

International Journal of **Economic Policy** (IJECP)

**Nigeria's Blue Economy: A Panacea for Employment Generation, Trade and
Development**



**CARI
Journals**

Nigeria's Blue Economy: A Panacea for Employment Generation, Trade and Development.

 *Dr. Peter Enueshike¹, Dr. Dorathy Oluchukwu Anyanwu²

¹Department of Banking and Finance, Nasarawa State University Keffi

²Department of Economics, Claretian University Nekede, Owerri Imo State

Accepted: 24th Jan, 2025, Received in Revised Form: 19th Feb, 2025, Published: 27th Mar, 2025

Abstract

Purpose: Nigeria is facing serious economic challenges that necessitate a shift towards diversification to achieve sustainable development. The recent change in government has brought new promises to combat corruption and uplift the common man, but economic diversification remains a pressing priority. The country over-reliance on oil, which dominates its economy, has made it vulnerable to global economic uncertainties and fluctuating oil prices. It's imperative for the government to recognize that oil is not an endless source of revenue and diversification is essential to break free from the limitation of a mono—economy. Thus, the Blue Economy, is an innovative and dynamic approach that balances economic growth with environmental sustainability. It seeks to harness the potential of Nigeria's vast coastline, marine resources, and inland water-ways to drive national development and identify opportunities for employment generation in coastal and marine -related industries.

Methodology: Based on the research objective the study employs the Dynamic Ordinary Least Square (DOLS) and the Johansen Cointegrating Regression (JCR) estimation methods to evaluate the sustainability of the employment generation by Nigerian's blue economy, using annual time series data (secondary data) covering the period 1986-2022, to investigate the potential impact of blue economy and employment generation in Nigeria.

Findings: The blue economy offers significant opportunities for Nigeria to achieve sustainable development and economic growth by investing in the sustainable use of marine resources, Nigeria can diversify its economy, create jobs, and improve livelihoods.

Unique Contribution to Theory, Practice and Policy: Finally, policy should be formulated to make the Federal Ministry of Marine and Blue Economy should establish a comprehensive national policy on marine and blue economy, aligning with United Nations Convention on Law of the Sea (UNCLOS) 1982 integrate provisions of the Sustainable Development Goals 14 and engage public private partnerships (PPP) to develop port and transport infrastructure to promote coastal recreation and tourism along the coast.

Keywords: *Blue Economy, Employment Generation, Trade, Development, Maritime Transport*

Introduction

The concept of the blue economy has gained prominence in recent years as countries around the world look for sustainable ways to harness the potential of their coastal and marine resources. Nigeria, with its vast coastline along the Atlantic Ocean and extensive inland waterways, holds significant untapped potential in its blue economy (Ninawe, 2017). Nigeria, located in West Africa, boasts a coastline stretching over 800 kilometers along the Atlantic Ocean. Additionally, it is endowed with a network of rivers, lakes, and lagoons, making up one of the most extensive inland waterways systems in Africa. These natural resources offer immense opportunities for economic development through activities such as fisheries (aquaculture), shipping, tourism, and oil and gas exploration (Elisha, 2019).

The fisheries sector is a crucial component of Nigeria's blue economy, it is critical for both the generation of national income, fish production, leading from fishing activities to revenue generation and employment for millions of people. Fishing sector contribute to food security and nutrition while supporting the livelihoods of coastal and fishing communities. The country's diverse aquatic ecosystems offer a rich variety of fish species, providing a basis for both domestic consumption and export (Attri, 2016). According to the Food and Agriculture Organization (FAO), Nigeria's fish production was estimated at 1.1 million tons in 2018, with vast potential for growth. Nigeria's extensive coastline and inland waterways have the potential to transform the country into a maritime hub for West Africa. The ports of Lagos, Port Harcourt, and Calabar already handle a significant portion of the region's maritime trade. Efficient utilization of these ports, coupled with improved inland waterway transportation, can significantly boost trade, create jobs, and enhance trade and development.

According to Ekemeabasi (2020), the Nigerian coastline offers picturesque beaches, wildlife, and cultural attractions that can attract tourists from around the world. With proper infrastructure development and sustainable tourism practices, Nigeria can tap into the growing global tourism industry, generating revenue and create employment opportunities for its citizens. Nigeria is one of Africa's leading oil producers, and a significant portion of its oil reserves lies offshore. The blue economy can benefit from responsible exploration and extraction of oil and gas resources. Revenue generated from the sector can be reinvested in other aspects of the blue economy, contributing to overall economic growth and development (Farouk, Jibril, Maigoshi, Ahamad, & Bako, 2021).

There are various studies conducted to assess the relationship between Blue Economy and the prospects for economic growth in Nigeria. For instance, the study of Egbedokun, & Ajayi, (2019) who investigated the relationship between Blue Economy and economic growth of the Niger Delta region in Nigeria. Findings showed terrorism, piracy, destruction of maritime ecosystems, Illegal arms trafficking, global climate change, are some challenges facing the blue economy. Also, most of their studies covered short periods of time. But the current research focused on effects of the Nigerian's blue economy on employment generation through trade, by using annual time series

data from 1986 -2022 and the study employed the Dynamic Ordinary Least Square (DOLS) and Johansen Cointegrating Regression (JCR) methods.

The gap in terms of periods covered by the aforementioned researchers was also a contributory factor to the disparity in the outcomes of the relationship between Blue Economy and employment generation in Nigeria. (Akinwumi, (2020); Okemwa (2019). The current study focused on the impact of blue economy performance indicators with reference to employment generations, trade and investment in Nigeria, because of their strategic importance to employment generation and development of the economy. This study attempts to provide answers to these fundamental questions: To what extent will maritime transport, fishery production, affect employment generation, trade and development in Nigeria. Aside the economic and social factors inhibiting the process of the trade and development, the bottleneck created by death of marine transport sector and fishery production to the economy constitutes a major setback to the actualization of Nigerian's Blue Economy. However, the vital role of the Nigerian Blue economy on employment generation through maritime transport and fishery production would continue to be investigated to gather more information for optimum decision.

An effort was made to address the following research questions:

H₀₁: Maritime transport has no significant impact on Gross Domestic Product in Nigeria.

H₀₂: Fishery production has no significant impact on Gross Domestic Product in Nigeria.

Conceptual Framework

Blue Economy

Nigerian Blue Economy encompasses all economic activities connected to seas, coasts and oceans such as fisheries, shipping, oil and gas exploration, renewable energy, waste management, maritime transport, climate change and tourism (Ekemeabasi, 2020). It can be defined as the use of the sea and its resources for sustainable economic development and includes economic gains that may not be advertised, such as coastal protection, carbon storage, biodiversity and cultural values (World Bank-UN, 2017). Nigeria being a country that possesses an abundance of littoral component states and water ways of great length, has not been left out in this quest, hence making the development of a Nigerian blue economy a requirement for the country's benefit. The six major sectors of the blue economy include fisheries and aquaculture, marine biotechnology, seabed mining, oil and gas exploration, renewable energy, shipping (Ibrahim, 2020).

Employment Generation

Employment Generation refers to the creation of jobs in an economy, other through the establishment of new businesses or the expansion of existing ones (Oyediran & Oyediran, 2019). The blue economy aims to promote employment generation, economic growth, trade and development and social inclusion without hammering out the oceans' environmental sustainability and coastal areas as the sea's resources are limited and their physical conditions have been

impaired by human actions (Gani, 2017). These resources produce numerous benefits to the world economy and present important opportunities. The aims of the blue economy model are to improve life, incorporate social aspects like social equity, reduce ecological risks and fuel the economy through sustainable ways, for the sake of the present but also the upcoming generations (Omotoso & Ojekunle, 2019). The blue economy in Nigeria can help prepare her for growth without oil.

Maritime Transport

Maritime transport refers to the transportation of goods and people by sea, including shipping, ports and related infrastructure. Nigeria's Blue economy potential extends to maritime transport. With its strategic location in the Gulf of Guinea, Nigeria can become a major hub for maritime trade and logistics in West Africa. By developing and modernizing its ports, improving connectivity, and enhancing maritime security, Nigeria can attract more shipping companies, increase trade volumes, and generate substantial revenue (Okolo-Obasi, 2018). This would not only benefit the country's economy in terms of employment generation but also strengthen its position as a regional economic powerhouse. Nigeria's endowment in inland water transport system stretches across more than 10,000km of navigable waterways. This water 'wealth' comprises of rivers, creeks, lagoons, lakes and intra-coastal waters (Omotoso & Ojekunle, 2019). The nation's main rivers are: Rivers Niger and Benue. Both rivers form a confluence at Lokoja, in Kogi State. River Niger is the longest river in West Africa and eleventh longest in the world, its main tributary is River Benue, the delta creeks as well as the lagoons bordering the coast form the principal navigable waterways in Nigeria. It is also instructive that these principal navigable waterways are the major transportation routes linking Apapa, Tin Can, and Warri, Port Harcourt, Onne and Calabar seaports and the numerous river ports and jetties. Through the lagoon and delta creeks, a water transport route is established between the hinterland and urban centres of Nigeria on River Niger (Adetona, (2020).

Trade and Development

Trade refers to the exchange of goods and services between countries or regions, often facilitate by the movement of goods through ports and shipping lanes. Looking back to the period of the pre-colonial era riverside towns on the Lower River Niger served as commercial rendezvous for various peoples from all over the country. The waterways served as initial corridors of transportation and many of them eventually became important areas of commerce and industrial development (Adelaja, & Adesina, 2018). Several cities during the pre-colonial era such as the Hausas from Kano usually come from the North with their wares such as groundnuts, eyelid, local salt (called Wuri), natron, leather goods, textiles, horses, donkeys, beads and other luxury goods. These goods were conveyed in canoes and ferries to Lokoja, Onitsha and other towns in southern Nigeria. Also, the Nupe traders from Rabba brought goods such as knives, bridles, stirrups, and ornaments; brass, Nupe cloths, skinned leather and other item to Lokoja for sale. These items were conveyed by Canoe. The Kakandas were professional canoe ferrying and fishing, had most of their industrial and commercial activities located close to the waterfronts there was nothing like

unemployment. It has been a powerful engine for potential economic growth and employment generation in addition to sustainable livelihood for the coastal community. Thus, rapid expansion in maritime and coastal activities including tourism, offshore oil and gas, shipbuilding and maritime equipment are likely to emerge a major source of employment generation through blue-economy will lead to an important catalyst in the spread of industrial revolution in West Africa (Onuoha (2018); Lloyd, Onyeabor , Nwafor , Alozie, Nwafor, Mahakweabba, and Adibe (2020)

Empirical Review

Ogunleye, & Olugbenga, (2019), analyzed the potential for a blue economy in Nigeria. Data were collected from both primary and secondary sources. Two types of questionnaires were administered in this research. Both descriptive and inferential statistical methods were used. The descriptive methods were employed for tabulation and data summary. Orthogonal factors analytical procedure was used for data reduction, multiple regression analysis was used to study impact of the blue economy on socio-economic development. The inferential analysis used in the study were analytical procedure, multiple regression methods. The authors found that Nigeria has the potential to develop its blue economy sector to create jobs and promote sustainable development. They recommend that government should create policies and incentives to encourage investment in the blue economy sector.

Egbedokun, & Ajayi, (2019), examined the potentials of Blue Economy and how they could be harnessed for sustainable development of Nigeria. The research methodology involved a review of the current institutional framework of the major sectors of Blue Economy and their governance regimes in Nigeria. The authors found that the blue economy has the potential to boost Nigeria's economic growth by creating jobs and promoting sustainable development. They recommended that the government should create policies to encourage investment in the blue economy sector.

Akinwumi, (2020), investigate the impact of Blue Economy and Job Creation in Nigeria. Using a vector autoregressive model, reveals that the blue economy can create jobs in Nigeria, particularly in the areas of fisheries and aquaculture. From the findings he recommends that the government should invest in infrastructure and create policies to support the development of the blue economy sector.

Jouili and Allouche (2016) assessed the impact of seaports investment on the economic growth in Tunisia from 1983 to 2011. This study used an econometric model by employing the Cobb–Douglas production function. The results of the study show that the public investment in seaport infrastructures has a positive influence on Tunisian economic growth. The study also revealed that the biggest beneficiary of the seaport investment infrastructure is the service sector. These results are similar to those from studies conducted by Lloyd et al. (2020) both of which studies showed maritime transport to have positive and significant impacts on the economic growth of that country.

Okemwa (2019) carried out a study to establish how Kenya can harness the potentials of Blue Economy for a sustainable development. Questionnaires were administered to 35 respondents

randomly selected from the state's agencies and departments in charge of blue economy of which there was response from 32. The results after analysis revealed that for blue economy resources to be fully utilized and sustainably exploited to spur economic growth and development in Kenya, and also foster understanding within the various state agencies and departments responsible for the blue economy agenda, an Integrated National Maritime Policy should be implemented.

Elisha (2019) carried out a study that focused on the Blue Economy in Nigeria and the prospects for economic growth of the Niger Delta region. Findings showed terrorism, piracy, destruction of maritime ecosystems, Illegal arms trafficking, global climate change, are some challenges facing the blue economy. It recommended an improvement in model policy reform situations for a blue economy.

Vázquez et al. (2021) carried out a bibliometric analysis of blue economy, maritime, ocean and marine economies and Blue Growth to analyze the scientific production of this field of study. The key objective was to investigate if there is a connection between the blue economy and the circular economy and findings showed a developing and growing trend during the last decade.

Similarly, Sakyi and Immurana (2021) also assessed the seaport efficiency on total trade in the sample 27 countries in Africa from the period of 2010 to 2017. The study employed the aid of the dynamic system GMM estimation technique. The results of the study show seaports efficiency increase the trade balance in both the long and short run. Therefore, it is imperative to enhance seaport efficiency in Africa.

Theoretical Framework

Sustainable Development Theory

This study is anchored on the Sustainable Development Theory. Brundtland (1987) report also known as < our common future > gave the most recognized and widely accepted definition of the term sustainable development. Sustainable Development Theory has evolved from its early focus on environmental concerns to encompass a more holistic view that integrates economic, social, and environmental dimensions Crowther, Seifi and Moyeen (2018). Sustainable Development Theory emphasizes responsible and efficient resource preserving management Polman (2019). In the context of Nigeria's Blue Economy, this is essential for the marine and aquatic resources upon which the sector depends. Overexploitation and unsustainable practices can deplete these resources, threatening long-term job creation and economic growth. By adopting sustainability principles, Nigeria can ensure the continued availability of marine resources for future generations. Sustainable practices in the Nigerian's Blue Economy can contribute to economic stability, reduction in resource volatility and avoid resource depletion. Nigeria can create a more stable and predictable economic environment. This stability is essential for attracting investments, which, in turn, can lead to employment generation, trade and development in Nigeria (Ibrahim, 2020).

One of the primary goals of Nigeria's Blue Economy is employment generation. Sustainable development principles can facilitate the creation of long-term, quality jobs by ensuring that marine ecosystems are healthy and can support industries such as fishing, aquaculture, tourism, and shipping (Folami, 2017). Adopting sustainable practices in the Blue Economy can enhance Nigeria's international reputation, lead to the development of new industries, such as marine renewable energy, which can generate additional employment opportunities (Wackernagel, 2017). It can also attract partnerships and collaborations with other nations and international organizations that prioritize sustainable development. This can lead to opportunities for technology transfer, knowledge exchange, and foreign investment, further supporting employment generation and development (Danladi, and kore, & Gul, 2017).

The Blue Economy of any economy plays a vital role in its employment generation, trade and development as it affects every sector of the economy: whether financial sector, agricultural sector, transport sector, fishing sector, manufacturing sector etc. The purpose of this study is to examine the effect of Nigeria's Blue economy performance on employment generation, trade and development. Although, there are few studies on the impact of Nigerian's Blue economy on employment generation, trade and development. The outcome of this study will contribute to the existing body of knowledge as well as a research material in this area: Policy makers like the Ministry of the Blue Economy in Nigeria wish to ascertain which factors to control and how in order to create an enabling environment for thriving trade and investment, here the significance of this study to the ministry cannot be over emphasized, as it will create the necessary awareness of the inherent benefits of the blue economy on the employment generation, trade and development by examining the Nigerian case

METHODOLOGY

Data Sources

Based on the main objective of this study, the ex post facto research design was used to investigate and establish the potential impact of Nigeria's Blue Economy on employment generation, trade and development. This study relied basically on an annual data covering 1986 – 2022. This study comprises one dependent variable the gross domestic product (GDP) was proxy for trade and development in Nigeria and two independent variables Marine transport and Fishery Production proxy for Nigerian's Blue Economy and employment generation. The secondary data were sourced from the World Bank Data Based (2022).

Based on the research objective the study employs the Dynamic Ordinary Least Square (DOLS) and the Johansen Cointegrating Regression (JCR) estimation methods to evaluate the sustainability of the employment generation by Nigerian's blue economy. These methods are preferred because they help to achieve the main focus of this study which is to check the sustainability (long-run impact) of the employment generated by Nigerian's blue economy. These methods can be invoked only when the existence of a long-run relationship among the variables has been confirmed.

Whereas the DOLS method was developed by Stock and Watson (1993) and the JCR was developed by Park (1992). These estimation methods have areas of strength in relation to other estimators. The DOLS method helps to construct asymptotically efficient estimators that excludes the Cointegrating system feedback. It corrects for both small sample and simultaneity biases as well as solves the endogeneity problem by incorporating lags, leads and contemporaneous values into the estimation process. It also accounts for autocorrelation and residual non-normality as well as accommodates variables that are integrated of varying orders.

Similarly, the JCR is an efficient single equation regression which can be used to test Cointegrating vectors in a model where the variables are stationary at first difference. It is based on transforming variables in the Cointegrating regression and eliminates the second-order bias of the OLS estimator. These two estimation methods (DOLS and JCR) are adopted simultaneously in this study to facilitate robustness checks and ensure that the results are consistent irrespective of the method of analysis employed so as to provide evidence-based policy recommendations.

Model Specification

Following the specification of Ogunjimi (2021) and incorporating other important variables in the model, the general equation depicting the relationship between the variables of interest in this study can be specified as:

The functional relationship of variables in the model is represented as follows;

$$GDP = f(MATRANS, FISPROD) \dots\dots\dots (1)$$

Were,

GDP = Gross Domestic Product, MATRANS = Maritime Transport, FISHPROD = Fishery Production.

$$GDP = \alpha_0 + \alpha_1 MATRANS_t + \alpha_2 FISHPROD + \mu_t \dots\dots\dots (2)$$

α_0 = constant, α_1, α_2 = are model parameters, $\alpha_1, \alpha_2 > 0$ = a priori expectations,

μ_t = is a random distribution term.

In its basic form the DOLS regression model looks like this,

$$GDPT = \alpha_0 + \alpha_1 MATRANS_t + \alpha_2 FISHPROD_t + \sum d_3 MATRANS_t + \sum d_4 MATRANS_{t+1} + \sum d_5 MATRANS_{-1} + \sum d_6 FISHPROD_t + \sum d_7 FISHPROD_{t+1} + \sum d_8 FISHPROD_{t-1} + \mu_t \dots\dots\dots (3)$$

Equation 3 presents the Dynamic Ordinary Least Squares (DOLS) which shows the current and lagged relationship between selected variables trade and development in Nigeria.

Table 1: Descriptive Statistics of Variables

	GDP	MATRANS	FISHPROD
Mean	4.287737	2.900000	24.28299
Median	4.230061	2.340009	23.89370
Maximum	15.32916	2.440010	36.96508
Minimum	-2.035119	-3.220010	19.99025
Std. Dev.	3.958301	1.430010	3.710512
Skewness	0.465009	-0.664248	1.607764
Kurtosis	3.389531	3.401250	6.153921
Jarque-Bera	1.397917	2.648120	27.89441
Probability	0.497103	0.266053	0.000001
Sum	141.4953	9.560010	801.3386
Sum Sq. Dev.	501.3807	6.530021	440.5728
Observations	33	33	33

Source: Authors computation from E-views 9

The synopsis of the descriptive statistics of the variables of this study is presented in Table 1. The Table depicts that the average share of maritime transport is approximately 2.90% and its standard deviation is quite low (1.45%). Fish production ranges 36.96% and 19.99% with a mean and standard deviation of 24.2% and 3.71 respectively. The average share of GDP is between -2.03% and 15.3% restively. More so, all the variables are positively skewed. Also, only fish production is leptokurtic while the others are platykurtic. Similarly, as regards normality, the Jarque-Bera probability values show that only fish production is normally distributed.

Unit Root Test

Table 2 Summary of Unit Root Test Results

Augmented Dickey Fuller (ADF)			
	Level	First Difference	1 (d)
GDP	-2.88	-2.31**	1 (1)
MATRANS	-1.82	-3.33**	1 (1)
FISHPROD	2.28	2.41***	1 (1)

Source: Author's Computation from Eviews9

The Augmented Dickey Fuller (ADF) stationary test shows the results of the three economic variables used in this study. From the result, all the economic variables were stationary at first difference 1(1). That gross domestic product (GDP) 1(1), maritime transport (MATRANS) 1(1), fish production (FISHPROD) 1(1). This implies that the economic variables are fit and suitable to been used for

the analysis. Given the unit root properties of the variables, we proceeded to conduct the Johansen Cointegrating Test to ascertain the co-integration among the economic variables used in the study.

Table 3: Johansen Cointegrating Test

The Johansen Cointegrating test was carried out to ascertain the existence of a long-run relationship among the variable under investigation. The optimal lag length for all the variables was first determined before carrying out the Johansen Cointegrating test and 2 lags were found to be suitable in the case of this study.

Unrestricted Cointegrating Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.813724	35.91577	29.79707	0.0087
At most 1	0.448991	12.38838	15.49471	0.0392
At most 2 *	0.250899	4.044334	3.841466	0.0443

Unrestricted Cointegrating Rank Test (Maximum Eigenvalue)

Hypothesized No. of CE(s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None *	0.813724	23.52738	21.13162	0.0226
At most 1	0.448991	8.344048	14.26460	0.0448
At most 2 *	0.250899	4.044334	3.841466	0.0443

Source: Author's Computation from Eviews9

Johansen Cointegrating Test Result

The co-integrated with the trace test shows 2 co-integrated equations at 5% level of significance. This suggest that there exists a long –run relationship among the variables under study and therefore, it is key to conduct the dynamic ordinary least square (DOLS),to describe the relationship between the variable.

Table 4: Results of the Dynamic OLS Estimation

Variable	Coefficient	Std. Error	t-Statistic	Prob.
IMATRANS	-0.014536	0.080203	-0.181246	0.0650
IFISHPROD	4.009682	0.573867	6.987132	0.0022
C	-10.74530	2.770953	-3.877835	0.0179
R-squared	0.956203	Mean dependent var		1.922804
Adjusted R-squared	0.868608	S.D. dependent var		0.327411
S.E. of regression	0.118680	Sum squared resid		0.056340
Long-run variance	0.012226			

Source: Author's Computation from Eviews9

Discussion and Findings

Sequel to the Johansen Cointegrating test result which shows that the variables are cointegrated, the conditions for estimating equations using DOLS methods are satisfied.

H₀₁: Maritime transport has no significant impact on Gross Domestic Product in Nigeria.

The empirical results presented in Table 4, shows that there is an insignificant negative impact of maritime transport on the gross domestic product in Nigeria. Judging from the result in table 4, a percentage change in maritime transport (MATRANS) will decrease transaction by -0.014 units' *ceteris paribus*. The results clearly showed a negative relationship exist between maritime transport and gross domestic product, but the P- value fall within the acceptable 5% level of significance. Hence this study accepts the null hypothesis. The negative sign may be because of the negligence of the maritime transport sector. In sum, this result shows that the employment generated in the maritime transport sector is a panacea to employment generation in Nigeria. It is needful that, while the campaign for Nigerian's blue economy continues, the economy be diversified to ensure that employment is generated from other sectors of the economy especially sectors that are labor-intensive.

H₀₂: Fishery production has no significant impact on Gross Domestic Product in Nigeria.

Considering the result, a percentage change in fish production will increase gross domestic product by approximately 4.00 unit all things being equal. The result clearly showed there is a positive relationship between fish production gross domestic product in Nigeria, which confirms to a priori; however, the conformity implies that the level of Fishery production in the Nigerian economy within the period of study is proposition to engender trade and development, given that the P-value is slightly above the acceptable 5% level of significance. Hence, this study accepts the null hypothesis. This in line with Akinwumi, (2020), who investigate the impact of Blue Economy and Job Creation in Nigeria. His findings reveals that the blue economy can create jobs in Nigeria, particularly in the areas of fisheries and aquaculture

To test the goodness of the fit of the regression model, its overall significance and the serial correction, other statistical indicators were examined. The regression results illustrate that the explanatory variables account for 0.95, which indicates that 95% of the systematic variation in the gross domestic product (GDP) in Nigeria is accounted for by variables taken together. Further, the S.E. of regression and sum squared residuals are considerably low thus, certifying that the findings are of this study are valid for policy recommendation.

The findings from this study raised some policy issues reinforces the link between the Nigerian's Blue economy and employment generation, trade and development. Given that the Nigerian' blue economy operates in a macroeconomic environment, it is necessary that the must be enabling one in order for it to realize full potentials. The demand for the services of the Nigerian's blue economy is a derived demand.

Conclusion

Every government aims to achieve full employment. Nevertheless, this has remained an uphill task for many developing countries including Nigeria as the rate of unemployment soars at an alarming rate. Consequently, campaigns for the blue economy encompasses a pleasant potential to contribute to higher and quicker gross domestic product growth in Nigeria. Marine trade within the coastal, marine and maritime sectors might deliver food, transport, among different products and services as well as laying a foundation for diversifying the countries or region economy on the far side oil. And its coastal, marine trade and fish production sector is crucial to achieving the Sustainable Development Goals 14 (SDGs). This can be particularly necessary within the context of the accelerated growth that the country is experiencing with none concomitant reduction in poverty. The findings of this study could help the Nigerian government in formulating policies and regulations that would enhance the potentials of the Nigeria's blue economy for employment generation, trade and development.

Recommendations

Primarily, this study found that GDP generated by maritime transport has a long-run phenomenon. The non-significance of the maritime transport coefficients shows that GDP does not exert a significant influence on employment generation in Nigeria. As observed by Okolie, Anidiobu and Ugwuanyi (2018) the funds available to the fishery production sectors most especially the SMEs are inadequate to improve their performance let alone reduce unemployment rate. The government needs to exponentially increase the ease of doing business and access to finance by these SMEs, so they can also exponentially increase employment generation. Thus, volume of credits to the private sector are still at a low ebb and the lending rate is high. Hence, the monetary authorities should give special directives to financial institutions to prioritize the Maritime transport sector. This would encourage trade in the maritime sector and further improve their performance thereby creating more employment in the country. Besides, policies geared towards Nigeria's blue

economy should be implemented to ensure that all and sundry, especially those intending to enroll into maritime transport business, have access to credits facilities.

Secondly, the Nigerian government needs to pay more attention to the Nigerian Institute for Oceanography & Marine University and rolling out of maritime education and skills Coaching Centers and policies supporting comprehensive coaching skills, career, and most especially in areas of Research and Developing (R & D) should be encouraged, The challenges faced by the maritime transport sectors in continuing the process of value innovation to ensure the ocean remains “blue” are to be addressed in future studies.

References

- Adelaja, O. A., & Adesina, O. A. (2018). The Blue Economy: A Panacea for Job Creation and Economic Development in Nigeria. *International Journal of Management, Innovation & Entrepreneurial Research*, 4(2), 1-8.
- Adetona, T. (2020). The Nigerian maritime sector: actualizing the blue economy dream. *American Journal of Social Sciences and Humanities*, 5(1): 178-193.
- Akbulaev N, & Bayramli G (2020) Maritime transport and economic growth: Interconnection and influence (an example of the countries in the Caspian Sea coast; Russia, Azerbaijan, Turkmenistan, Kazakhstan, and Iran). *Mar Policy* 118:104005
- Akinwumi, A. A. (2020). Blue Economy and Job Creation in Nigeria. *Journal of Economics and Sustainable Development*, 11(18), 1-10.
- Crowther, D Seifi, S & Moyeen A (2018). The goals of sustainable development responsibility and governance. *University of Derby, UK*.
- Danladi, I .B, kore, B. M., & Gul, M, (2017) Vulnerability of the Nigerian coast: An insight into the sea level rise owing to climate change and anthropogenic activities. *Journal of African Earth Science* 134, 493-503.
- Attri, V. N. (2016). An emerging new development paradigm of the blue economy in IORA; A policy framework for the future. Chair Indian Ocean Studies, *Indian Ocean Rim Association (IORA)*, University of Mauritius.
- Egbedokun, A. O., & Ajayi, O. D. (2019). The Blue Economy as a Panacea for Nigeria's Economic Growth. *Journal of Economics and Sustainable Development*, 10(16), 1-8.
- Ekemeabasi, E. (2020). Blue Economy: the new frontier for marine environmental protection and sustainable development. *Journal of Economics and Sustainable Growth*, 2(2): 1-2

- Elisha, O. D. (2019). The Nigeria blue economy: Prospects for economic growth and challenges. *International Journal of Scientific Research in Education*, 12(5), 680-699.
- Folami, Taoheed Olalekan. (2017). Towards an integrated ocean government regime and implementation of the sustainable development goal 14 in Nigeria. *World Maritime University Dissertations*. 592
- Farouk, A. U., Jibril, R. S., Maigoshi, Z. S., Ahamad, T. H., & Bako, M. M. (2021). Broadening Nigeria's Revenue Base: Exploring Blue Economy Activities. *Applied Finance and Accounting*, 7(2), 9–13.
- Gani A (2017). The logistics performance effect in international trade. *Asian J Ship Log* 33(4):279–288.
- Ibrahim, Hamed Damilare (2020) Harnessing the potentials of blue economy for sustainable development of Nigeria). Unpublished dissertation. *World Maritime University Dissertations*. 673.
- Jouili TA, Allouche MA (2016) Impacts of seaport investment on economic growth. *Promet Traffic Transp* 28(4):365–370
- Lloyd C, Onyeabor E, Nwafor N, Alozie OJ, Nwafor M, Mahakweabba U, Adibe E (2020) Maritime transportation and the Nigerian economy: matters arising. *Commonwealth*.
- Ninawe, A S (2017) Blue Economy is the Economic Activities that directly or indirectly take Place in the Ocean and Seas, Use Outputs, Goods and Services into Ocean and Land Based Activities. *Examines in Marine Biology & Oceanography*. pp. 1-3.
- Ogunleye, O. O., & Olugbenga, O. J. (2019). Blue Economy: A Panacea for Sustainable Development in Nigeria. *International Journal of Economics, Commerce and Management*, 7(9), 134-146.
- Omotoso, K., & Ojekunle, O. (2019). The Blue Economy: A Catalyst for Job Creation and Sustainable Development in Nigeria. *Journal of Economics and Development Studies*, 7(4), 1-9.
- Okolo-Obasi, E. N. (2018). Blue Economy: A Catalyst for Job Creation in Nigeria. *Journal of Economics and Sustainable Development*, 9(16), 1-8.
- Oyediran, O. S., & Oyediran, I. A. (2019). Blue Economy and Sustainable Development in Nigeria: An Overview. *Journal of Economics and Sustainable Development*, 10(20), 1-7.
- Onuoha, C. O. (2018). Blue Economy and Sustainable Development in Nigeria: Challenges and Prospects. *Journal of Economics and Sustainable Development*, 9(21), 1-9.
- Okemwa, E. M. (2019). Harnessing the potentials of the blue economy for Kenya's sustainable development. [Master's thesis, World Maritime University] *World Maritime University Dissertations*. 1145.

- Okolie, P.I.P., Anidiobu, G.A. and Ugwuanyi, W.N. (2018). Entrepreneurship Financing and its Effect on Unemployment Rate in Nigeria: The MSMEs' Perspective, 2001–2017. *International Journal of Academic Research in Economics and Management Sciences*, 7(3): 251-266.
- Ogunjimi, J.A. (2021). The role of small and medium enterprises in tackling unemployment rate in Nigeria. *Journal of Economics and Sustainable Growth*, Vol 4 issue 1: 74-92
- Polman Paul (2019). A business model for sustainable, world economic forum. *Journal of Economics and Sustainable Development*, 10(17), 58- 72.
- Park, J.Y. (1992). Canonical Cointegrating Regressions. *Econometrica*, 60(1), 119-143.
- Sakyi D, Immurana M (2021) Seaport efficiency and the trade balance in Africa. *Maritime Transport*.
- Vázquez. R. M, García, J. M. &Valenciano, J. (2021). Challenges of the Blue Economy: Evidence and Research Trends. *Research Square*
- Wackernagel, Math (2017). Making the sustainable development goals consistent with sustainability. *Energy Research, Global Footprint*
- World Bank and United Nations Department of Economic and Social Affairs (World Bank-UN). (2017). The Potential of the Blue Economy: Increasing Long-term Benefits of the Sustainable Use of Marine Resources for Small Island Developing States and Coastal Least Developed Countries. *World Bank, Washington DC, USA*.



©2025 by the Authors. This Article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<http://creativecommons.org/licenses/by/4.0/>)