



International Balance of Payment and Economic Growth in Nigeria (1990- 2019)

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Author's contribution

The sole author designed, analysed, interpreted and prepared the manuscript.

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ABSTRACT

This study dwelt on balance of payments and the growth of Nigeria's economy between the periods 1990 to 2019. The study's main goal was to analyse the impact of the balance of payments on the Nigerian economy's growth. This research relied on secondary data from the Central Bank of Nigeria's statistical bulletin 2019. The dependent variable was real gross domestic product, whereas the independent variables were oil export, non-oil export, oil import, and non-oil import. The variables were found to be stationary at the first difference using a unit root test (1). As a result, the co-integration test was used, which revealed a long-term link between the variables. The paper used the Vector error correction model (VECM) and discovered that in the long run, the short-run disequilibrium can be addressed at a rate of 0.03 percent. As a result, we find that the balance of payment position has little impact on Nigeria's economic growth. As a result, it was suggested, among other things, that Nigeria's federal government implement more export-friendly regulations on balance of payment issues in order to boost economic growth.

Keywords: International balance of payment; economic growth; oil exports; non-oil exports.

1. INTRODUCTION

Balance of payments which is also known as BOPs has been a good indicator towards the

growth of a country in terms of her trade relationships with other countries of the world. Countries of the world today engage in international trade so as to achieve a favourable

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balance of payments for their countries through a favourable exchange rate. The entries of the credit and debit transactions involving two countries are of more important for record purposes thereby showcasing the performance of the both countries [1].

Transactions involving payments by non-residents to residents of any economy are classed as credit entries by Ndugbu [2], whereas payments by residents of an economy to non-residents are classified as debit entries.

Economic transactions such as an exchange of value, which is often an act in which title to an economic good is transferred, the performance of services, or the transfer of title to assets from one country's resident to another, make up the balance of payments [3]. Buying, selling, borrowing, and lending, as well as investment and disinvestment, income from investment, and repatriation of profits and grants, are all examples of these activities. It entails the provision and reception of real resources (goods, services, and money), as well as precise changes in claims and liabilities to the rest of the world, according to Nzotta [4]. Credit plus entries is used for transactions that result in a payment inflow, whereas debit or minus entries are used for transactions that result in a payment outflow. The balance of payments account summarises a country's financial transactions with the rest of the world for a given year.

Today, International trade which brought international finance has made it open for countries to benefit from one another. Countries today add favourable values to their balance of payments records by engaging more on the production of goods which they have more comparative advantages over other economies, thereby exporting the excess of their products to the needy countries thereby enhancing their balance of payment position through foreign exchange which all geared towards enhancing the growth of the economy [5].

The major components of balance of payments in Nigeria economy could be viewed through the financial values of trade transactions between the oil and non-oil imports and exports with other countries. In order to enhance economic growth of a given nation, countries seek to attain a favourable balance of payments position or at its equilibrium [6].

The theory of comparative cost advantage has made it a focused point for countries to specifically concentrate on producing the commodities and/or services which they have lesser production cost than other countries of the world. When these products are produced in excess, countries with such advantage would seek for foreign exchange through exporting those commodities after reserving for her domestic consumptions thereby increasing a favourable balance of payment position for her economy through the exports from such commodities. In the Nigerian competition, they have a distinct edge in terms of exporting both oil and non-oil commodities in order to convert foreign currency and improve the country's balance of payments with other countries.

1.1 Statement of the Problem

Many scholars have conducted studies on the subject in the past in order to determine how the balance of payments (BOP) affects the growth of the Nigerian economy throughout various time periods. According to the few empirical evidences reviewed in the work by various researchers, there is a missing gap to be filled, which is data updates on the variables of balance of payments and real gross domestic product in Nigeria as of the time of this research, as well as the inclusion of data on oil and non-oil imports and exports.

Similarly, the study is in conformity with the reviewed studies of the empirical evidences in the choice of variables, hence there is need to update the data of the variables in order to determine the effect of balance of payments on the growth of Nigeria's economy up to the current possible year for the researcher.

1.2 Objectives of the Study

The main objective of this study is to determine the effect of balance of payments on the growth of Nigerian economy. Thus, the specific objectives are to:

1. Investigate the relationship between oil exports on economic growth of Nigeria.
2. Determine the effect of non-oil exports on the growth of Nigerian economy.
3. Ascertain the effect of oil import on economic growth of Nigeria.
4. Analyze the effect of non-oil import on the growth of Nigerian economy.

2. LITERATURE REVIEW

2.1 The Concept of Balance of Payments

Ndugbu [2] defines balance of payments as an accounting statement of a country's international transactions over a period of time. It is a detailed and systematic record of all economic transactions between residents of a reporting country and residents of other countries during a period of time, generally a year. A country's balance of payments is an annual accounting of its monetary transactions with other nations. The balance of payments of a country displays the total amount of money exchanged with other countries by individuals, businesses, and government entities [7].

Anyanwu [3] defines a balance of payments account as a categorised summary of the money worth of all foreign transactions of an economy, aggregated in some way, for a specific time period, usually a year. The balance of payments is divided into five components according to the International Monetary Fund (IMF) classification: current account, capital account, net errors and omissions, exceptional financial account, and changes in reserve account.

2.2 The Current Account

The current account records sales and purchases of currently manufactured goods and services, as well as a variety of additional items such as interest and dividend payments, private presents, and international tourist expenses [2]. There are two types of objects in the current account: visible and invisible items. The visible objects are tangible goods, whereas the invisible items are services like shipping and aviation, insurance, banking, and tourism. A current account with a positive cash flow is a credit, while one with a negative cash flow is a debit.

The current account, according to Anyanwu [3], records all transactions in goods and services and depicts the flow of products and services in the form of export and import. As a result, the trade balance reflects the difference between export and import values.

2.3 The Capital Account

The capital account of the balance of payments keeps track of transactions involving long- and short-term capital flows. It keeps track of the

sales and purchases of capital or investment commodities including bonds, stocks, bank accounts, real estate, factories, and entire businesses. Changes in a country's foreign assets and liabilities, capital movements, and changes in its international investment position are all recorded in the capital account.

2.4 Balance of Payments Equilibrium and Disequilibrium

When receipts from foreigners equal payments paid to foreigners, the balance of payments is in equilibrium. In other words, when the value of exports equals the value of imports, the balance of payments is in balance. Meanwhile, a deficit balance of payments occurs when the value of import exceeds the value of export, and a surplus occurs when the value of export exceeds the value of import during a specific time period, usually one year. The deficit and surplus in the balance of payments account are considered disequilibrium.

2.5 Theory of Comparative Advantage

The law of comparative advantage is usually attributed to English political economist David Ricardo, who wrote "On the Principles of Political Economy and Taxation" in 1817, however it is more likely that Ricardo's mentor, James Mill, devised the approach. Comparative advantage refers to an economy's ability to produce a given good or service at a lower opportunity cost than its trade rivals. A comparative advantage allows a company to provide goods and services at a lower price than its competitors while still making a profit.

2.6 Monetary Approach

In terms of money demand and supply, the monetary approach explains changes in a country's balance of payments. Only monetary acts, according to this theory, can correct changes in the balance of payments. A balance of payments deficit is equivalent to the excess of money supply over money demand as a result of this method. The balance of payments deficit is thought to be caused by an excess of money supply in the economy relative to money demand [8]. Individuals and businesses swap excess money balances for abroad goods and services. When the money supply is smaller than the demand for money balances, on the other hand, the balance of payments is expected to be in

surplus when individuals and corporations seek to obtain local currency by selling products and securities to foreigners. The inflow of foreign exchange results in a balance-of-payments surplus.

2.7 The Balance of Payments Theory of Exchange Rate

The balance of payments theory of exchange rate, often known as the demand-supply theory of exchange, states that the price of foreign money in terms of domestic money is determined by the free forces of demand and supply in the foreign exchange market. As a result, the external value of a country's currency is determined by its demand and supply.

According to the theory, the forces of demand and supply are determined by several things in a country's balance of payments. According to the theory, a deficit in the balance of payments causes the rate of exchange to fall or depreciate, whereas a surplus in the balance of payments strengthens the exchange reserves, leading the price of home currency in terms of foreign currency to rise. A positive balance of payments results in an increase in the external worth of the country's currency. An unfavourable balance of payments causes the external value to depreciate [9]. As a result, this study based its theoretical framework on this theory of exchange, because nations like Nigeria want to achieve a surplus or a favourable balance of payment position in order to increase the external value of their local currencies.

3. EMPIRICAL REVIEW

Igbinoba, E. [10] conducted research on Nigeria's economic growth using the adjusted balance of payment (BOP) restricted growth framework developed by Thirlwall and Hussain (1982) to determine the factors of the long run rate of growth in Nigeria. The cointegration test on time series data was used in the study to evaluate the long-run connection between Nigeria's real GDP (production) and its real export. The findings indicated that the variables were cointegrated, adding support to Thirlwall's BOP restricted model as a reasonable framework for explaining Nigeria's long-term growth.

Sanni, Musa, and Sani [11] looked into the link between Nigeria's current account balance and economic progress. To analyse the link, the Auto

Regressive Distributed Lag (ARDL) Bounds Testing methodology was applied, and annual data from 1970 to 2016 were used. The study found a long-run relationship between Nigeria's current account balance, real GDP growth, and bilateral real exchange rate.

Wiley [12] published a paper titled Explaining Nigeria's Economic Growth: A Balance of Payments Constrained Growth Approach. In the study, a system estimator was used to test the validity of a balance-of-payments limited growth model in the case of Nigeria. They tweaked a version of Thirlwall's model produced by Soukiazis et al. (2014) to account for the function of foreign content in the growth process. The updated version of the model does a far better job of describing Nigeria's rise. According to the study, Nigeria's economic growth is heavily reliant on the balance of payments strategy.

Between 1990 and 2018, Efang and Jeremiah [13] conducted research on the topic "The role of balance of payments on the growth of the Nigerian economy." After testing the variable data for unit root at a mixed order of 1(0) and 1(1), the study used the Autoregressive Distributed Lag (ARDL) Model. The dependent variable in the study was real gross domestic product (RGDP), whereas the independent variables were Balance of Payments (BOP), Exchange rate, Inflation rate, Export and Import. According to the findings, the balance of payments had a positive and considerable impact on Nigeria's GDP throughout the time period covered by this study.

4. MODEL SPECIFICATION

The study involved two dependent variables: the RGDP and GDP, but the interest of the researcher is the model of RGDP with the independent variables.

Thus, functional model of the study is;

$$RGDP = f(OEX, NOEX, OIM, NOIM)$$

Where;

- RGDP = Real Gross Domestic Product,
- OEX = Oil Export,
- NOEX = Non-Oil Export
- OIM = Oil Import
- NOIM = Non-Oil Import

Thus; the econometric model presents the variables as;

$$RGDP = a_0 + b_1OEX + b_2NOEX + b_3OIM + b_4NOIM + et$$

Where; a_0 = constant term,

b_1, b_2, b_3, b_4 = coefficients of explanatory variables,

et = error term

4.1 Data Presentation

Table 1. Data on Real GDP, oil and non-oil exports, oil and non-oil imports all in billions naira

Year	RGDP (N'Billion)	OIM (N'Billion)	NOIM (N'Billion)	OEX (N'Billion)	NOEX (N'Billion)
1990	19305.63	6.07	39.64	106.63	3.26
1991	19199.06	7.77	81.72	116.86	4.68
1992	19620.19	19.56	123.59	201.38	4.23
1993	19927.99	41.14	124.49	213.78	4.99
1994	19979.12	42.35	120.44	200.71	5.35
1995	20353.2	155.83	599.30	927.57	23.10
1996	21177.92	162.18	400.45	1,286.22	23.33
1997	21789.1	166.90	678.81	1,212.50	29.16
1998	22332.87	175.85	661.56	717.79	34.07
1999	22449.41	211.66	650.85	1,169.48	19.49
2000	23688.28	220.82	764.20	1,920.90	24.82
2001	25267.54	237.11	1,121.07	1,839.95	28.01
2002	28957.71	361.71	1,1500.99	1,649.45	94.73
2003	31709.45	398.92	1,681.31	2,993.11	94.78
2004	35020.55	318.11	1,668.93	4,489.47	113.31
2005	37474.95	797.30	2,003.56	7,140.58	105.96
2006	35020.55	710.68	2,397.84	7,191.09	133.59
2007	39995.5	768.23	3,143.73	8,110.50	199.26
2008	42922.41	1,315.53	4,277.65	9,861.83	525.86
2009	46012.52	1,068.74	4,411.91	8,105.46	500.86
2010	54612.26	1,757.14	6,406.83	11,300.52	710.95
2011	57511.01	3,043.60	7,952.27	14,323.15	913.51
2012	59929.89	3,064.26	6,702.30	14,259.99	879.34
2013	63218.72	2,429.38	7,010.05	14,131.84	1,130.17
2014	67152.79	2,215.17	8,323.75	12,006.97	955.06
2015	69023.93	1,725.22	9,350.84	8,184.48	660.68
2016	67931.24	2,384.41	7,095.95	8,178.82	656.79
2017	68490.98	2,615.45	8,189.39	12,913.24	1,074.90
2018	69799.94	3,686.89	9,758.34	17,282.25	1,425.71
2019	71367.83	3,534.52	16,914.40	16,702.73	3,207.02

Source: Central Bank of Nigeria statistical bulletin, 2019

4.2 Econometric Analysis

The data analysis is carried out employing the E-view 10 computer software. We began estimating with a unit root test to determine the data set's reliability strength.

Table 2. Unit root test result

KPSS test for d_RGDP	KPSS test for d_oillexport
T = 29	T = 29
Lag truncation parameter = 2	Lag truncation parameter = 2
Test statistic = 0.348701	Test statistic = 0.0901559
10% 5% 1%	10% 5% 1%
Critical values: 0.354 0.462 0.710	Critical values: 0.354 0.462 0.710
P-value > .10	P-value > .10

KPSS test for d_nonoilexport	KPSS test for d_oilimport
T = 29	T = 29
Lag truncation parameter = 2	Lag truncation parameter = 2
Test statistic = 0.375024	Test statistic = 0.149993
10% 5% 1%	10% 5% 1%
Critical values: 0.354 0.462 0.710	Critical values: 0.354 0.462 0.710
Interpolated p-value >0.090	P-value > .10

KPSS test for d_nonoilimport
T = 29
Lag truncation parameter = 2
Test statistic = 0..397946
10% 5% 1%
Critical values:0.354 0.462 0.710
Interpolated p-value >0.080

The KPSS test was adopted to test for unit root on each of the variables, from the outputs, the P-values (0.10, 0.09 and 0.080) were all less and not more than 10% which signifies that the variables are stationary at first difference 1(1). The researcher's choice of this KPSS is premised on the ease of interpretation and coherence.

4.3 Co-Integration Test

The study adopted the Johansen's co-integration test using the Eigenvalue Trace test statistics. From the findings, the p-values of the Eigenvalue Trace test and Lmax test of (0.0000), which is less than 10% shows a co-integrating equation and there exist a long run relationship among the variables.

4.4 Vector Error Correction Model (VECM)

The model describes the relationship between the dependent and independent variables. The researcher is particularly interested in the first

equation of RGDP on oil exports, non-oil exports, oil imports, and non-oil imports. The output of the E-Views 10 computer software is shown below.

The VECM result on the equation 1 above with the EC1 insignificant negative coefficient (-0.00371660) shows that about 0.37% variation of Nigeria's economic growth is explained by the balance of payments position. Oil export has a positive coefficient (0.589530) and significant, non-oil export is insignificant with a negative coefficient (-0.999567), oil import has a negative coefficient (-2.64633) and significant, hence, the non-oil import with a positive coefficient (0.271372) is insignificant to real GDP.

4.5 Speed of Adjustment

The negative coefficient of the EC1 (-0.00371660) with the P-value (0.4589) which is greater than 10% level of significance indicates that there is an insignificant speed of adjustment towards equilibrium is corrected per year.

Table 3. Vector error correction model output

Equation 1: d_RGDP				
Coefficient	Std Error	t-ratio	p-value	
Const	338.558	644.831	0.5250	0.6048
Oillexport	0.589530	0.224218	2.629	0.0153**
Nonoillexport	-0.999567	1.71924	-0.5814	0.5669
Oilimport	-2.64633	1.22964	-2.152	0.0426**
Nonoilimport	0.271372	0.380874	0.7125	0.4836
EC1	-0.00371660	0.00492950	-0.7540	0.4589
Mean dependent var	1863.170	S.D. dependent var	2102.525	
Sum squared resid	79706187	S.E. of regression	1903.420	
R-squared	0.332201	Adjusted R-squared	0.180428	
Rho	-0.016991	Durbin-Watson	2.030666	

5. CONCLUSION

The study looked at the impact of Nigeria's balance of payments on economic growth from 1990 to 2019. The dependent variables of the study were real GDP and GDP at constant basic prices, while the independent variables were oil export, non-oil export, oil import, and non-oil import. The KPSS unit root test revealed that the variables were stationary at first difference, prompting the use of the vector error correction model (VECM) to evaluate the data; consequently, the co-integration test revealed a long-term link between the variables. The output of equation 1 shows that oil export is positive and substantial; oil import is negative and significant; and non-oil export and non-oil import are negatively and positively negligible to RGDP. As a result of the key variables, we accept that the balance of payments affects the growth of the Nigerian economy.

Thus, this conclusion is consistent with the findings of Efang, Etim, and Jeremiah [13], who discovered a positive and significant association between the balance of payments and Nigeria's economic growth. Similarly, the findings coincided with those of Igbinoba [10], who discovered co-integration among the variables.

6. RECOMMENDATIONS

Based on the results, the following recommendations could be of importance towards enhancing economic growth in Nigeria.

1. The federal government of Nigeria should introduce more export friendly policies on balance of payment positions in order to enhance economic growth.
2. Through the authorities, certain restrictions should be put in place to discourage too much dependency on importations to avoid seeing the economy as a dumping ground.
3. There should be diversification of national income as the economy is almost wholly dependent on oil exportations for sustenance.

COMPETING INTERESTS

Author has declared that no competing interests exist.

REFERENCES

1. Aliyu U. Balance of payments and the Nigerian economy. *International Journal of Economics and Business*. 2019;6(2):92-96.
2. Ndugbu MO. Theories, policies and institutions of money and banking, Uzopietro Publishers, Owerri, Imos State, Nigeria; 2013.
3. Anyanwu JC. Monetary economics: Theory, policy and institutions. Hybrid Publishers Ltd, Onitsha, Nigeria; 2015.
4. Nzotta SM. Money, banking and finance. Osprey Publishers, Owerri, Imo State, Nigeria; 2014.
5. Ajayi OF. Determinants of balance of payments in Nigeria: A partial adjustment analysis. *Journal of African Macroeconomic Review*. 2014; 5(1).
6. Aniekan A. Review of empirical literature on balance of payments as a monetary phenomenon, department of Economics, Modibbo Adama University of Technology. (JETEMS). 2013;4:124-132.
7. Yousif F, Musa A. The determinants factors of balance of payments: An investigation from Sudan through the period 1980-2016. *Edelweiss Applied Science and Technology*. 2018;2(1):41-45.
8. Imoisi AI, Olatunji LM, Ekpenyong BI. Monetary policy and its implications for balance of payments stability in Nigeria: 1980-2010. *International Journal of Economics and Finance*. 2013;5(3).
9. Nwanosike D, Uzoechina B, Ebenyi G, Ishiwu H. Analysis of balance of payments trend in Nigeria: A test of marshall-lerner hypothesis. *Saudi Journal of Business and Management Studies*. 2017;468-474. ISSN 2415-6663 (Print).
10. Igbinoba E. Balance of payments constrained economic growth in Nigeria, Article. *African Journal of Economic Review*. 2017;5.
11. Sanni GK, Musa AU, Sani Z. Current account balance and economic growth in Nigeria: An empirical investigation, *Research article*; 2019.

12. Wiley J. Explaining Nigeria's economic growth: Balance of payments constrained growth approach with external and internal imbalances. SAJE South African Journal of Economics; 2019.
13. Efanga UO, Etim RS, JS. The impact of balance of payment on economic growth in Nigeria. Journal of Applied Financial Econometrics. 2020;1(2):145-160.

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