International Journal of Maritime and Interdisciplinary Research
©2025 IJMIR/Volume 7(3) SE (1) | ISSN: 2734-3286.
Journal homepage: www.ijmir.edu.ng

THE BLUE ECONOMY AND ECONOMIC GROWTH IN NIGERIA

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ABSTRACT

The study examined the relationship between the Blue Economy and economic growth in Nigeria. The study was guided by three research questions and three hypotheses. A correlational research design was adopted for the study. The population of the study consisted of top principal officers from six maritime industries in the Niger Delta region, Nigeria. The sample size was determined using the Taro Yamane formula, and a total of 201 respondents were selected from a study population of 404. The instrument for data collection was a self-structured questionnaire, which was validated by experts in the field of economics. The reliability of the instrument was tested using the Cronbach alpha test and the result yielded a .84 coefficient. The questionnaire was personally administered to the respondents with the aid of research assistants. The regression statistical model was used to test the null hypotheses at a 0.05 level of significance using the Statistical Package for Social Science (SPSS) version 25.0. A total of 201 questionnaires were distributed and 186 (93%) were retrieved, valid and used for the analysis. The findings of the study revealed that the Blue Economy, including marine resources, marine transport, and fisheries, has a strong positive relationship with GDP per capita in Nigeria. In conclusion, the Blue Economy enhance economic growth in Nigeria. Based on the findings, the study recommended that governments and stakeholders should invest in developing marine resources, improving marine

transport infrastructure, and promoting sustainable fishery practices to boost Nigeria's GDP per capita.

Keywords: Blue Economy; Marine Resources; Marine Transport; Fishery; GDP per capita

1.0 INTRODUCTION

Until the late 1960s, Nigeria's economy relied substantially on agricultural products and solid minerals for its foreign exchange. However, the discovery of oil and the subsequent boom in the 1970s led to the abandonment of other vital sectors, particularly agriculture and the blue economy (Adeyemi & Abiodun, 2013). The blue economy, which relates to the exploitation and preservation of the marine environment, has emerged as a crucial pathway for sustainable economic development. With a coastline spanning approximately 870km and about 3,000 kilometres of inland waterways, Nigeria possesses abundant natural resources including petroleum, natural gas, tin, columbite, iron ore, coal, zinc, limestone, lead, and other minerals that could significantly impact its GDP per capita. The blue economy's significance extends beyond resource extraction, as oceans protect biodiversity, provide jobs and food, drive economic growth, keep the planet cool, produce 65% of the oxygen that humans breathe, and absorb about 30% of global CO2 emissions (World Bank, 2016). The ocean already encompasses two-thirds of the Earth's surface and represents the only continuously connected ecosystem, holding immense opportunities for human benefits. It is crucial to human existence through climate temperature regulation, provision of seafood and nutrition for millions of people, and sequestration of 30% of carbon dioxide emission (Koundouri & Giannouli, 2015; FAO, 2011). The growing importance of the blue economy is further emphasized by its role in global trade. With an estimated 80 percent of world trade volume covered by the sea, international shipping and ports provide crucial linkages in global supply chains essential for all countries to access global markets (UNCTAD, 2016; World Bank Group, 2016). For Nigeria, this presents significant opportunities for enhancing GDP per capita through maritime activities. However, current challenges in Nigeria reflect sectoral institutions competing for ocean space management, leading to inefficiency, poor coastal and marine management, and dysfunctional development plans (Economist Intelligence Unit, 2015). While there is a clear understanding of the need for sustainable alternatives in human interactions and economic activities with the environment, there remains a lack of consensus on the critical factors needed to

achieve sustainable objectives through adequate harnessing of ocean resources (Park & Kidow, 2014). The potential of the blue economy to stimulate growth is particularly relevant for the Niger Delta region and the broader Nigerian economy (Abdullahel, 2017). Beyond traditional benefits, dramatic changes are anticipated within the ocean space in the coming decades due to the surging Nigerian population, emerging economies and trade, search for alternative energy, and rapid technological advancement (Kamanlioglu, 2011; Visbeck et al., 2014).

1.1 STATEMENT OF THE PROBLEM

The Blue Economy, encompassing aquatic and marine spaces including oceans, seas, coasts, lakes, rivers, and underground water, represents a significant opportunity for economic diversification and growth in Nigeria. Despite possessing a large coastal area and abundant marine resources, Nigeria has failed to adequately identify and harness the blue economy as a driver of sustainable development (Elisha, 2019). The sector encompasses various productive activities including fisheries, aquaculture, tourism, transport, shipbuilding, energy, bioprospecting, and underwater mining, yet its impact on GDP per capita remains understudied and potentially underutilized. While the blue economy could provide Nigeria with opportunities for low-carbon and resource-efficient economic growth, enhance livelihoods, create employment, and reduce poverty, the nation continues to rely heavily on petrol-dollar revenue. This overdependence on oil and neglect of other sectors, including the blue economy, has significantly affected the nation's economic performance. Although scholars like Amrah (2017), ul Haq and Boz (2020), and Hamisu (2019) have established that marine resource extraction contributes substantially to national development, the sector's importance and contribution to GDP per capita are often underestimated and disregarded. Furthermore, Olobaniyi and Omo-Irabor (2016) emphasized the high revenue-generating potential of marine resources, yet this potential remains largely untapped in terms of its impact on GDP per capita. The study aims to examine the blue economy and economic growth in Nigeria. The specific objectives are to investigate the extent marine resources, marine transport and fisheries affect GDP per capita in Nigeria. Meanwhile, the Blue Economy (independent variable) is a proxy by Marine Resources, Maritime Transport, and Fishery, while the Dependent Variable (Economic Growth) dimension is GDP Per Capita.

1.2 RESEARCH QUESTIONS

The following questions were raised to guide the study:

To what extent do marine resources affect GDP per capita in Nigeria?

To what extent does marine transport affect GDP per capita in Nigeria?

To what extent does the fishery affect GDP per capita in Nigeria?

1.3 HYPOTHESES

The following hypotheses were formulated and statistically tested at a 0.05 level of significance:

There is no significant relationship between marine resources and GDP per capita in Nigeria

There is no significant relationship between marine transport and GDP per capita in Nigeria

There is no significant relationship between fisheries and GDP per capita in Nigeria

2.0 LITERATURE REVIEW

2. 1 CONCEPTUAL FRAMEWORK

The conceptual framework illustrates the relationship between the Blue Economy and Economic Growth. The Blue Economy is represented by three key components: Marine Resources, Maritime Transport, and Fishery, which serve as independent variables. The dependent variable is Economic Growth, which is measured by GDP Per Capita.

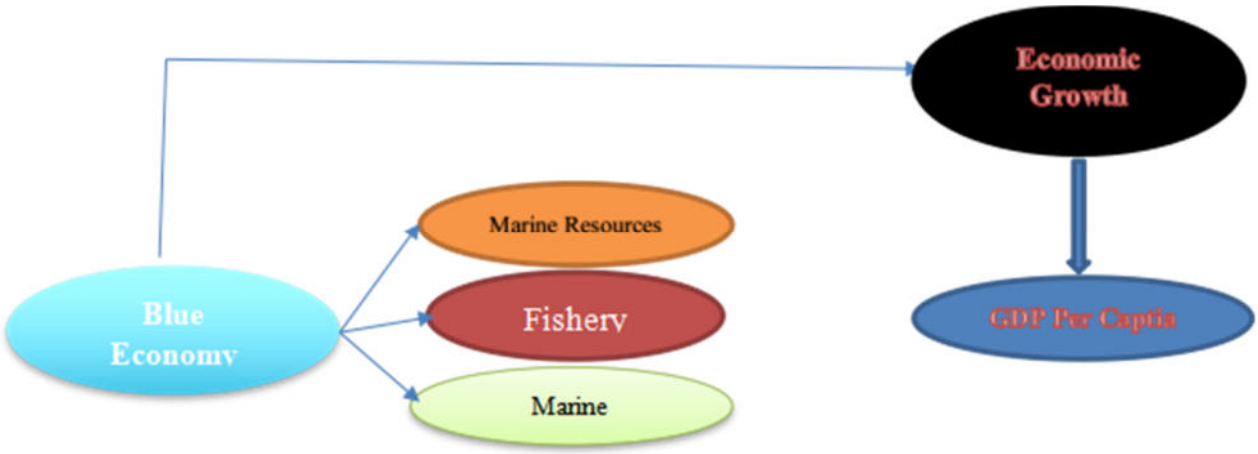


Fig. 1: Conceptual Framework. Source: Conceptualized by the researcher based on the works of Keen et al. (2018) and Sarker et al. (2018) in Elisha (2021).

2.1.1 The Origins and Evolution of the Blue Economy Concept

The concept of the Blue Economy emerged through two distinct paths in the 1990s and 2010s. Initially, Professor Gunter Pauli introduced it as an economic philosophy in 1994 when the United Nations requested his insights on future business models in preparation for COP3 and the Kyoto Protocol (Ebarvina, 2016). However, the concept gained significant momentum and a more specific marine focus during the preparatory process for Rio+20, when Pacific Small Island Developing States (SIDS) advocated for greater consideration of marine resources in sustainable development (Ebrahim, 2012). The term's modern interpretation was solidified at the 2012 Rio+20 Summit by the United Nations Environment Program. The name draws inspiration from the colours of the sky and water, representing an application of green economy principles to ocean-related development (UNEP, 2013). This evolution reflects the growing recognition of oceans as crucial development spaces, particularly for coastal nations and island states. Various organizations have contributed to defining the Blue Economy. The World Bank (2016) describes

it as the sustainable use of ocean resources for economic growth, improved livelihoods, and jobs while protecting the ocean ecosystem's health. The European Commission takes a broader view, encompassing all economic activities associated with oceans, seas, and coasts. Conservation International, as noted by Bertazzo in van den Bragt (2020), extends the concept to include non-market benefits such as carbon storage, coastal protection, and cultural values. The United Nations Economic Commission for Africa emphasizes that the Blue Economy represents an alternative economic model acknowledging nations' dependency on oceans while maintaining sustainability and social justice principles (UNECA in Abdul-Wakeel et al., 2023). This evolution in understanding demonstrates how the concept has developed from an initial economic philosophy to a comprehensive framework for sustainable ocean resource management.

2.1.2 Legal and Policy Framework of Nigeria's Blue Economy

Nigeria's potential for blue economy implementation is significant, yet the country faces several challenges in its legal and policy frameworks. The current structure reveals a fragmented approach to maritime governance, where key sectors operate in isolation rather than under a unified system. The shipping and fisheries sectors, while being the most developed maritime economy sectors in Nigeria, operate under separate policy regimes with no comprehensive framework bridging them together (Kimball in Ibrahim, 2018). The country's shipping policy, widely considered obsolete, operates independently from other maritime sectors. Similarly, the Agricultural Promotion Policy (2016-2020) addresses agricultural objectives while excluding fisheries, despite both falling under the Federal Ministry of Agriculture and Rural Development (FMARD). This disconnect extends to the National Fisheries Development Committee (NFDC), which formulates fisheries policies in isolation from FMARD, creating a disjointed approach to maritime governance (Federal Ministry of Agriculture and Rural Development, 2016). The legal framework, which should provide the legislative foundation for blue economy development, reveals several inadequacies. Some of Nigeria's shipping and fisheries laws have created operational conflicts and duplicated statutory functions. A notable example is the overlap between the Nigerian Ports Authority (NPA) and Nigerian Maritime Administration and Safety Agency (NIMASA) operations, leading to inter-agency rivalries and revenue losses (Iheduru, 2023). The Sea Fisheries Act 1992 exemplifies the

outdated nature of some maritime legislation, lacking provisions for contemporary challenges such as Illegal, Unreported and Unregulated Fishing (IUUF) and other evolving sustainability principles. These legislative gaps and policy fragmentations contradict the essence of Marine Spatial Planning (MSP), which aims to unify and coordinate maritime stakeholders through shared policy direction. For Nigeria to establish an effective blue economy regime, there is a pressing need to modernize existing legislation to align with current ocean sustainability requirements and create a more cohesive policy framework (Iheduru, 2023).

2.1.3 The Legal Framework and Definition of Nigeria's Cabotage Act

The Coastal and Inland Shipping (Cabotage) Act 2003 represents a significant milestone in Nigeria's maritime reforms, particularly in reshaping domestic coastal trade regulations. While designed to limit foreign participation in Nigeria's coastal trade, the Act maintains provisions for foreign involvement under specific conditions (Nwokedi et al., 2019). The concept of cabotage, as defined in Black's Law Dictionary (8th Ed.), encompasses trade along a country's coast and the transport of goods or passengers between ports within the same country. The Webster's Dictionary extends this definition to include navigation in coastal waters and the restriction of coastal waters and airspace for domestic traffic. Section 2 of the Cabotage Act provides a comprehensive definition that includes the carriage of goods and passengers in Nigerian waters, particularly concerning mineral resource exploitation, marine transportation activities of a commercial nature, and the carriage of goods regardless of commercial value. The Act specifically defines "place above Nigerian waters" to encompass various maritime structures, including vessels, offshore drilling units, production platforms, artificial islands, and related installations (Ndikom & Buhari, 2021). The legal framework established by the Act aims to create a robust domestic maritime sector while protecting national interests. According to Elisha (2019), this legislation represents one of the most significant attempts to reform Nigeria's maritime sector, although its implementation has faced numerous challenges since its enactment.

2.1.4 Overview of Economic Growth in Nigeria

Nigeria's economic growth trajectory has been marked by significant fluctuations, particularly in its GDP per capita performance over recent decades (Udemba, 2020). As Africa's largest economy

and most populous nation, Nigeria's economic indicators have drawn considerable attention from economists and policymakers alike. The country's GDP per capita has experienced both promising growth periods and concerning declines, reflecting the complex interplay of various economic factors. In the early 2000s, Nigeria witnessed substantial growth in GDP per capita, driven primarily by rising oil prices and increased foreign investment. According to Igbeghe et al. (2023), this growth was significantly influenced by global energy market dynamics, particularly the surge in oil prices, which directly impacted Nigeria's export earnings and economic performance. The country's GDP per capita demonstrated remarkable growth during this period, rising from $377 in 2000 to $2,292 in 2014, marking one of the most significant economic expansions in the nation's history. This growth coincided with various economic reforms and increased efforts toward economic diversification. However, the period following 2014 has been characterized by more challenging economic conditions. Oyelaran-Oyeyinka and Abejirin (2024) document that Nigeria's GDP per capita experienced a notable decline between 2015 and 2020, falling from US$2,687 to US$2,097. This decline coincided with significant geopolitical risks affecting global oil markets, which, as analyzed by Ngo et al. (2024), had substantial impacts on resource-dependent economies like Nigeria. The economic downturn was further intensified by the COVID-19 pandemic, leading to significant disruptions in economic activities and international trade. Recent economic data has shown some signs of recovery, though challenges persist. Research by Igbeghe et al. (2023) highlights that while Nigeria's overall GDP has grown, the per capita figures have struggled to keep pace with population growth, raising concerns about the inclusive nature of economic development. Despite being Africa's largest economy, Nigeria's GDP per capita remains below many smaller African economies, suggesting persistent structural challenges in wealth distribution and economic planning. This situation emphasizes the need for more diversified economic growth strategies beyond oil dependency. Looking at sectoral contributions, Anyanwu (2000) added that while the service sector has shown promising growth, contributing significantly to GDP, the manufacturing sector's contribution to per capita income remains relatively low. This imbalance has implications for job creation and sustainable economic growth, particularly given Nigeria's rapidly growing population. The current economic landscape presents both opportunities and challenges for Nigeria's GDP per capita growth. While the country continues to attract foreign investment and implement economic reforms, addressing infrastructure deficits, improving human

capital development, and diversifying the economy remain crucial for sustained improvements in per capita income levels (Elisha, 2023).

2.1.5 Marine Resources and GDP Per Capita in Nigeria

Nigeria's marine resources present significant potential for boosting the country's GDP per capita through sustainable exploitation of ocean-based economic opportunities. According to Osuji and Agbakwuru (2024), Nigeria's extensive coastline and maritime resources offer diverse economic possibilities, including fishing, shipping, offshore oil and gas extraction, and marine tourism, all of which can contribute substantially to national income. The contribution of marine resources to Nigeria's economic growth has been particularly notable in the fisheries sector. Elisha (2023) further reported that the fishing industry alone provides employment for over one million Nigerians and contributes significantly to the country's protein supply, though its full economic potential remains largely untapped. The sector's contribution to GDP could be substantially increased through better management and modern fishing practices. However, Sanni (2022) argues that Nigeria has not fully capitalized on its marine resources compared to other maritime nations. The study suggests that increased foreign direct investment in the maritime sector, particularly in port infrastructure and shipping services, could significantly boost GDP per capita. The research emphasizes that countries with well-developed blue economies typically demonstrate higher per capita income levels, indicating the potential economic benefits Nigeria could realize through better utilization of its marine resources and implementation of comprehensive blue economy strategies.

2.1.6 Marine Transport and GDP Per Capita in Nigeria

Based on these studies, maritime transportation plays a significant role in Nigeria's economic development and GDP growth. Elisha (2019) opined on the blue economy's potential in Nigeria, emphasizing how marine transport contributes to economic diversification and growth prospects. The maritime sector's impact on GDP per capita is particularly notable through its facilitation of international trade and the creation of employment opportunities. Imide et al. (2022) provide empirical evidence linking maritime business performance to real GDP growth in Nigeria. Their research demonstrates that improvements in maritime infrastructure and operations correlate

positively with economic indicators, suggesting that investments in the maritime sector can drive broader economic development. More recent research by Ifegha et al. (2023) examines specific factors influencing maritime sector performance in Nigeria. Their findings suggest that enhancing maritime sector efficiency through better infrastructure, policy reforms, and technological adoption could significantly boost GDP per capita. The authors also note that challenges such as inadequate infrastructure and regulatory issues need to be addressed to fully capitalize on the sector's potential for economic growth.

2.1.7 Fishery and GDP Per Capita in Nigeria

The fishery sector has demonstrated a significant influence on Nigeria's GDP per capita, as evidenced by recent research. Odioko and Becer (2022) conducted a comprehensive economic analysis of Nigeria's fisheries sector, highlighting its contribution to both employment generation and national income. Their study emphasizes the sector's potential for enhancing economic growth through sustainable fishing practices and improved management systems. Research by Uzonwanne et al. (2023) provides empirical evidence of a positive correlation between fish production and GDP growth in Nigeria. Their findings suggest that investments in fishery infrastructure and technology can lead to substantial improvements in economic output and per capita income. The study particularly emphasizes how commercial fishing operations contribute to export earnings and domestic food security. Olaifa et al. (2022) examine strategies for enhancing fish production in Nigeria, noting its implications for both food security and economic growth. Their research indicates that modernizing fishing techniques and developing aquaculture could significantly boost GDP per capita. The authors also highlight how improved fishery management practices can create sustainable economic benefits through increased productivity and market expansion.

2.2 Theoretical Framework

The theoretical framework is the structure that can hold or support a theory of a research study by introducing and describing the theory(s) that best explain why the research problem under study exists. The study is anchored on the resource-based view theory.

2.2.1 Resource-Based View Theory

The Resource-Based View (RBV) theory traces its foundations to Edith Penrose's seminal 1959 work "The Theory of the Growth of the Firm." In that publication, Penrose introduced the revolutionary concept of viewing firms as collections of productive resources (Vlačić et al., 2021). She argued that these resources could be strategically deployed to achieve growth and establish competitive advantages in the market. While Penrose laid this crucial theoretical groundwork, the theory evolved significantly through subsequent scholarly contributions, particularly through Jay Barney's influential work during the 1980s and 1990s. His research further refined and formalized the framework, establishing RBV as a fundamental theory in strategic management. Barney's contributions helped transform Penrose's initial insights into a comprehensive theoretical framework that explains how firms can achieve sustainable competitive advantage through their unique resource configurations. El Nemar et al. (2022) added the establishment of the resource-based theory by stating that firms possess resources which enable firms to achieve competitive advantage and lead to superior long-term performance. The resource-based view is a managerial framework used to determine the strategic resources a firm can exploit to achieve sustainable competitive advantage. Valuable and rare resources can lead to the creation of a competitive advantage. That advantage can be sustained over longer periods to the extent that the firm can protect against resource limitation, transfer or substitution (Christine, 2010). Information system resources may take on many of the attributes of dynamic capabilities and may be useful to firms operating in a rapidly changing environment. Information resources may not directly lead the firm to a position of superior sustained competitive advantage, but they may be critical to the firm's long-term competitiveness in unstable environments if they help it develop, add, integrate and release other key resources over time (Wade & Hulland, 2014). Resources such as adequate finance and competent human resources are crucial for the effectiveness of the blue economy and market entry strategy management practices in a rapidly changing environment (Wade & Hulland, 2014). The dynamic capabilities which consist of the activities and mechanisms of managing resources in the creation of value enable companies to manage their activities for improvement in performance. It is expected that a country which has adequate and rare resources would have more influence on the performance of the blue economy. The Resource-Based View (RBV) is relevant to this study because it aids the government in authority and policymakers to analyse and interpret internal resources of the nation and emphasizes resources and capabilities in formulating a strategy to achieve sustainable competitive advantages. Resources may be considered as inputs that enable

the nation to carry out its activities. This theory is also relevant to the study as it explains how oceanic resources at the country's disposal are a critical factor to consider when implementing blue economy strategies.

2.3 Review of Related Empirical Studies

Hamisu (2019) conducted desktop research on Nigeria's blue economy potential, focusing on oil and gas. The study found that growing ocean pressures have led to increased policy attention and the development of governance frameworks for sustainable ocean management. Psaraftis (2021) analyzed maritime transport's impact in 20 EU countries from 2007-2018. The study found that a 10% increase in maritime transport, related pollution, and port infrastructure investment corresponded to GDP growth of 1.6%, 0.4-0.8%, and 0.7%, respectively. Ul Haq and Boz (2020) assessed tea farm sustainability in Turkey across 138 farms. They found an average sustainability index of 0.39, with economic sustainability (0.23) lagging behind social (0.51) and environmental (0.43) measures. High-sustainability farms used less hired labour and fewer chemical fertilizers. Amarh (2017) examined Ghana's blue economy through document review and interviews with key stakeholders. The study highlighted the blue economy's importance for national development while noting challenges like pollution from illegal mining and scientific fishing.

3.0 METHODOLOGY

The study adopted a deductive approach and a quantitative methodology to investigate the relationship between the blue economy and economic growth in Nigeria. A correlational research design was used to measure the relationship between the independent and dependent variables. A total of 404 senior officials from six prominent maritime organizations in Nigeria participated in the study. These organizations included the Nigerian Maritime Administration and Safety Agency (NIMASA) with 116 participants, Nigerian Ports Authority (NPA) with 105 participants, Nigerian Shipowners Association (NSA) with 54 participants, National Inland Waterways Authority (NIWA) with 52 participants, Nigerian Shippers Council (NSC) with 39 participants, and Federal Ministry of Transport (FMT) with 38 participants. The participants held key roles such as directors, managers, and department heads. The sample size was determined using the Taro Yamane

formula, and a total of 201 respondents were selected. The instrument for data collection was a self-structured questionnaire, which was validated by experts like Economists, maritime experts, blue economy specialists, environmental scientists, policy analysts, industry stakeholders, and academic researchers. The reliability of the instrument was tested using the Cronbach alpha test. The questionnaire was personally administered to the respondents with the aid of research assistants. The regression statistical model was used to answer the research questions and also test the null hypotheses at a 0.05 level of significance using the Statistical Package for Social Science (SPSS) version 25.0. A total of 201 questionnaires were distributed and 186 representing (93%) were retrieved and used for the analysis.

4.0 RESULTS AND DISCUSSIONS

Research Question One: To what extent do marine resources affect GDP per capita in Nigeria?

Hypothesis One: There is no significant relationship between marine resources and GDP per capita in Nigeria

Table 1: Showing analysis for Research Question one and Hypothesis One

		Marine Resources	GDP per capita
Marine Resources	Pearson Correlation	1	.861
	Sig. (2-tailed)		.002
	N	186	186
GDP per capita	Pearson Correlation	.861	1
	Sig. (2-tailed)	.002	
	N	186	186

Research question one states "To what extent do marine resources affect GDP per capita in Nigeria?" The result from the analysis reveals that there is a strong positive relationship ($r = 0.861$) between marine resources and GDP per capita in Nigeria. This indicates that changes in marine resources have a substantial association with changes in GDP per capita. The hypothesis states, "there is no significant relationship between marine resources and GDP per capita in Nigeria." The analysis rejects this hypothesis, as evidenced by the significance value ($p = 0.002$), which is considerably lower than the 0.05 threshold. Therefore, we reject the null hypothesis, meaning there

is strong statistical evidence to conclude that marine resources significantly influence GDP per capita in Nigeria. These findings align with existing literature that suggests marine resources have a substantial economic impact. The strong statistical relationship indicates that Nigeria's marine resources are effectively contributing to economic growth, with their economic benefits directly translating into per capita GDP growth. This suggests that factors such as infrastructure development, policy implementation, and resource management practices are working together to enable marine resources to positively impact economic output.

Research Question Two: To what extent does marine transport affect GDP per capita in Nigeria?

Hypothesis Two: There is no significant relationship between marine transport and GDP per capita in Nigeria

Table 2: Correlation Result for Hypothesis Two Test

		Marine Transport	GDP per capita
Marine Transport	Pearson Correlation	1	.923
	Sig. (2-tailed)		.001
	N	186	186
GDP per capita	Pearson Correlation	..923	1
	Sig. (2-tailed)	.001	
	N	186	186

Research question two states "To what extent does marine transport affect GDP per capita in Nigeria?" The result from the analysis reveals that there is a very strong positive relationship (r = 0.923) between marine transport and GDP per capita in Nigeria. This indicates that changes in marine transport have a substantial and direct association with changes in GDP per capita. The hypothesis states "There is no significant relationship between marine transport and GDP per capita in Nigeria." The analysis rejects this hypothesis, as evidenced by the significance value (p = 0.001) which is considerably lower than the 0.05 threshold. Therefore, we reject the null hypothesis, meaning there is strong statistical evidence to conclude that marine transport significantly influences GDP per capita in Nigeria. These findings align with the literature that emphasizes the crucial role of marine transport in economic development. The strong statistical relationship demonstrates that Nigeria's marine transport sector is effectively contributing to

economic growth, with improvements in maritime transportation infrastructure and operations directly translating into increased per capita GDP. This suggests that investments in port facilities, shipping operations, and maritime infrastructure are successfully driving economic growth and development in Nigeria.

Research Question Three: To what extent does fishery affect GDP per capita in Nigeria?

Hypothesis Three: There is no significant relationship between fishery and GDP per capita in Nigeria

Table 2: Showing analysis for Research Question Three and Hypothesis Three

		Fishery	GDP per capita
Fishery	Pearson Correlation	1	.897
	Sig. (2-tailed)		.001
	N	186	186
GDP per capita	Pearson Correlation	..897	1
	Sig. (2-tailed)	.001	
	N	186	186

Research question three states "To what extent does fishery affect GDP per capita in Nigeria?" The result from the analysis reveals that there is a very strong positive relationship ($r = 0.897$) between fishery and GDP per capita in Nigeria. This indicates that changes in fishery activities have a substantial and direct association with changes in GDP per capita. The hypothesis states "There is no significant relationship between fishery and GDP per capita in Nigeria." The analysis rejects this hypothesis, as evidenced by the significance value ($p = 0.001$) which is considerably lower than the 0.05 threshold. Therefore, we reject the null hypothesis, meaning there is strong statistical evidence to conclude that fishery significantly influences GDP per capita in Nigeria. These findings align with the literature that emphasizes the importance of the fishery sector in economic development. The strong statistical relationship demonstrates that Nigeria's fishery sector is effectively contributing to economic growth, with improvements in fish production, aquaculture development, and fishing practices directly translating into increased per capita GDP. This suggests that investments in fishing infrastructure, modern techniques, and sustainable fishing practices are successfully driving economic growth and development in Nigeria.

4.1 DISCUSSION

This study investigated the relationship between the Blue Economy and GDP per capita in Nigeria, with a focus on marine resources, marine transport, and fishery. The findings of this study are discussed in light of existing literature. The study found a significant positive relationship between marine resources and GDP per capita in Nigeria. This finding is consistent with Psaraftis (2021), who found that a 10% increase in maritime transport corresponded to a 1.6% increase in GDP growth in 20 EU countries. Similarly, Hamisu (2019) noted that Nigeria's blue economy has the potential to contribute significantly to the country's GDP. The strong relationship between marine resources and GDP per capita suggests that the exploitation of marine resources can have a positive impact on the country's economic development. The study also found a significant positive relationship between marine transport and GDP per capita in Nigeria. This finding is supported by Psaraftis (2021), who found that maritime transport-related investment corresponded to a 0.7% increase in GDP growth in 20 EU countries. Additionally, Amarh (2017) highlighted the importance of maritime transport in Ghana's blue economy, noting its potential to contribute to the country's economic development. The strong relationship between marine transport and GDP per capita suggests that investing in maritime transport infrastructure can have a positive impact on the country's economic growth. The study found a significant positive relationship between fishery and GDP per capita in Nigeria. This finding is consistent with ul Haq and Boz (2020), who found that sustainable farming practices, including those in the fishery sector, can contribute to economic sustainability. Similarly, Hamisu (2019) noted that Nigeria's fishery sector has the potential to contribute significantly to the country's GDP. The strong relationship between fishery and GDP per capita suggests that the development of the fishery sector can have a positive impact on the country's economic development.

5.0 CONCLUSION

In conclusion, the findings of this study revealed that the Blue Economy, including marine resources, marine transport, and fishery, has a strong positive relationship with GDP per capita in Nigeria. This suggests that the Blue Economy has the potential to contribute significantly to the country's economic development. The study's results are consistent with existing literature, which highlights the importance of the Blue Economy in promoting economic growth and development.

The findings of this study have implications for policymakers and stakeholders seeking to promote economic growth and development in Nigeria. Overall, the study provides evidence that investing in the Blue Economy can have a positive impact on Nigeria's economic development and therefore recommends that the government and relevant stakeholders prioritize the development of the Blue Economy. This can be achieved through investments in infrastructure, technology, and training.

5.1 RECOMMENDATIONS

The government and relevant stakeholders should invest in the development of marine resources, such as oil and gas, to increase their contribution to Nigeria's GDP per capita. This can be achieved through the provision of infrastructure, technology, and training to enhance the extraction and processing of marine resources. The government should prioritize the improvement of marine transport infrastructure, such as ports and shipping facilities, to increase the efficiency and competitiveness of Nigeria's maritime transport sector. This can be achieved through investments in modernization, expansion, and maintenance of existing infrastructure, as well as the development of new facilities. The government and relevant stakeholders should promote the sustainable development of the fishery sector through measures such as regulation of fishing practices, provision of training and support to fishermen, and investment in fish processing and marketing infrastructure. This can help to increase the sector's contribution to Nigeria's GDP per capita, while also ensuring the long-term sustainability of the country's fishery resources.

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