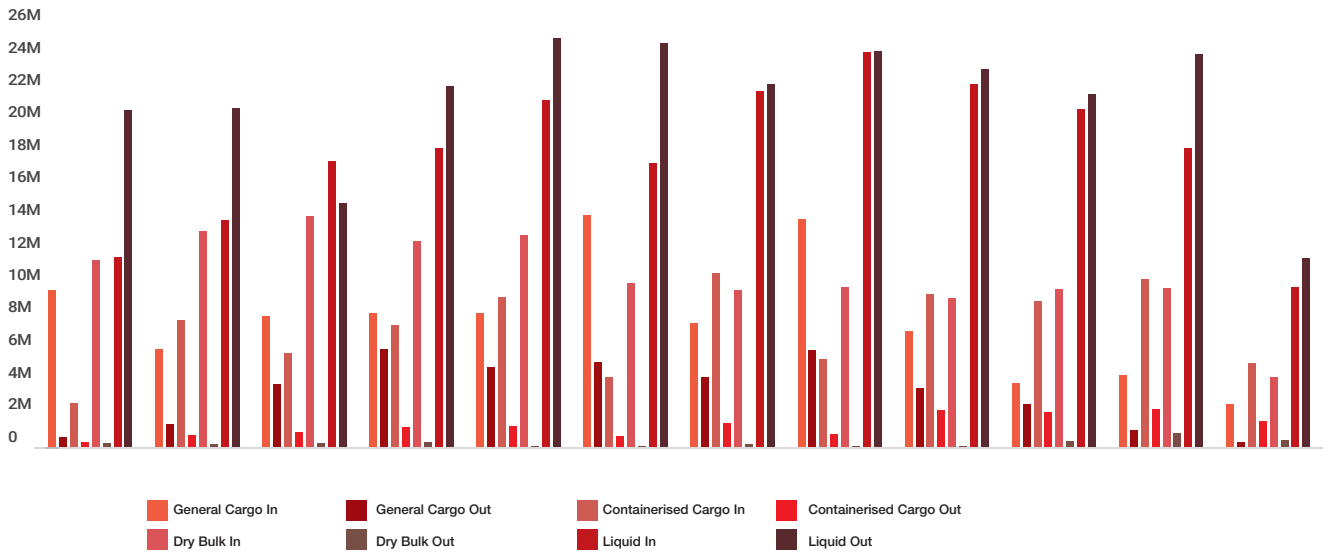


External factors remain the key reason for the decline experienced in Nigeria's port usage. The volatile nature of international crude oil prices, led to a fall in the value of naira against other international currieries especially the dollar and, has also reduced domestic demand for imports. Likewise, imports ban on certain consumer goods- which was part of the government's effort to encourage domestic production and reduce the country's trade deficit- has also had impact. These policies, including the ban on import of certain products, were intended to increase value addition and domestic production, and this is supported by the fact that ships calling into Nigerian ports typically leave empty, as was the case for 1.6m tones of outward containerised cargo against 5.1m tones inward containerised cargo in 2018, according to the NPA.

Cargo Throughput at Nigerian Ports (Excl. Crude Oil Terminals)



Cargo Throughput at Nigerian Ports (Excl. Crude Oil Terminals)



*Source: Nigerian Ports Authority (***: 2018 Provisional Figures for Jan to Sept)*

Text Box 1: Cabotage - the Voyage so far

The underlining law behind cabotage activities in Nigeria are enlisted in the Coastal and Inland Shipping (Cabotage) Act 2003.

1. The objectives of the cabotage law are as follows:
2. To attain national sufficiency in tonnage capacity, shipbuilding and seafarers' capabilities;
3. To acquire the technical know-how in ship management, shipbuilding and ship manning;
4. To enhance the earnings and conservation of foreign exchange for the country;
5. To preserve the internal and economic security of the nation; and
6. To create employment in the maritime industry.

Analysis of Enforcement Activities (2016-2018)

DESCRIPTIONS	2016	2017	2018	VARIANCE 2017-2018	% DIFF
NUMBER OF VESSELS BOARDED	584	861	1035	174	20
NUMBER. OF VESSELS WITH CABOTAGE REGISTRATION	371	477	524	47	9.8
NUMBER. OF VESSELS WITHOUT CABOTAGE REGISTRATION	213	413	180	-233	-56.4
WHOLLY NIGERIAN OWNED VESSELS	234	318	291	-27	-8.4
FOREIGN OWNED VESSELS/JOINT VENTURES	350	505	746	241	47.7
NUMBER. OF NIGERIAN SEAFARERS ONBOARD THE VESSELS	5965	6610	7311	701	10.6
NUMBER OF FOREIGN SEAFARERS ONBOARD VESSELS	9678	7897	7662	235	2.97
NUMBER NIGERIAN BUILT VESSELS	55	55	21	-34	-61.8
NUMBER OF FOREIGN BUILT VESSEL	527	792	898	106	13.3
NUMBER OF VESSELS DETAINED	17	30	45	15	50
NUMBER OF VESSELS RELEASED	14	24	31	7	29

The disparity in the comparative narratives above reaffirms the identified gaps in indigenous capacity with regards to the four pillars of Cabotage Act (Shipbuilding, Manning, Ownership and Registration solely by Nigerians).

Recent Development

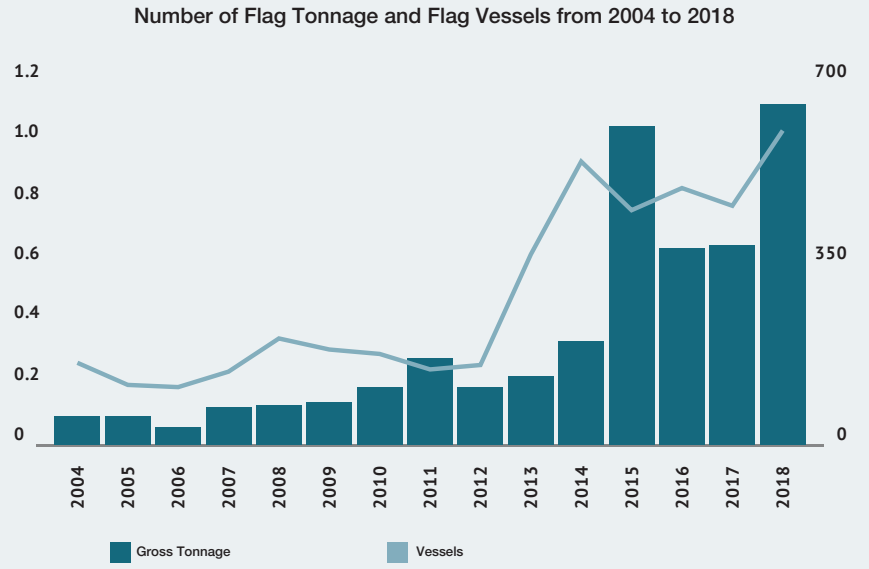
- The New Cabotage Compliance Strategy
- In 2017, NIMASA introduced the New Cabotage Compliance Strategy (NCCS) for a successful Coastal and Inland trade regime thereby halting consideration of applications for grant of waivers on manning for prescribed category of Officers on vessels engaged on cabotage trade.
- Renewed Synergy between Nigeria Content Development & Monitoring Board (NCDMB) and the Nigerian Maritime Safety and Administration Agency (NIMASA) leading to the following amongst others:

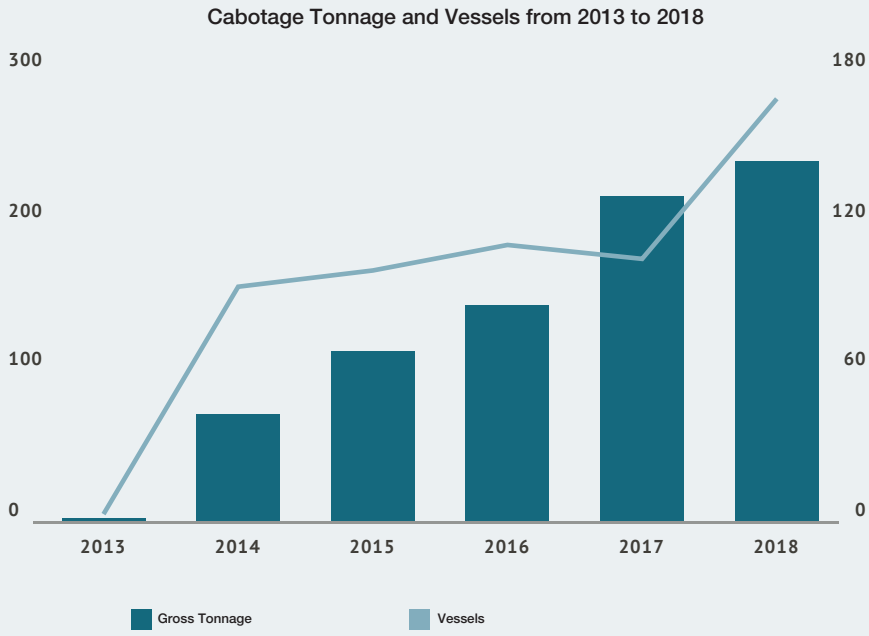
i. Joint approval of an implementation framework to drive local content development in the maritime sector, pursuant to section 105 of the Nigeria Oil and Gas Industry Content Development (NOGICD) Act and Cabotage Act.
ii. Development of procedure and template for data collection and analytics for marine vessel utilization. Five (5) year vessel demand for oil and gas operators.
iii. Capacity Audit of ship building yards and ship repair yards in the country
iv. Development of framework for manpower development for critical skills required in the maritime sector – Expected by Q1 2019
v. Five (5) year plan for cessation of grant of Cabotage waiver has commenced.

- To ensure effective management and disbursement of the Cabotage Vessel Financing Fund (CVFF) pre-disbursement parameters have been put in place, and review of the CVFF Guidelines 2007 is ongoing.

Textbox 2: Vessel Registration/Tonnage Comparative Analysis (2004 -2018)

The Nigerian Ship Registration office is currently being repositioned to ensure a globally competitive and attractive flag. The below charts show flag registered vessels with their total gross tonnage from 2004-2018 and the increase rise in GRT for the year 2018. The merchant fleet growth tonnage increased by 71.03% (figure 1); the reason for the tonnage increase was due to the registration of high capacity index vessels (registration of EGINA FPSO in November 2018).



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4

Regulatory Developments in the Nigerian Maritime Industry between 2019-2020

1. Key Domestic Regulatory and Legislative Developments

A. Key IMO Conventions/Protocols being considered for ratification by Nigeria

- The Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships, 2009
- INTERVENTION Protocol, 1973
- International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea (HNS), 1996 (and its 2010 Protocol)
- Protocol on Limitation of Liability for Maritime Claims (LLMC), 1996
- 2002 Protocol to the Athens Convention relating to the Carriage of Passengers and their Luggage by Sea (PAL)
- Protocol on Preparedness, Response and Co-operation to pollution Incidents by Hazardous and Noxious Substances, 2000) (OPRC-HNS Protocol)
- 2008 amendments to the International Maritime Satellite Organization Convention (IMSO)1976
- International Convention on Standard of Training, Certification and Watchkeeping for Fishing Vessel Personnel (STCW-F) 1995
- Protocol of 2005 to the Convention for the Suppression of Unlawful Act against the Safety of Maritime Navigation.
- 1993 amendments to the Convention for Safe Containers 1972
- Convention relating to Civil Liability in the Field of Maritime Carriage of Nuclear Material 1971
- 2003 Protocol on International Oil Pollution Supplementary Fund

B. Review of the Merchant Shipping Act (MSA) 2007 to fully domesticate already ratified IMO Conventions/Protocols in line with the IMO Member States Audit Scheme (IMSAS) report actions.

C. Review of Nigerian Maritime Administration & Safety Agency Act (NIMASA) 2007

D. Development of Regulations made pursuant to the MSA 2007 and NIMASA Act 2007

E Ratification of relevant ILO Conventions:

- C152 - Occupational Safety and Health (Dock Work) Convention, 1979 (No. 152)
- Revising Protection against Accidents (Dockers) Convention (Revised), 1932 (No. 32);
- Work in Fishing Convention, 2007 (No. 188); R.199 Work in Fishing Recommendation 2007

F. Domestication of ratified LO Conventions

- Protection against Accidents (Dockers) Convention (Revised), 1932 (No. 32)
- The Dock Work Convention, 1973 (No.137)
- Maritime Labour Convention 2006 as amended
- Seafarers' Identity Documents Convention (Revised), 2003, (No. 185)

G. Key bills being considered by the National Assembly

- Suppression of Piracy and other Maritime offenses Bill (Anti-Piracy): The Bill when passed into law within the margin of the 8th National Assembly would provide a robust and detailed framework to criminalize and punish piracy and unlawful acts in the Nigerian maritime domain as well as give further expression to the relevant provisions of the International Maritime Convention on maritime security to which Nigeria is a party. This will also provide the necessary assurance to foreign investors that Nigeria and the Gulf of Guinea to a large extent is a safe hub for International trade.
- National Transport Commission Bill
- Petroleum Industry Governance Bill
- National Inland Waterways Authority Amendment Bill
- Coastal and Inland Shipping (Cabotage) Amendment/Revised Bill
- Ports and Harbour Bill

2. International Developments International Maritime Organization (IMO) Instruments entering into force from 2019-2020

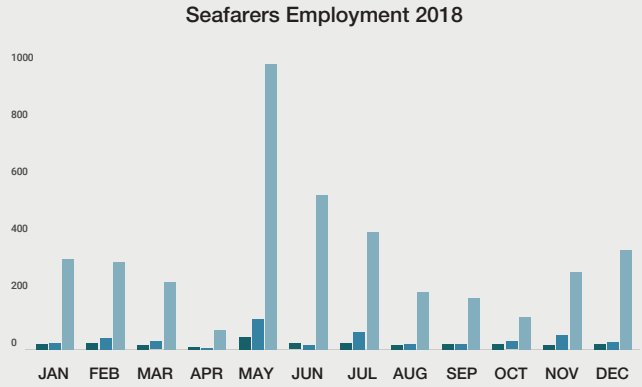
The role of the IMO as an International regulator of ship safety and security and marine pollution from ships has heightened its concentration on amendments to existing Instruments to meet new and emerging technologies in shipping as well the need for improved safety to seafarers and the marine environment. Therefore, the thrust of the Agency 's role for 2019 -2020 should be aligned to key developments of the IMO.

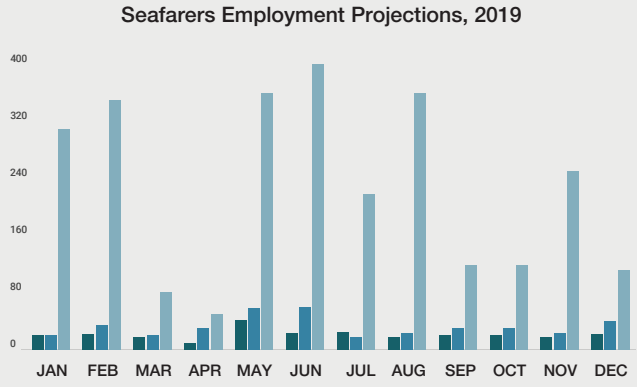
1. Amendments to the IMSBC Code expected to enter into force on 1st January 2019 Amendments to the International Maritime Solid Bulk Cargoes (IMSBC) Code provide update to requirements for the carriage of a number of cargoes. The amendments highlight the responsibility of the shipper for ensuring that a test to determine the Transport Moisture Limit (TML) of a solid bulk cargo is conducted prior to shipment and a declaration to that effect is made. Also included are amendments related to substances which are harmful to the marine environment to require the shipper to declare whether or not a solid bulk cargo other than grain is harmful to the marine environment.
2. Amendments to the SOLAS Convention entering into force on 1st January 2020 The IMO MSC 97th session adopted amendments the SOLAS Convention: regulation II-1/3-12 on protection against noise; regulation II-2/10 on fire fighting and new regulation XI-1/2-1 on harmonization of survey periods of cargo ships not subject to the ESP Code. 9. Amendments to the 2008 International Code on Intact Stability (IS Code) entering into force on 1st January 2020. These amendments relate to ships engaged in anchor handling operations and to ships engaged in lifting and towing operations including escort towing.
3. Amendments to MARPOL Annex VI on the 0.50% global sulphur limit expected to enter into force on 1st January 2020 The Marine Environmental Protection Committee adopted amendments reducing the global limit for sulphur oil fuel used on board ships to 0.50% to take effect from 1st January 2020. The decision to reduce sulphur content in marine fuel oil demonstrates a clear commitment by the IMO to reduce air pollution from shipping and ensure that it meets its environmental obligations. Under the new global limit ships will have to use fuel oil with sulphur content of no more than 0.50% against the current limit of 3.50% which has been in effect since 1st January 2012. Exemptions are provided for situations involving the safety of the ship or saving life at sea or if a ship or its equipment is damaged. State Parties are advised to work with local fuel oil suppliers to ensure availability of compliant fuel for ships calling at its ports by 1st January 2020. The IMO MARPOL regulation, limit the sulphur content in fuel oil. So ships need to use fuel oil which is inherently low enough in sulphur, in order to meet IMO requirements. Some ships limit the air pollutants by installing exhaust gas cleaning systems, also known as “Scrubbers”. This is accepted by flag States as an alternative means to meet the sulphur limit requirement. Ships can have engines which can use different fuels such as liquefied natural gas or biofuel which may contain low or zero sulphur. IMO is working with Member States as well as industry including the shipping, bunker supply and refining industry to identify and mitigate transitional issues so that ships may meet the new requirement.
4. Ballast Water Convention which entered into force on September 8, 2017 marking a landmark step to invasive aquatic species, which can cause havoc for local ecosystems, affect biodiversity and lead to substantial economic loss. Under the Convention terms, Ships will be required to manage their ballast water to remove, render harmless, or avoid the uptake or discharge. IMO Member states have been called upon to finalize the revision of G8 Type Approval Guideline for treatment system. For new and existing ships: Ballast Water Management Stems type approved on or after 28 October 2018 Ballast Water Management Systems installed on or after 28 October 2020.

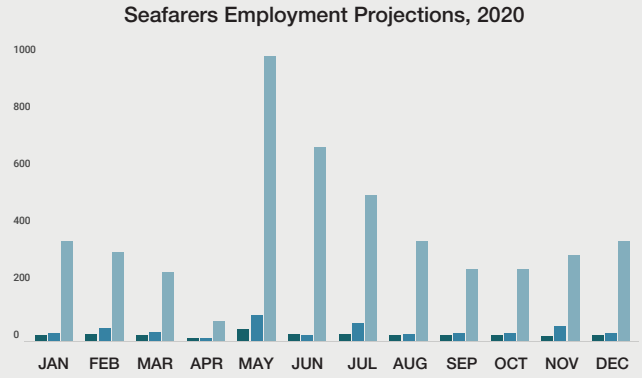
Text Box 3: Maritime Labour Outlook

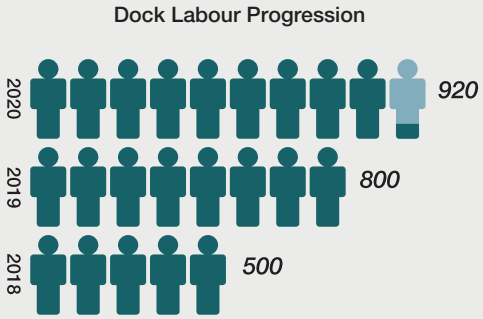
The importance of the maritime industry in driving socio-economic development can't be overemphasized. The United Nations stresses this by stating that maritime transport and recreation plays a key role in poverty alleviation through employment opportunities generated in economies of developing countries, such as the supply of maritime personnel and ship recycling, ship owning and operating, shipbuilding and repair and port services, among others. Additionally, according to the International Centre for Trade and Sustainable Development (ICTSD), maritime transport is vital to the world's economy as about 90% of world trade (by volume) and 60 percent by value is transported by sea. Maritime Labor function relate to the regulation of the employment of seafarers and dockworkers. The Agency's compliance with employment, Safety and health Standard is in relation to the provision of Maritime Laws in Nigeria and the ILO ratified Maritime Conventions. In terms of policies and programmes, the Agency facilitates growth of local capacity in manning of ships by seafarers and engagement of Dockworkers in Seaports, Terminals and Jetties.

In 2018, a record of appreciable progress as a result of relative peace and harmony in the industry was noted. The Agency's continuous approach to tripartite consultation and amicable resolution of disputes is to encourage dialogue and a harmonious relationship with all Maritime Labor stakeholders in the industry. The two-year projections (2019-2020) as presented below for Maritime Labor respectively leverage on the Agency's medium-term Strategic plan on capacity development of seafarers and dockworkers, activities in the maritime industry, the implementation of Coastal and Inland Shipping (Cabotage) number of vessels in the Nigerian register of ships, availability of spaces in the Offshore Platforms, Terminal and Jetties aimed at increasing their employment in the Maritime subsector.









The Agency's zero policy on waiver issuance to foreign nationals is another strategy that will improve the employment of more qualified Nigerian seafarers. The projections below took into consideration the possibility of increase in seafarer's employment on a monthly basis in line with the policy of waiver suspension. The forecast as presented below took into consideration the possibility of increase in seafarer's employment on a monthly basis in line with the policy of waiver suspension. On Dock labour, it is also expected that there will be increase (figure3) in the number of employed dockworkers based on the projection that the Agency's presence in the offshore platforms, jetties and terminals that were yet to be assigned stevedoring companies, will further boost increase in the employment of Dock labour. The projections took cognizance of increase in the number of vessels operating in the Cabotage regime and the requirements for competent dockworkers and seafarers to work onboard vessels terminals, jetties, and offshore platform and to guide their capacity development.

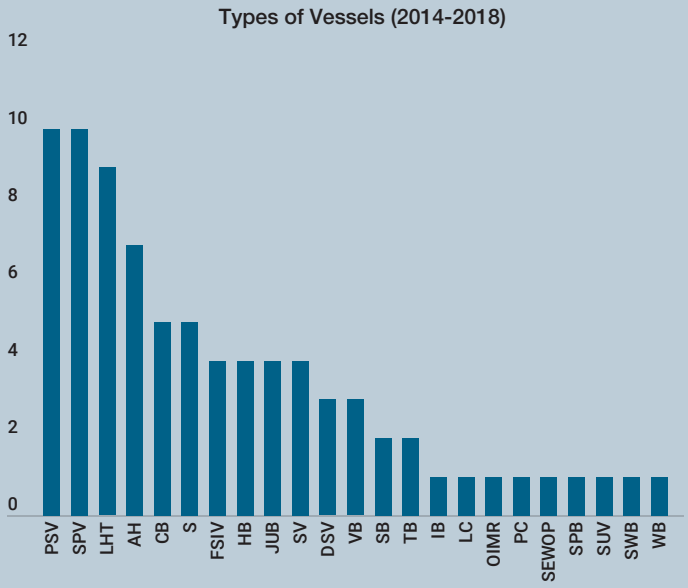
Textbox 4: Nigerian Content Development and Monitoring Board (NCDMB) Marine Vessel Demand Profile

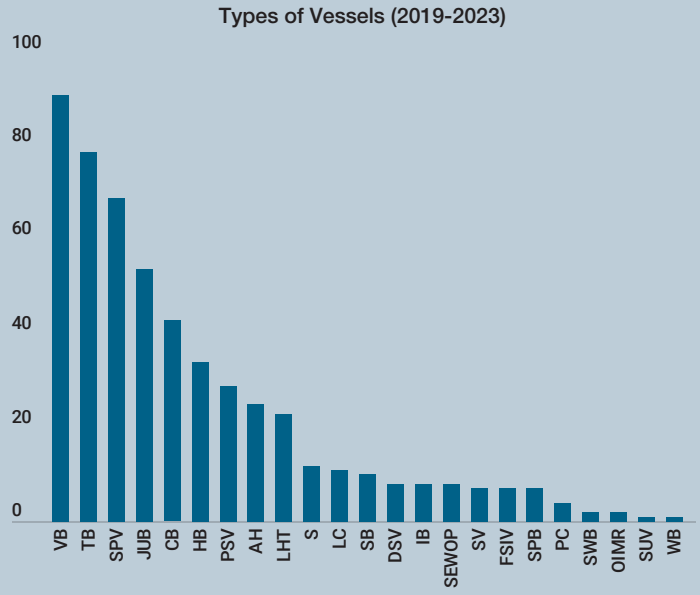
In an effort to drive local content development in the maritime sector, the Nigerian Content Development and Monitoring Board have identified the types of vessels that local operators in the shipping business should acquire so as to guarantee good business and return on investment. Preliminary findings using types of vessel categories and industry spend shows that the top five vessels in projected demand between 2019 and 2023 would be tugboats, security patrol vessels, jargon barges and crew boats, among others.

According to analysis carried out, the top five vessels will account for 66% of vessels in demand between 2019 to 2023. The least demanded vessels in these periods will be water bus, support vessels among others. Also, In the next five years, industry spend on tugboats and other vessels is projected to be $1.6bn, or 51 per cent of total spend, and the annual spend is projected to be $641m over 519 marine contracts in Nigeria between 2019 and 2023.

Elsewhere, expenditure on marine vessels cost Nigeria about N1.09 trillion in the last four years. Data provided showed that between 2014 and 2018, the industry expenditure of $2.21billion on category 1 of marine vessels accounting for 73 per cent of total funds spent on marine vessels. Category 2 expenditure stood at $393 million or 13 per cent, while $ 437 million or 14 per cent was for category 3 vessels. Vessels in category 1 and 2 accounted for 87 per cent of vessels utilized in the period.

The NCDMB and NIMASA approved an implementation framework to drive the collaboration with respect to local content development in the Maritime Sector, pursuant to Section 105 of the Nigeria Oil and Gas Industry Content Development (NOGICD) Act and Cabotage Act.





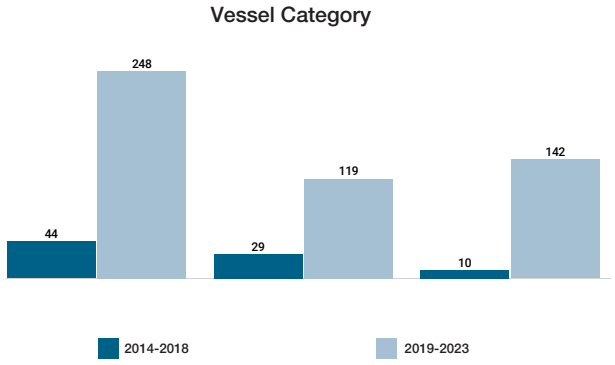
The outlook for the next four years (2019 and 2023) according to analysis states that the volume of transaction for category 1 vessels would be 49 per cent as against 23 per cent in category 2 and 28 per cent in category 3. The industry's expenditure on category 1 vessels was projected to be $1.65billion or 51per cent of total spend compared to $1.04billion or 33per cent for Category 2 vessels and $519million or 16per cent for Category 3 vessels.

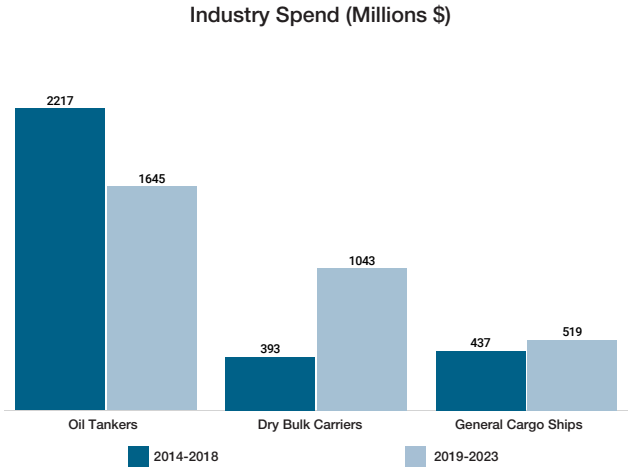
It is clear that the downstream sector presents opportunities considering the huge logistics required to meet Nigeria's daily energy demand. Other opportunities across the value chain include vessel construction, repair and maintenance, auxiliary services for catering companies, waste management and a host of other opportunities which are all hinged on promoting and sustaining growth in the indigenous ownership of vessels.

It was observed that the economic benefits from marine vessel transactions are enormous and extend into other sectors, hence the need to help stakeholders review and plan their business models in the near future. Finally, the agencies share the view that the $600 million per year forecast revenue from the engagement of marine vessels for the upstream sector will positively impact on the financial and insurance institutions if a large chunk is retained in-country.

Keys: Vessel Categorization & Vessel Definition

Category 1 - Non-Dynamically Positioned Low acquisition cost - <$50m Tenure > 2 years	Crew Boat, Surfer, Security vessel, Diving support vessels, Fast supply intervention vessel, Supply vessel, Mooring Launch vessels & Shallow draft vessels.
Category 2 - Dynamically Positioned & Specialized vessels Higher acquisition cost - >$50m- 200m Tenure > 2 years	Accommodation vessel, Platform supply vessel, Anchor handling tug vessel, Tug boat, Multipurpose vessel, Pipe lay barges.
Category 3 – Short term vessels Very higher acquisition cost - >$200m Tenure < 1 years	Installation barges, Jack-up barge, Lift boats, Seismic acquisition.






MAX. GROSS
TARE
MAX. PAYLOAD
CUBE
32 500 KG
71 650 LBS
2 850 KG
6 280 LBS
29 650 KG
65 370 LBS
32.1 M3
1 132 CUFT

5

Nigerian Maritime Industry Forecast and Outlook

The Global Outlook

The context for the Nigerian Maritime Industry Forecasts for 2019 and 2020 is set by the global economic environment, specifically global growth prospects and global trade prospects. Global growth is forecast to slow from 3.7% in 2018 to 3.5% in 2019 and 3.6% in 2020, according to the IMF.

Growth in Advanced Economies is expected to decelerate from 2.3% in 2018 to 2.0% in 2019 and 1.7% in 2020. These projections indicate a sharp deceleration, or worse, a significant loss of growth momentum. Underlying concerns include the potential for deceleration or even a recession in the United States as well as the threats to growth in Europe from uncertainty surrounding BREXIT, the tightening of monetary policy by the ECB and unrest and industrial action in places like France.

Growth in Emerging Markets is expected to slow in 2019 to 4.5% from 4.6% in 2018. Deceleration in China's growth is at the heart of this expectation, as pressures from the disruptions to trade occasioned by the disputes with the United States bite. India may offer the offset required to keep growth from weakening by a greater degree.

Oil Prices: Across a range of forecasters, oil price projections are sitting the $55 to $65 per barrel range. The United States Energy Information Administration forecasts Brent spot prices as averaging about $60.52 per barrel in 2019 and $64.76 per barrel in 2020. Presently, the New York Mercantile Exchange (NYMEX) futures prices place oil at about $62.63 per barrel for the rest of 2019 and $61.93 in 2020. The proposed 2019 budget benchmark price of $60pb, which is just slightly lower than the average price forecasts quoted above, is taken as our baseline scenario.

Oil Production: The 2019 budget assumes 2.3 million barrels per day oil production, including condensates. The commencement of production at the 200,000bpd Egina deep water oil field should augment domestic production.

Domestic Outlook

The economy is expected to pick up, albeit at limited speed, from growth this year. We expect the uncertainty surrounding the 2019 elections and the time lag possibly required to activate growth-stimulating policies after the inauguration. Growth will also rely on recovery in Agriculture, the largest sector of the economy, to once familiar levels above 3%. At the baseline we foresee 2% GDP growth in 2019.

Forecasts

The forecast period of 2019 to 2020 covers a time of the 2019 general elections and finally concludes in the post-election environment. Two broad sets of dynamics would drive the outlook of the Nigerian maritime industry over this period. The first pertains to international developments as they relate to growth in global output and trade, the situation in the global oil market and international maritime regulatory conditions. The second is the domestic economic conditions, which speak to economic growth and the associated growth in trade, availability of and access to foreign exchange (FX), as well as the evolving factors in domestic maritime regulation. Precise forecast estimates are difficult enough. As such, planners and economic operators typically resort to scenarios in anticipating future conditions. This report, like similar documents, will explore three scenarios:

- The Baseline Scenario is driven by the Economic Recovery and Growth Plan (ERGP) which covers the period to 2020
- Scenario B is a slightly pessimistic scenario relative to the Baseline
- Scenario C is a slightly optimistic scenario relative to the Baseline

Based on the scenarios enumerated above and in light of our earlier indication, we produce forecast estimates on the tonnage of Vessels berthing at Nigerian Ports for 2019 and 2020. This is further delineated into the fleet size for Oil and Non-Oil Tankers for those two years. Finally, we also produce for Oil Rig Count in the same period. However, before we display the forecast estimates, some caveats are in order.

Our forecast models for the selected parameters rely on a number of macroeconomic indicators as explanatory variables. These include:

1. Foreign Exchange Reserves
2. Total Trade
3. Oil Prices
4. Oil Production

Baseline forecast estimates for the aforementioned are taken from the Federal Government's ERGP. However, we note that with the ERGP having been released in February 2017, forecast estimates provided under the Plan cover the period 2017-2020. 2018 ERGP forecasts have been overtaken by current realities, which may have a bearing on 2019, requiring us to make the following adjustments:

1. 2018 estimates for Foreign Exchange Reserves are revised to $43.1bn, which is where Gross Reserves stood at the end of 2018. We maintain the ERGP's FX Reserves forecast estimate of $60.10bn in 2019.
2. In the absence of Q4-2018 Foreign Trade estimates, we project 2018 Total Trade (in light of the reality of Q1–Q3 2018 cumulative Total Trade estimate of N23.14tn) at N29.16tn.
3. Our assumption on oil for 2019 is the recently approved MTEF price estimate of $60/bbl which would reflect the baseline scenario for oil price would reflect the 2019 budget benchmark price.
4. Oil production estimates for the forecast period, 2019–2020, remain unchanged.

Scenario Assumptions

The econometric model used in forecasting assumes that the size of the parameters projected for a given year are affected by the conditions in the current and immediately preceding year i.e. the estimates for our maritime forecast indicators – total fleet size, oil tanker fleet size, non-oil tanker fleet size and oil rig count – in 2019 are affected by the conditions, in 2018, of the following macroeconomic indicators: the volume of trade, extent of foreign exchange reserves holding, oil price and oil production.

We restate, for emphasis, that our baseline scenarios for the macroeconomic parameters reflect the Federal Government's assumptions in the ERGP. We need to also emphasise that with 2018 having already passed, the ERGP estimates for that year have been overtaken by current realities. As such, we are using actual full-year estimates of trade, FX reserves, oil price and production in 2018 (instead of the ERGP forecast estimates for these) in deriving the 2018 forecast estimates for the aforementioned maritime indicators. The 2019 forecast estimates for the maritime indicators are derived from the 2018 ERGP forecast estimates for the named macroeconomic indicators.

Finally, while baseline scenarios assume that conditions proceed as they are, our optimistic scenarios anticipate even more favourable conditions, such as higher oil prices. However, the pessimistic scenarios anticipate a possible deterioration of conditions, such as the now unlikely event of a decline in oil prices.

2018 Estimates	Forecast	Full Year Actuals
GDP Growth (%)	3.50	1.9*
Total Trade (N 'tn)	23.90	23.14
Foreign Exchange Reserves (US$ 'bn)	43.50	43.10
Oil Price (US$/bbl)	47.00	53.2
Oil Production (mbpd)	2.30	1.94**

**IMF FY2018 estimate*

***January–September Average*

2018 Forecast Estimates

2018 Forecast Estimates	Pessimistic	Baseline	Optimistic	2017	2018***
Total Fleet DWT (Mn)	3.83	3.87	3.95	3.64	3.71
Oil Tanker Fleet DWT (Mn)	0.64	0.66	0.69	0.67	0.71
Non-Oil Tanker Fleet DWT (Mn)	3.19	3.21	3.26	2.96	3.00
Oil Rigs (Land & Offshore)	10	11	12	9	11

**** UNCTAD 2018 Estimates*

2019 Forecast Estimates

Forecast Estimates	Pessimistic	Baseline	Optimistic
Total Fleet DWT (Mn)	4.10	4.13	4.21
Oil Tanker Fleet DWT (Mn)	0.62	0.64	0.67
Non-Oil Tanker Fleet DWT (Mn)	3.47	3.50	3.55
Oil Rigs (Land & Offshore)	11	13	13

2020 Forecast Estimates

Forecast Estimates	Pessimistic	Baseline	Optimistic
Total Fleet DWT (Mn)	4.49	4.53	4.62
Oil Tanker Fleet DWT (Mn)	0.63	0.64	0.67
Non-Oil Tanker Fleet DWT (Mn)	3.87	3.89	3.95
Oil Rigs (Land & Offshore)	12	13	14

Empirical Methodology

The model used for analysis is a Vector Autoregressive (VAR) model, with an optimal lag length of 1. Data used for the estimation covers the period 1981 to 2018 (with 2018 estimates projected where not available). As stated, lagged values of the macroeconomic parameters were used to derive maritime forecasts for 2019 and 2020.

DOMESTIC MACRO ECONOMIC CONDITIONS
1. Real GDP Growth
2. Foreign Exchange Reserves
3. Oil Price(Bonny Light)
4. Oil Production Volumes

NIGERIAN MARITIME INDUSTRY CHARACTERISTICS
1. Total Tanker Fleet
2. Oil Tanker Fleet
3. Non Oil Tanker Fleet

NIGERIAN'S INTERNATIONAL TRADE
1. Non-oil Imports
2. Non-oil Export
3. Crude Oil Export
4. Fuel Imports
5. Total Seaborne Trade

DEMAND FOR USE OF MARITIME INDUSTRY FACILITIES 2018-2019

Total Fleet

Dead Weight Tonnage (Millions)			
	Pessimistic	Baseline	Optimistic
2019	4.10	4.13	4.21
2020	4.49	4.53	4.62

The major drivers of Total Fleets calling at Nigeria Ports are Foreign Reserves and Total Trade from our Empirical Estimates.
- The Baseline forecast is based on the 2018 outcome and 2019 ERGP forecast for total trade and foreign reserve
- The pessimistic forecast is based on the assumption that total trade declines to N25.42trn in 2019 and N26.8trn in 2020, while foreign reserves is $43bn in 2019 and $59.3bn in 2020.
- The Optimistic forecast is based on the assumption that total trade will increase to N28.55trn in 2019 and N30.11trn in 2020, while foreign reserves is $44.7bn in 2019 and $61.7bn in 2020.

Oil Tanker Fleet

Dead Weight Tonnage (Millions)			
	Pessimistic	Baseline	Optimistic
2019	0.62	0.64	0.67
2020	0.63	0.64	0.67

The major drivers of Oil Tanker Fleets from our empirical estimates are Oil price and Foreign Reserves.
- The Baseline forecast is based on the 2018 outcome and 2019 expected for oil price and ERGP forecast for foreign reserve
- The pessimistic forecast was centered on the assumption that oil price is $69.6 per barrel in 2019 and $72.6 per barrel in 2020, while Foreign Reserves is $40.57bn and $55.94bn in 2019 and 2020 respectively.
- Optimistic Forecast assumes an oil price of $76.67 per barrel in 2019 and $80.02 per barrel in 2020, with Foreign Reserves of $50.11bn in 2019 and $69.36bn in 2020.

Non-Oil Tanker Fleet

Dead Weight Tonnage (Millions)			
	Pessimistic	Baseline	Optimistic
2019	0.62	0.64	0.67
2020	0.63	0.64	0.67

The major drivers of Non-oil tanker fleets are total trade and foreign reserves

- The Baseline forecast is based on the 2018 outcome and 2019 ERGP forecast for total trade and foreign reserve
- Pessimistic assumes that total trade declined by to N25.42trn in 2019 and N26.81trn in 2020 whilst we anticipate a foreign reserve of $43bn in 2019 and $59.3bn in 2020.
- Optimistic forecast assumes that total trade increases to N28.55trn in 2019 and N30.11trn in 2020 with a foreign reserve of $44.69bn in 2019 and $61.74bn in 2020.

Oil Rigs

Given the ERGP forecast of oil production and oil price with estimated the required rig counts below:

Units			
	Pessimistic	Baseline	Optimistic
2019	11	12	13
2020	12	13	14

Oil price and Oil Production is assumed to be the major drivers of Oil Rigs (Land and Offshore) in Nigeria.

- The Baseline forecast assumes that 2.3mbd (million barrel per day) and 2.4mbd of oil will be produced in 2019 and 2020 whereas Oil price will be $71.9 per barrel in 2019 and $75 per barrel in 2020
- On the other hand, the pessimistic forecast assumes Oil production of 2.25mbd for 2019 and 2.35mbd 2020 and Oil Price of $67.44/brl and $70.3/brl in 2019 and 2020 respectively.
- Our Optimistic scenario assumes 2.40mbd 2019 and 2.51mbd 2020 with an Oil price of $81.75/brl in 2019 and $85.37/brl in 2020.

6

Emerging Opportunities and Challenges: Implications for the Nigerian Maritime Industry

6.1 Moving into the Smart Ship Era

What's next? It's a simple question to ask but it's not so simple to answer. Companies are constantly scanning the horizon to see what's coming and what the future holds. The future poses many challenges but also open many new opportunities. World trade is expanding. Shipping as its workhorse is undergoing a transformation and facing huge challenges in maintaining competitiveness.

Global Trends

Smart Ships: Smart ships are being widely debated as the shipping industry's next technological revolution. In the manufacturing industry, the term 'fourth industrial revolution' describes how smart devices' will replace the role of humans for the management, optimisation and control of machinery. Fully autonomy remains elusive for the vast majority of the industry. A fully autonomous and unmanned vessel requires no input from humans other than in an emergency. As at today, the most advanced seagoing ships are at level one already considered "smart", they are directed by humans but rely on systems and sensors for support in collecting data and making decisions.

Cyber Risk: As vessels become connected, increasingly smart and reliant systems, cyber safety and security have become a major concern for ship owners seeking to protect their data, people, assets and operations. However, cyber-enabled ships and systems are already here as ships increasingly incorporate the systems and sensors required to suggest or even make autonomous decisions.
Big Data Analytics: IT infrastructure will be upgraded to retrieve, store and process data in real time. The shipping industry will, therefore, move from a decision-tree-driven approach to the adoption of a probabilistic approach. Real-time performance monitoring, alert systems and/ or visualizing situational awareness can all be achieved wherever you are and whenever you want. This will help increase business competitiveness and will assist the shipping industry stakeholders to take proactive actions.

Sensors: Sensor technologies are developing rapidly to meet the ever-growing demand for data and information that will enable consumer-driven needs. For example, The Internet of Things, which allows real-time monitoring and control of systems and processes, from home through to medical and industrial applications. These will also address the need for ever-increasing capabilities to measure the ocean (and near ocean) environment, including biological, acoustic and electromagnetic characteristics.

Robotics: In recent years, the technical potential of robotics has been demonstrated in various areas in commercial shipping. For the short- to mid-term future, autonomous robots will only see the application in a limited range of rather specific areas. In fields where, autonomous robotics is not a realistic option, at least for the foreseeable future, remote-controlled robots are a promising alternative.

6.2 Emerging Opportunities in the Nigerian Maritime Sector

The concept of blue economy has taken a global focus and Nigeria, being hugely endowed in ocean resources can attain economic prosperity and wealth creation for its citizenry if the right investments are mobilized to optimize these resources and opportunities. The Nigerian Maritime Industry is an enabler and facilitator of economic growth and prosperity. About 90% of world merchandise/trade by volume is carried by seas and over 60% of all imports to West Africa are Nigeria bound. Over the years, maritime transportation has made the movement of cargoes of all types and volume both possible and efficient especially engendering economies of scale through massive cargo transportation that has positively impacted global logistics value chain. The industry is constantly evolving leading to greater efficiencies and precipitating economic opportunities especially across coastal nations including Nigeria.

The unveiling of the 2018 Nigeria's Maritime Industry Forecast in 2018 threw up Opportunities and Challenges in the Maritime and Shipping Sector leading to the drive for:

- Increased local participation in the Sector
- Capacity Building Development and Engagement of Seafarers on Board Cabotage Vessels
- Synergy among Regulators and Stakeholders
- Review of Fiscal and Trade Policies militating against full participation of Nigerians in activities in the Maritime and Shipping Sector
- Options to solve challenges of funding and investment capital for assets acquisition
- Special Intervention Fund for the Sector

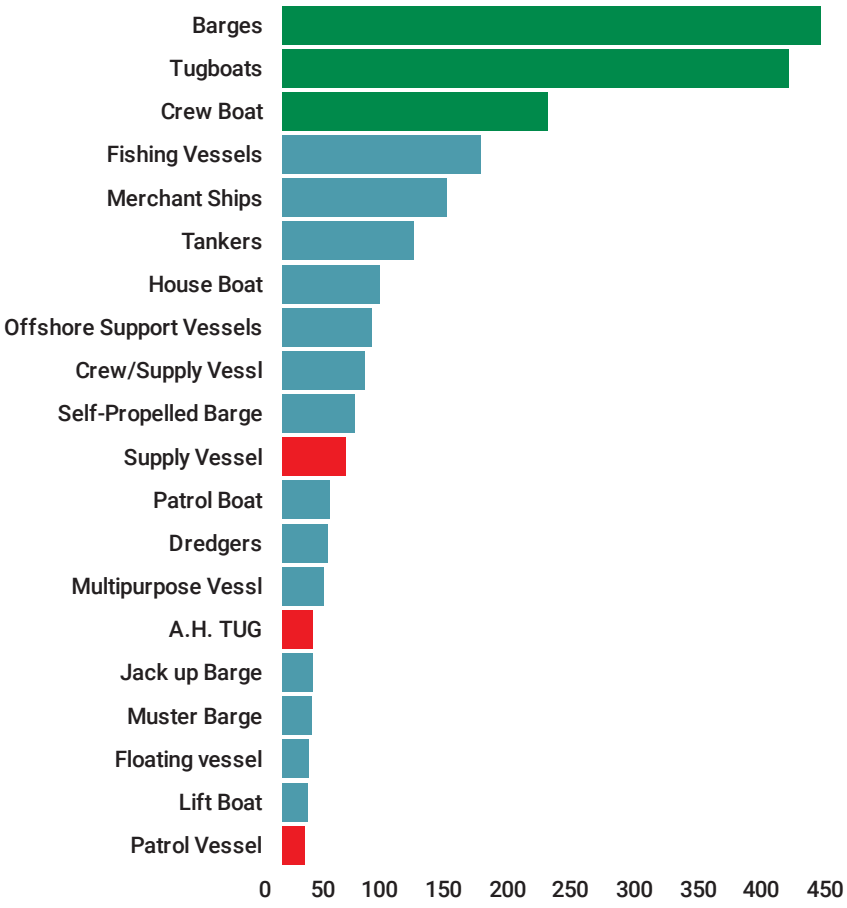
Also the NCDMB Marine Vessel Scheme focus on increasing retention of industry spend from marine vessel utilization through the following interventions:
• Promote and sustain growth in indigenous ownership of Marine Vessels
• Enforce utilization of Nigerian owned Marine Vessels • Increase capacity of local ship yards to build, service & maintain Marin Vessels of various sizes • Develop and maintain healthy pipeline of skilled marine operators and seafarers Investments in the form of funding for asset acquisition, technology, leasing, R & D and human capacity building are some opportunities to be explored by both local and international investors.

Existing Opportunities

Ship Financing: Shipping is capital intensive as critical maritime assets are usually long-term assets that have longer life span and gestation period. Government intervention in the sector is therefore essential to source funding required to unlock the acquisition of these maritime assets. Furthermore, Prospective investors and buyers should seek innovative financing models and new sources of funding should be explored away from existing traditional models. Effectiveness of seeking and securing financing will, however, only be achieved with adequate evaluation and provisioning for risks, appropriate leverage levels and use of financing structures most suitable to a maritime asset at hand. There has to be funding structure that suits the maritime sector because it is capital intensive
The capital market remain critical for the enhancement as well as the promotion of shipping business growth and creation of corporate value. They are viable financial alternatives.

Ship Building and Ship Repairs: The maritime industry in Nigeria holds a lot of promise for economic development. One of which is the gradual migration of Nigeria's oil and gas exploration towards deep offshore, off the cost and in the coastal waters. This would increase the demand for more offshore support vessels, FPSOs, tankers and platforms. Huge investments are required

Nigerian Maritime IndustryFuture Vessel Demand (In Green) Vs Current Vessel Demand (In Red)



in developing this aspect of the industry which is critical for trade facilitation. Investments in the form of funding, technology and human capacity building are some opportunities to be explored by both local and international investors.

A capacity audit of ship building and ship repairs yards in Nigeria has been commissioned as this subsector remains under developed and has potentials of reducing capital flight if vessels are dry-docked in country. There are huge investment opportunities in building of vessels to meet national and cabotage requirements. Dry Docking remains a critical area of investment with over 3,500 vessels operating in Nigerian waters and largely been dry-docked outside the shores. Nigeria has quite a few ship yards in operation but the capacity remains an all-time low.

Marine Insurance: The insurance sector represents the backbone of Nigeria's risk management system. Therefore, the role of insurance in the growth and development of the economy cannot be over emphasized. Insurance has the ability to mitigate the impact of risk and positively correlates with growth as investors and entrepreneurs cover their exposures and inculcate more risk abilities.

An overview of the insurance industry show that motor, general accident and marine insurance contributes positively to the development of the insurance market in Nigeria by their positive coefficients. Hence marine insurance will continue to exert significant influence on the overall insurance business in Nigeria. For marine insurance to thrive, underwriters must adopt a realistic approach to the enormous build-up of exposures in the maritime trade.

Nigeria's marine subsector is one of the most under developed compared to peers and a number of critical factors that have the potential to drive growth in the area such as technological disruption, mergers and acquisition, recapitalization to underwrite big transactions in the industry have been identified as game changers for investors. Ship owners are called upon to also look into establishing

a Protection and Indemnity Club (P&I). For intending investors, huge opportunities abound in the subsector.

Research and Development: The Maritime Industry has not really made a leap change in the use of Technology. It is still very much human driven. A number of innovation and new technology approaches are taking place globally and even locally in the oil and gas sector. Investment opportunities exist in setting up training and research centres as these will scale up activities in the maritime sector.

Maritime Law and Law of the Sea Experts: The law relating to activities and sea is based primarily on Maritime Law and the Law of the Sea. Maritime law is the law of things, activities and events related with the sea. Specifically, it deals with matters concerning sea going personnel, ships and other seagoing vessels, charter contracts and ocean transport, ship ownership and sales, maritime safety incidents at sea and marine insurance. The law of the sea on the other hand is the law of maritime space, it defines its zones as well as the rights and obligations of States in these zones, especially in regard to environmental protection and law and order at sea. These maritime law experts are there to inform and advise, act on behalf of clients, draft legal documents where necessary.

Manpower & Human Capacity Development: The availability of manpower is crucial to development of Nigeria's maritime and shipping sector. Large opportunities exist in establishment, upgrading of facilities and management of maritime institutions. Nigeria as a country is making heavy investments in human capacity development in the maritime industry which implies to an increase in local participation in shipping especially shipping operations. There are ongoing discussions and plans driven by government for Nigeria to re-float a national shipping fleet. The implication of this development upon its crystallization will see Nigerian flagged vessels trading with other countries of the world. As expected, this would come with the benefit of employment generation, sea-time for cadets and competitive cost of doing business. We need to train our young generation to develop cross disciplinary skills required in today's world by providing professional development course focussing on advanced maritime technologies, cyber security, maritime and port management, supply chain management etc. West Africa's offshore oil and gas deposits remain under explored and exploited. Nigeria is playing

no significant role in seabed mining and exploration. There is need for a lot of investment in training and development of maritime professionals.

Haulage and Storage Services (Warehousing): As an industry, we must adapt to changes and develop in sync with shifts in the broader trade and logistics ecosystem. Ports are now much more than transit points. They provide added value for which there is a real demand, such as the processing of products, financial breaks in free trade zones, specialized packing methods etc. Supply chain logistics (transport of raw materials usually in bulk) accounts for two thirds of shipping traffic, while distributing logistics (manufactured products usually transported in containers) account for the third. The Haulage business provides a lot of opportunities. Also establishing warehouse or distribution houses outside the Ports would help reduce business cost.

Marine Renewable Energy, Storage and Services: The Marine Renewable Energy (wind, current, tidal, wave and ocean thermal energy) is the world's second largest maritime zone. Africa is lagging behind in marine renewable energy technology. The development of marine renewable energies requires knowledge and know-hows that are specific to our marine environment. Leasing: The robust activities in the sector present enormous opportunities for investors to lease on short- or long-term bases. For instance, the deregulation and liberalisation of the port sector has given additional impetus for private initiatives in terminal operation.

Classification Societies: Classification societies play predominant roles in maritime transport by ensuring that ships are built and operated according to satisfactory safety standards.

Marine Support Services: Economic dynamics and global changes account for ongoing transformation and reforms in ports worldwide. Businesses are evolving rapidly embracing technology and innovation. The pace and scope of change is impressive and opportunities abound for investors.

Ship Broking Firms: Acting as intermediary between the supply and demand sides of ship chartering, ship building & sales and dismantling markets. Ship broking firms will further strengthen activities under the cabotage regime.

Port Development and Modernization: Construction of new green filed ports, dedicated coastal berths and development of new terminals and jetties will be required to ensure smooth and efficient shipping operations.

Development of Deep Seaports: In response to the demands of modern-day shipping, Nigeria embarked on the development of deep-sea ports. This is a Public Private Partnership initiative between the federal government and private investors. Multiple opportunities for the development of deep-sea ports are available considering Nigeria's coastline stretching over 853kms. Some deep-sea projects which are already at different stages of implementation include the Ibom deep sea port in Akwa Ibom State, the Lekki deep sea port and Badagry deep sea port in Lagos State.

Inland Container Depots and Multimodal Transport: Inland Container Depots are inevitable as a result of the vastness and diversity of the country's landscape and the resulting distance between some major commercial centres and the coastline, there is need to bridge the service gap occasioned by the lack of access to seaport services.

Hinterland connectivity & Multimodal Logistics: Modernization of rail corridors and connection of narrow gauges at ports will speed up evacuation of goods and reduce congestion. Investments through Public Private Partnership is encouraged.

Blockchain Technology: Potentials exist in the use of blockchain technology, in cargo tracking; visibility in the supply chain; recording vessel information including global risks and threats; integrating smart contracts; maritime policies and digitizing, as automating the documentation and reserves save costs and time for the release and movement of the cargo.

Appendix

FIGURES FOR PORT AND FLAG STATE INSPECTIONS

We are committed to ensuring Safety and Security in our waters.

PORT STATE INSPECTION SUMMARY

YEAR	2010	2011	2012	2013	2014	2015	2016	2017	2018
TOTAL NUMBER OF PORT STATE INSPECTIONS	317	223	119	456	647	316	341	350	631
TOTAL NUMBER OF VESSELS WITH DEFICIENCIES	6	11	9	53	94	60	81	59	23
TOTAL NUMBER OF VESSELS DETAINED	-	2	1	7	10	-	15	5	19

FLAG STATE INSPECTION SUMMARY

YEAR	TOTAL SURVEY'S CARRIED OUT	CTM ISSUED	CONDITION SURVEY REPORT CERT. ISSUED	CARGO SHIP SAFETY EQUIPMENT CERT. ISSUED	CARGO SHIP SAFETY RADIO CERT. ISSUED	PLAN APPROVAL CERT. ISSUED
2012	202	92	80	16	16	24
2013	444	201	135	46	46	35
2014	529	288	126	61	61	29
2015	423	199	184	59	59	42
2016	285	144	174	49	49	55
2017	495	264	189	38	38	64
2018	332	154	96	60	60	51

MARITIME SAFETY AND SECURITY DATA 2010 – 2018)

YEAR	NO. PIRACY	NO. ROBBERIES	SAR CASES	MEDIVAC	STOWAWAY	ANY OTHER INCIDENT
2010	25	-	5	1	2	11
2011	48	-	16	1	1	85
2012	7	-	2	-	-	19
2013	81	10	21	1	3	115
2014	12	1	10	2	1	80
2015	9	-	10	-	-	47
2016	34	2	6	1	2	55
2017	24	-	15	3	3	101
2018	41	7	20	4	4	115

INDUSTRY TOTAL FREIGHT RATES FOR WET CARGO

YEAR	VESSEL TRAFFIC	GROSS FREIGHT (IMPORT)	GROSS FREIGHT (EXPORT)	TOTAL GROSS FREIGHT (IMPORT/EXPORT)
2004	4707	1,823,097,126.01	1,009,761,940.28	2,832,859,066.29
2005	4975	2,313,161,698.80	1,434,123,481.31	3,747,285,180.11
2006	4793	2,300,288,876.44	1,298,151,862.72	3,598,440,739.66
2007	5179	2,775,721,224.10	1,567,769,062.89	4,343,490,286.99
2008	5025	3,705,864,759.97	1,704,411,142.30	5,410,275,902.27
2009	7853	7,463,910,282.33	8,076,821,688.64	15,540,731,970.97
2010	6519	4,343,176,388.81	2,837,312,967.46	7,180,489,356.27
2011	6382	4,852,820,057.07	3,112,492,150.82	7,965,312,207.89
2012	6070	4,754,105,500.73	3,164,187,318.41	7,918,292,819.14
2013	7098	5,191,531,385.39	4,386,537,108.04	9,578,068,493.43
2014	8015	5,454,727,338.82	5,738,114,903.18	11,192,842,242.00
2015	7505	4,943,101,377.07	7,353,861,181.15	12,296,962,558.22
2016	5881	3,709,261,189.79	3,842,042,977.33	7,551,304,167.12
2017	5908	4,370,779,495.96	4,231,101,680.12	8,601,881,176.08
2018	5634	4,691,798,472.59	6,398,755,415.85	11,090,533,888.44
TOTAL	91544	62,693,345,173,.88	56,155,444,880.50	118,848,770,054.88

NUMBER OF TEMPORARY IMPORTATION APPROVALS (TIP) FROM 2004 TO 2018

YEARS	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	TOTAL
VESSELS	152	260	NA	187	152	236	167	NA	287	289	330	379	236	284	365	3,324

DOMESTIC ECONOMIC PARAMETERS

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018*
Nominal GDP (NGN 'tn)	39.16	44.29	54.61	62.98	71.71	80.09	89.04	94.14	101.49	113.72	129.18
Real GDP (NGN 'tn)	46.01	49.86	54.61	57.51	59.93	63.22	67.15	69.02	67.93	68.50	70.54
Real GDP Growth rate (%, YoY)	7.20	8.35	9.54	5.31	4.21	5.49	6.22	2.79	-1.58	0.83	1.92
Oil GDP growth (%, YoY)	-6.19	0.45	5.25	2.33	-4.95	-13.07	-1.32	-5.45	-14.45	4.79	N/A
Agriculture GDP growth (%, YoY)	6.77	13.49	-2.28	-1.59	5.54	9.66	20.15	-5.12	0.94	3.45	N/A
Manufacturing GDP growth (%, YoY)	9.05	7.94	7.68	17.82	13.46	21.80	14.72	-1.46	-4.32	-0.21	N/A
Distributive Trade GDP growth (%, YoY)	14.02	11.48	11.22	7.21	2.21	6.64	5.88	5.14	-0.24	-1.05	N/A
Transport GDP growth (%, YoY)	7.10	6.98	6.85	5.97	-3.42	3.80	4.42	4.51	0.39	3.86	N/A
Water Transport GDP growth (%, YoY)	6.05	5.66	5.37	-9.74	-1.67	4.50	8.74	8.45	1.40	1.25	N/A
Aggregate Trade (NGN 'tn)	15.98	14.09	20.18	26.23	24.91	24.70	23.50	19.92	18.32	24.79	N/A
Imports (NGN 'tn)	5.59	5.48	8.16	11.00	9.77	9.44	10.54	11.08	9.48	10.80	N/A
Exports (NGN 'tn)	10.39	8.61	12.01	15.24	15.14	15.26	12.96	8.85	8.84	13.99	N/A
Oil Exports (NGN 'tn)	9.86	8.11	11.30	14.32	14.26	14.13	12.01	8.18	8.18	12.91	N/A
Non-oil Exports (NGN 'tn)	0.53	0.50	0.71	0.91	0.88	1.13	0.95	0.66	0.66	1.07	N/A
Aggregate Trade growth (%, YoY)	23.52	-13.44	30.18	23.09	-5.33	-0.83	-5.12	-17.96	-14.85	35.36	N/A
Imports growth (%, YoY)	30.06	-2.05	32.87	25.75	-12.59	-3.47	10.43	4.85	-25.61	13.97	N/A
Exports growth (%, YoY)	20.00	-20.70	28.35	21.17	-0.64	0.80	-17.76	-46.53	-3.73	58.32	N/A
Global Competitiveness Index rank	95	94	99	127	127	115	120	127	124	127	115
Ease of Doing Business rank	120	125	133	133	138	147	170	170	169	145	146
Inflation, CPI (average, %, YoY)	11.58	12.54	13.74	10.82	12.22	8.50	8.05	9.01	15.70	16.55	11.51
Inflation, CPI (yearend, %, YoY)	15.05	13.93	11.82	10.29	11.98	7.96	7.98	9.55	18.55	15.37	11.44

**IMF World Economic Outlook Forecasts*

CONTAINER TRAFFIC STATISTICS

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
No. of Vessels	4,849	4,623	4,721	4,881	5,232	4,837	5,369	5333	N/A	5000	N/A
No. of Vessels Growth (%)		-4.66	2.12	3.39	7.19	-7.55	11.00	-0.67	N/A	N/A	N/A
Gross Registered Tonnage (dwts.)	84,806,792	89,505,702	90,603,611	106,689,553	122,614,716	120,818,683	130,628,057	148,323,065	N/A	N/A	N/A
Gross Registered Tonnage Growth (%)		5.54	1.23	17.75	14.93	-1.46	8.12	13.55	N/A	N/A	N/A
GDP Growth (%)	7.32	7.20	8.35	9.54	5.31	4.21	5.49	6.22	2.79	-1.58	N/A
Total Fleet - UNCTAD (dwts.)	524.17	626.36	897.04	989.41	3735.49	3273.82	3301.76	3812.99	3981.11	3623.05	4768.00
Total Fleet Growth - UNCTAD (%)	-1.11	19.49	43.21	10.30	277.55	-12.36	0.85	15.48	4.41	-8.99	31.60
Linear shipping connectivity index	13.7	18.3	19.9	18.3	19.9	21.8	21.4	22.9	21.4	21.3	20.53
Nigeria- Port Infrastructure Quality 1(low)- 7(high)	2.69	2.62	2.8	2.98	3.31	3.55	3.44	3.16	2.98	2.8	2.8
Total Fleet (No. of Vessels)	N/A	N/A	N/A	N/A	372	374	402	469	547	571	583
Growth Rate	N/A	N/A	N/A	N/A	N/A	0.54	7.49	16.67	16.63	4.39	2.10
Tanker Freight	N/A	N/A	673	750	609	485	494	597	708	700	671
Growth Rate	N/A	N/A	N/A	11.44	-18.80	-20.36	1.86	20.85	18.59	-1.13	-4.14
Dry Bulk - IN	11,500,338	13,350,161	14,267,917	12,683,482	13,082,771	10,102,158	9,693,134	9,847,860	9,154,171	9,704,453	9,818,494
Dry Bulk - OUT	234,786	179,668	243,854	285,015	28,557	61,584	137,399	22,135	36,101	339,662	825,624
Containerised Bulk - IN	2,697,353	7,794,894	5,802,550	7,534,972	9,252,781	4,298,373	10,729,910	5,428,846	9,419,672	8,976,048	10,379,152
Containerised Bulk - OUT	298,627	685,248	897,994	1,224,443	1,239,600	662,815	1,435,972	750,620	2,263,594	2,103,798	2,325,091

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