INTERNATIONAL BALANCE OF PAYMENT AND ECONOMIC GROWTH IN NIGERIA (1990- 2019)

ABSTRACT

This paper dwelt on balance of payments and the growth of Nigeria's economy between the periods 1990 to 2019. The major objective of the study was to determine the effect of balance of payments on the growth of Nigerian economy. Secondary data obtained from Central bank of Nigeria statistical bulletin 2019 was used for this paper. Real gross domestic product was used as the dependent variable while oil export, non-oil export, oil import and non-oil import formed the independent variables. Unit root test was conducted which showed that the variables were stationary at first difference I (1). Hence, co-integration test was employed which showed a long term relationship among the variables. The paper adopted the Vector error correction model (VECM) and discovered that the short-run disequilibrium can be corrected in the long-run at the speed of 0.03%. Thus, we conclude that balance of payment positions have insignificant impact on the growth of Nigeria's economy. Hence, it was recommended among others that the federal government of Nigeria should introduce more export friendly policies on balance of payment positions in order to enhance economic growth.

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 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.

Ndugbu (2013), transactions involving payments to residents of any economy by non-residents are classified as credit entries, while payments by the residents of an economy to non-residents are classified as debit entries.

Balance of payments consist of economic transactions such as an exchange of value, typically an act in which there is transfer of title to an economic good, the rendering of services or transfer of title to assets from one country's resident to another (Anyanwu, 2015). These transactions include buying, selling, borrowing and lending, investment and disinvestment, income from investment and repatriation of profits and grants, etc. According to Nzotta (2014), it involves the provision and receipts of real resources (goods, services and income), the specific changes in claims and liabilities to the rest of the world. All transactions which entail inflow of payment are taken as credit plus entries while debit or minus entries are of those transactions which generate an inflow of payments. A nation's financial transactions with the outside world for any given year are summarized in the balance of payments account.

Today, International trade which brought international finance has made it open for countries to benefit from one another. Countries today add favourable 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.

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 to a favourable balance of payments position or at its equilibrium.

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 contest, they have such advantage on exporting for both oil and non-oil commodities in order to exchange for foreign currencies and better the position of her balance of payments with other countries of the world.

Statement of the Problem

Over the time past, so many researchers have been conducting studies on the subject matter towards determining how balance of payments (BOP) affects the growth of Nigerian economy on the different periods of their choices. From the few empirical evidences reviewed in the work by different researchers amongst others, it was found that there is missing gap to be filled which is the data updates on the variables of balance of payments and the real gross domestic products in Nigeria as at the time of this research, and also the inclusion of data on oil and non-oil import 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.

Objectives of the Study

The major objective of this paper is to determine the effect of balance of payments on the growth of Nigerian economy. Thus, other 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.

Research Questions

1. How does oil export affect the economic growth of Nigerian?
2. To what significant effect does non-oil exports have on the growth of Nigerian economy?
3. What is the correlation between import and growth of Nigerian economy?
4. To what extent does non-oil import affect the growth of Nigerian economy?

Research Hypotheses

1. Ho: There is no significant relationship existing between oil export and real gross domestic product of Nigeria.
2. Ho: Non-oil export does not significantly affect real gross domestic product of Nigeria.
3. Ho: There is no correlation between imports and Nigerian economy.
4. Ho: Non-oil import does not significantly affect real gross domestic product of Nigeria.

REVIEW OF RELATED LITERATURE

The Concept of balance of Payments

According to Ndugbu (2013), balance of payments is an accounting statement of the international transactions of one country over a specific period. It is a comprehensive and systematic record of all economic transactions between the residents of a reporting country and the residents of the rest of the world over a period of time usually a year. The balance of payments of a country is an annual record of its monetary transactions with other countries of the world. A country's balance of payments shows the sum of transactions by individuals, businesses and government agencies with other nations of the world.

Anyanwu (2015), refer balance of payments account as a classified summary of the money value of all international transactions of an economy, in some form of aggregation, pertaining to a given period of time, usually a year. According to the International Monetary Fund (IMF) classification, the balance of payments is divided into five components such as; the current account, capital account, net errors and omission, exceptional financial account and changes in reserve account.

The Current Account

The current account records sales and purchases of currently produced goods and services, plus several other items including interest and dividend payments, private gifts and international tourist expenses (Ndugbu 2013). The current account is divided into two: Visible and invisible items. The visible items deal with the tangible commodities while the invisible constitute of invisible services as shipping and aviation, insurance, banking and tourism. A current account that causes an inflow of money counts as credit while one that results in an outflow of money counts as a debit.

According to Anyanwu (2015), the current account records all transactions in goods and services; it portrays the flow of goods and services in the form of export and import. Hence the balance of trade shows the difference between the export and import values.

The Capital Account

The capital account of balance of payments records transactions related to movement of long and short term capital flows. It records sales and purchases of capital or investment items such as bonds, stocks, bank accounts, real estate, factories and whole companies. The capital account records changes in a country's foreign assets and liabilities, capital movements and changes in international investment position.

Balance of Payments Equilibrium and Disequilibrium

The balance of payments is in equilibrium where the receipts from foreigners equate with payments made to foreigners. In other words, a balance of payments is in a balance position when the value of exports is equal to the value of imports. Meanwhile, a deficit balance of payments arises when the value of import is greater than the value of export, otherwise a surplus when the value of export is greater than the value of import over a given period of time, usually one year. The deficit and surplus are considered as disequilibrium in the balance of payments account.

Theory of Comparative Advantage

The law of comparative advantage is popularly attributed to English political economist David Ricardo in his book "On the Principles of Political Economy and Taxation" written in 1817, although it is likely that Ricardo's mentor, James Mill, originated the analysis. Comparative advantage is an economy's ability to produce a particular good or service at a lower opportunity cost than its trading partners. A comparative advantage gives a company the ability to sell goods and services at a lower price than its competitors and realize stronger sales margins.

Monetary Approach

The monetary approach explains changes in the balance of payments of a country in terms of the demand for and supply of money. The approach assumes that balance of payments changes can only be corrected by monetary measures. Thus, a balance of payments deficit from this approach is equal to the excess of money supply over money demand. Here, there is a presumption that balance of payments deficit reflects excess money supply in the economy over money demand. Individuals and businesses exchange the excess money balances for foreign goods and services. On the other hands, if the money supply is less than the demand for money balances, the presumption is that there will be a surplus in the balance of payments when individuals and businesses seek to acquire the domestic currency by selling goods and securities to the foreigners. The inflow of foreign exchange results in a surplus in the balance of payments.

The Balance of Payments Theory of Exchange Rate

The balance of payments theory of exchange rate also referred to as demand-supply theory of exchange holds 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. It follows that the external value of a country's currency will depend upon the demand for and supply of the currency.

The theory states that the forces of demand and supply are determined by various items in the balance of payments of a country. According to the theory, a deficit in the balance of payments leads to a fall or depreciation in the rate of exchange, while a surplus in the balance of payments strengthens the exchange reserves, causing an appreciation in the price of home currency in terms of foreign currency. A favourable balance of payments leads to an appreciation in the external value of the currency of the country. Unfavourable balance of payments causes a depreciation of the external value, (https://www.yourarticlelibrary). Hence, this study anchored its theoretical framework on this theory of exchange for countries like

Nigeria seeks to achieve surplus or favourable balance of payment position in order to enhance the external value of her domestic currencies.

Empirical Review

Igbinoba, E. (2017), conducted on a research on the adjusted balance of payment (BOP) constrained growth framework modified by Thirwall and Hussain (1982) on Nigeria's economic growth to estimate the determinants of the long run rate of growth in Nigeria. The study adopted cointegration test on time series data to estimate the long-run relationship between Nigeria's real GDP (output) and its real export. The results signified cointegration between the variables, lending support to Thirwall'sBOPconstrained model as a suitable framework to explain Nigeria's long term growth.

Sanni, Musa, and Sani, (2019), examined the relationship between current account balance and economic growth in Nigeria. Auto Regressive Distributed Lag (ARDL) Bounds Testing methodology was employed to investigate the relationship, using annual data spanning from 1970-2016. The study found a long-run relationship between the current account balance, the real gross domestic product (GDP) growth and bilateral real exchange rate in Nigeria.

Wiley (2019), conducted a study on Explaining Nigeria's Economic Growth: Balance of Payments Constrained Growth Approach. The study employed a system estimator to examine the validity of balance of payment constrained growth model in the case of Nigeria. They modified a version of Thirlwall's model developed by Soukiazis et al (2014) to incorporate the role of foreign contents in growth process. The new version of the model improves significantly explaining the growth in Nigeria. The study revealed that the economic growth of Nigeria is significantly dependent on the balance of paymentsapproach used.

Efang, and Jeremiah (2020), investigated on the subject matter "The role of balance of payments on the growth of Nigeria economy" between the years 1990 – 2018. The study adopted the Autoregressive Distributed Lag (ARDL) Model after the variable data were tested for unit root at a mixed order of 1(0) and 1(1). The study adopted the variables; real gross domestic product (RGDP) as the dependent variable, while the independent variables were Balance of Payments (BOP), Exchange rate, Inflation rate, Export and Import. From the findings it was discovered that balance of payments exerted a positive and significant impact on gross domestic product in Nigeria across the period covered by this study.

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

Thu; the econometric model presents the variables as;

RGDP = a0 + b1OEX + b2NOEX + b3OIM + b4NOIM et

Where; a0 = constant term,

B

b1, b2, b3 b4 = coefficients of explanatory variables,

et = error term

Data Presentation

The variable data are of real GDP, oil export, non-oil export, oil import and non-oil import, all in Billion Naira as presented in the table below.

Table 1: All In Billion 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

Econometric Analysis

The analysis of the data employed is done using the E-view 10 computer software. In order to ascertain the reliability strength of the data set, we began estimation with unit root test.

Table 2: Unit Root Test

KPSS test for d_RGDP	KPSS test for d_oilexport
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).

Co-Integration Test

The study adopted the Johansen's co-integration test using the Eigenvalue Trace test statistics. From the findings as attached in the appendix, 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.

Vector Error Correction Model (VECM)

The model explains the relationship between the dependent variables and the independent variables. Here the researcher's interest is on the first equation of RGDP on oil export, non-oil export, oil import and non-oil import. Below is the output of the result using the E-Views 10 computer software.

Equation 1: d_RGDP				
	Coefficient	Std Error	t-ratio	p-value
Const	338.558	644.831	0.5250	0.6048
Oilexport	0.589530	0.224218	2.629	0.0153**
Nonoilexport	-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
ECI	-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	

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 (-0999567), 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.

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.

Discussion of Findings

The study investigated the effect of balance of payments on economic growth of Nigeria from the year 1990 to 2019. The study adopted the real gross domestic product and GDP at constant basic prices as the dependent variables and oil export, non-oil export, oil import and non-oil import as the independent variables. The KPSS unit root test showed that the variables were stationary at first difference which geared to the adoption of the vector error correction model (VECM) to analyze the data, hence, the co-integration test showed a long term relationship among the variables. The equation 1 output which is the interest of the researcher revealed that oil export is positive and significant; oil import is negative and significant while non-oil export and non-oil import are negatively and positively insignificant to RGDP. Therefore concluding with the significant variables, we accept that balance of payments affects the growth of Nigeria's economy.

Thus, this result is in conformity with the work of Efang, Etim and Jeremiah (2020), which they found a positive and significant relationship between the balance of payments and the growth of Nigeria's economy. Similarly, the work also agreed with the work of Igbinoba, E. (2017), which showed a co-integration existence among the variables.

Recommendation

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

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.

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