Comparative Analysis of the Effectiveness of Monetary and Fiscal Policy Variables on Net-Exports of Nigeria's Economy

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ABSTRACT

The study investigated the effectiveness of monetary and fiscal policy variables on net-exports of Nigeria's economy from 1981 to 2016. The research adopts multiple regression analysis in which ARDL model and Granger causality test were utilized in the analysis. Data on net-exports (NEX), money supply (LMS), interest rate (INR), exchange rate (LEXCR), government expenditure (LGEX), tax revenue (LTAR), public debt (LPUDT) and foreign direct investment (LFDI) were analyzed in the study. The results showed positive and significant relationship between LMS and NEX; but in the St. Louis model, LMS influenced NEX negatively and insignificantly. It also indicated that LEXCR had negative and significant impact on NEX, while INR affects NEX negatively. It further revealed that LGEX had positive and insignificant effect on NEX; in the St. Louis model, LGEX had positive and significant influence on NEX. Similarly, the results showed that LTAR and LFDI impact on NEX positively, while LPUDT had negative effect on NEX. The causality test found unidirectional relationship with causality running from LMS to NEX only. Therefore, the study recommends that government should apply monetary policy instruments (money supply) more than it uses fiscal policy instruments (government expenditure) in order to achieve higher net-exports in the economy.

Keywords: Comparative analysis, Monetary policy, Fiscal policy, Net export, Autoregressive distributed lag model, Pairwise Granger causality

INTRODUCTION

Net-export is very important for economic growth in any economy. According to macroeconomic theorists, countries with higher net-exports tend to grow their economies faster than those with lower net-exports. To achieve higher net-exports, there is need for countries to increase the production of exports products in their economies. To this end, macroeconomic variables must interface or rather interact to influence levels of economic activities in order to achieve the macroeconomic objectives of the nations such as sustainable growth, price stability, full employment, balance of payments equilibrium, equitable distribution of national income, financial sector and exchange rate stabilities. In an attempt to these macroeconomic goals of nations, governments often employ two major macroeconomic policies, which include monetary and fiscal policies [1]. The instruments of monetary policy include the Open Market Operation (OMO), interest rate, money supply; cash reserve requirements, discount rate, liquidity ratio, selective credit control, moral suasion, among others. On the other hand, the fiscal policy instruments include government expenditure, taxation and government borrowing.

However, the role of macroeconomic policy instruments to economic activities and stabilization of economies among countries, have overtime been a subject of major debate between the Monetarists and the Keynesian Schools of Thoughts. The monetarists argued that level of economic activities of countries are greatly influenced by monetary policy instruments. For them, changes in money supply affect output level, aggregate demand and economic growth of the nations. Therefore, for output level, aggregate demand and economic growth to increase, the nations' money stock must be increased in the economy. However, they reject the use of fiscal policy instruments to influence economic activities as they argued that such policy leads to crowding-out of private investments [2].

The Keynesians on the other hand, refute the claims of the monetarists, and argued

that fiscal policy instruments are the major tools that greatly influence levels of economic activities of the nations. Therefore, they postulated that fiscal policy instruments stimulate aggregate demand, increase output level and reduce level of unemployment in the economy due to its role in controlling inflation. Similarly, they reject the use of monetary policy instruments to influence level of economic activities as they argued that continuous increase in the nation's money stock may lead to "liquidity trap"

In Nigeria, the major objectives of adopting fiscal and monetary policy include to achieving sustainable economic growth, price stability, full employment, improvement in the balance of payments and net trade/net-exports, and equitable distribution of national income. Others include accumulation of financial savings, increase in economic growth, reduction in unemployment level and inflation rates, financial sector and exchange rate stabilities as well as building of reasonable size of external reserves [3]. However, in spite of the applications of these two major macroeconomic policy instruments to achieve the macroeconomic goals of the nation, unsustainable growth, price instability, disequilibrium in the balance of payments, high rate of unemployment, inequitable distribution of national income, low financial savings, low aggregate demand and economic growth, exchange rate and financial sector instabilities still remain the major characteristics of the Nigeria's economy. Hence, these economic behaviours no doubt have overtime posed major threat to external trade and other economic activities in achieving the macroeconomic objectives of the nation.

More so, the economic behaviours contradict the Marshall-Lerner condition, which postulated that real devaluation or depreciation of a nation's currency promotes balance of trade of countries in the long-run, but deteriorates same in the short-run, if the values of export and import demand elasticity put together is greater than unity [4]. Thus, a change in the domestic currency has two major effects on trade balance of a country; these include the quantity effect and the price effect. Whereas the price effect makes imports more expensive, the quantity effect makes exports cheaper for the importing country. This is because the volume of imports and exports do not adjust instantaneously in the short-run. Trade balance tends to worsen in the short-run following devaluation or depreciation of exchange rate. However, in the long-run, when the adjustment process of exports and imports to the devaluation dominates, the devaluation effects lead to improvement in trade balance of the country thereby assuming the Marshall-Lerner condition.

Statistics showed that both government expenditures and debt stocks alongside exchange rate depreciation have overtime exhibited rapid increases, while the net trade or net-exports decline continuously in Nigeria or sometimes fluctuated, instead of translating into economic benefits accrued from external trade to the desired growth, thereby negating the theories of Keynesians and monetarists. For instance, the trade balance of Nigeria in 1981 stood at ₦23.9 billion, and declined to ₦18.8 billion in 1985. By 1990 and 1995, the trade balance rose to ₦155.6 billion and ₦1,705.8 billion respectively. In 2000, 2005 and 2010, the trade balance of Nigeria again rose to ₦2,930.7 billion, ₦10,0447.4 billion and ₦20,175.5 billion respectively; and however, declined to ₦19,921 billion in 2015. On the other hand, the corresponding net export or net trade in Nigeria stood at -₦1.8 billion in 1981. By 1985, 1990, 1995, 2000 and 2005, the net exports of Nigeria rose to ₦4.7 billion, ₦64.2 billion, ₦195.5 billion, ₦960.7 billion and ₦4,445.7 billion, respectively. However, in 2010 and 2015, the net exports of Nigeria decreased to ₦3,847.5 billion and -₦2,230.9 billion, respectively.

In the same view, empirical studies as reviewed confirmed that the Nigeria's macroeconomic policies are yet to lead the nation into achieving the desired macroeconomic goals of the nation. These studies include [5], [6], [7], [8]. Thus, the economy is still characterized by low financial savings, investments, output level, and aggregate demand, which have in turn resulted to lower net-exports inflows, lower economic growth and high rate of poverty in the economy. It is against this background therefore, that this study investigates the effectiveness of monetary and fiscal policy variables on net-exports of Nigeria.

REVIEW OF RELATED LITERATURE

Fiscal and monetary policies are generally conceived as the major macroeconomic policies employed by government to influence levels of economic activities in an economy, in order to achieve macroeconomic goals of sustainable growth and price stability. Other macroeconomic objectives that fiscal and monetary policies are used to achieve in the economy by government include balance of payment equilibrium and trade balance, exchange rate stability, financial sector stability, full employment, equitable income distribution, among others.

The term "fiscal policy" deals with how fiscal policy instruments such as taxation and government expenditure are employed to effect economic activities of a nation. Essentially, government budget is used as a critical tool for implementing fiscal policy in countries of the world, especially in the developing countries, which Nigeria is inclusive. Therefore, budget can be described as the government annual plan put in place to run public sector and as well promote private sector of the economy. It both shapes and reflects the country's economic life. More importantly, it is one aspect of the government budgets utilized as a measure in nation's economic management [9]. More so, fiscal policy is a deliberate action of government in using public spending, taxation and borrowing in influencing the variables of macroeconomics in a required goal direction. It is often geared towards the achievement of high employment creation, sustainable economic growth and lower inflation rate. Generally, fiscal policy targets stabilization of an economy. According to [10] cited in [11], increase in public expenditure and a fall in taxation helps to pull a nation out of economic recession, whereas a decrease in public expenditure and increase in taxation slows down economic boom.

Similarly, fiscal policy deals with the use of public expenditure, taxes and public debt to stimulate levels of economic activities such as employment, output level and aggregate demand in an economy. It also centres on the management of an economy by government via the manipulation of spending power and income to attain the desired goals of the macroeconomic policies [12]. In the same view, [13] postulated that the main fiscal policy objective in any economy is to facilitate a conducive economic condition that promotes business growth, in addition to ensuring that the actions of government are in line with the goal of achieving stability in the economy.

On the other hand, the term "monetary policy" deals with the use of monetary policy instruments by the monetary authorities to control money supply, interest rate and price levels, primarily to achieve the stated macroeconomic objectives of the economy. Governments of various nations try to control money supply with the belief that its growth rate has significant influence on inflation rate. Monetary policy consists of the designed actions of government to stimulate the monetary sector behaviours. It is a way by which the monetary authorities use the instruments of monetary policy to attain stability in the macroeconomic variables in an economy. Essentially, monetary policy is a critical tool employed in the implementation and achievement of price and monetary stabilities. The monetary authorities of various nations undertake monetary policy mainly as a programme of action to regulate and control money supply in the nation in order to attain the desired goals of the nations' macroeconomic policies [14].

Similarly, [15] cited in [16] postulated that monetary policy constitutes the major policy thrust of the government in the realization of various macroeconomic objectives. They argued that monetary policy involves the combination of discretionary measures designed by the monetary authorities to regulate and control the money supply in an economy mainly to achieve the desired or stated macroeconomic objectives. Therefore, the author opined that monetary policy is concerned with the conscious action undertaken by the monetary authorities to regulate or change the direction, cost, quantity or availability of credit in any economy, in order to attain stated economic objectives.

Fiscal and Monetary Policies in Nigeria

Government utilizes fiscal policy to influence level of economic activities by increasing or decreasing its taxation on the investors or expenditure level in order to improve stability in the economy. Macroeconomic goals are achieved by formulating and implementing economic

policy and in particular, pursuing fiscal policy. This is particularly designed by the authorities to attain the macroeconomic objectives of sustainable growth, price stability, full employment, equilibrium balance of payments, mobilization and distribution of resources as well as investment growth. These goals have since the attainment of political independence in Nigeria, promoted the design of economic policy as well as its developmental efforts.

The outcome of government role in economic activities and the performance of the economy in Nigeria, indeed, showed contradictory results. In some occasions, the economy experienced growth in real output and decreases in other time. This amounts to scoring developmental efforts of the nation low. The economic crisis witnessed by the nation between 1980 and the early 1990s, is an indication that there is distinction between growth and development. There are wide ranging objectives of fiscal and monetary policies on Nigerian economy. These objectives of the monetary and fiscal policies have been identified to include rise in gross domestic product growth rate, reduction in inflation rate, improve in balance of payments, reduction in unemployment, increase in accumulation of financial savings and naira exchange rate stability as well as improve in the external reserves of the nation. However, rather than helping to achieve the above stated goals, the fiscal policy had arbitrarily showed ineffectiveness performance on the economy as the much expected from it have resulted to stunted growth, thereby putting doubt on whether the policy is indeed, the best policy option compared to the monetary policy in Nigeria [17]. In determining the changes in the national income in the developing countries, which Nigeria is inclusive, the fiscal policy is considered as a critical variable that plays an important role. It stimulates the growth of the economy by the ways of applying the instruments of fiscal policy. Accordingly, it is critical tool used to finance direct investments that ordinarily, private sector lacks the required capital to provide the desired quantities. It also function to supply in efficient manner the certain public services that are required conditions to influence economic activities and long term investments; and as well finance public activities that can minimize distortions in spending decisions and proper investment in the private sector [18].

Fiscal and monetary policies are critical in stimulating the major governmental goal of improving welfare of the citizens. [19] cited in [20] stated that for the desired results of the monetary policy to materialize as postulated by the classical economist, highly integrated and monetized economy in addition to frequent network information system are inevitable. However, it is obvious that the economy of Nigeria lacks flexibilities and fundamentals with regards to interest rate, treasury certificates, etc that have the ability to guarantee effective utilization of monetary policy. The authors therefore, argued that the Keynesians fiscal policy is more preferred to the monetary policy of the monetarists on the basis that prediction and empirical evidence showed that it works only in the developed economies. Hence, they advocated for the mixture of the both policies for better improvement of the developing economy such as Nigeria.

Theoretical Review

There are two basic Schools of thoughts, namely; the monetarists and the Keynesians, which explain the influences of monetary and fiscal policy instruments on the macroeconomic variables such as sustainable economic growth, price stability, balance of payments equilibrium and trade balance, exchange rate stability, financial sector stability, equitable income distribution, among others. These however, have generated serious debate among the scholars as to which of the policies (fiscal or monetary policy) is more desirable in achieving the macroeconomic objectives of a nation. This debate therefore, is broadly evident in the controversies ensued between the monetarists and the fiscalists about the rightful policy option required to better influence the economic activities of a nation [21]. In this view, Milton Friedman and others in 1990 carried out a research in Chicago to examine if the Keynesians velocity or multipliers variables as indicated in the quantity theory of money help to determine the trend of national income. They tested the stability of the two variables in which they argued that if there is stability in money velocity, it implies that money stock variations support the monetarists view. However, if the investment multipliers were more stable, it therefore indicates that a change

in aggregate demand imposed by fiscal policy result is more predictable changes in the national income [22].

The St. Louis Model of the Effectiveness of Monetary and Fiscal Policies

The model of St. Louis is the synthesis of the fiscal and monetary policies, which is almost hard to understand at first instance. The model was developed by St. Louis in 1970s. According to [23], Andersen and Carlson described the model as a small scale monetarist model of economic activity. Its emphasis was mainly focused on the nominal income (GNP) growth to variations in fiscal and monetary policy instruments, which are measured by the money growth and government expenditures.

The new version of the St. Louis model comprises five estimated equations in addition to a number of identities. The main focus of the St. Louis model was on the total spending equation as postulated by [24] cited in [25] who combined the variations in nominal income to changes in the nominal stock of money and of the government higher employment expenditures. In this sense, [26] emphasized that since the expenditures have small effects, the specification of the model embodies the viewpoint of the monetarist, which states that change in quantity of money is the major variable which explain the changes in nominal income whereas the effects of fiscal variables are only transitory.

Andersen-Jordan Equation

The focal point of the model of St. Louis is on the total spending equation developed by [27] that combined the variations in nominal income to changes in nominal stock of money and of the government high employment expenditures. The independent variables of the model include nominal income (Y), the money supply (M) - the M_1 is the money currently used with the model of St. Louis and the level of government high employment expenditures (G). The estimation of the variables of M and G is approximately sum to unity and zero. Thus, the estimates favoured the general conclusion of the viewpoint of the monetarist which states that changes in quantity of money is the major variable that explains changes in nominal income whereas the variables of fiscal policy have only transitory effects.

$$Y_t = \alpha_0 + \sum_{i=0}^{4} \beta_{1j} M_{t-1} + \sum_{i=0}^{4} \beta_{2i} G_{t-1} + e_t \qquad 1$$

Where; Y is the gross national product, M is the narrow money, G is the government expenditures, α_0 is the constant term and β_{is} are the coefficient of the variables in the regression equation.

However, it is obvious that since the actions of the fiscal and the monetary policies affect the foreign sector, the demonstration of the Andersen-Jordan estimation assume that the economy analyses are relatively closed economy. This implies that exports do not affect the large proportion of the gross nation product (GNP). In view of this, [28] explained that there is minimization of correlation between domestic and external influences on gross nation product (GNP), and that external influences are not included in the analysis. As a result of this criticism of the St. Louis model, a modified version of the St. Louis model was developed. The dots shown on each of the variable showed that the equation is estimated in the form of growth rate.

$$\dot{Y}_t = \alpha_0 + \sum_{i=0}^{t-1} \beta_1 \dot{M} + \sum_{i=0}^{} \beta_2 \dot{G} + \sum_{i=0}^{} \beta_3 \dot{EX} + e_t \qquad 2$$

Where; EX is the merchandise exports, Y is the gross national product, M is the narrow money, G is the government expenditures, α_0 is the constant term and β_{is} are the coefficient of the variables in the regression equation. Thus, this model actually demonstrated how the combinations of the macroeconomic variables are beneficial to the achievement of macroeconomic goals in an economy; however, the theories ignored the effects of such policies in the economies that lacked the capacity to produce finished product or operated in mono-product economy like Nigeria.

Monetary Theories of Money

Some of these theories considered here include the postulations that evolved from the contributions of some economic scholars such as Irving Fisher, and Keynes monetary theories. This is because, though other scholars contributed immensely to the evolution or development of the monetary theories, but the above mentioned theories are the clearest exposition of the monetary theories.

Irving Fisher Quantity Theory of Money

Irving Fisher, an American Economist, Statistician, Progressive social campaigner and inventor was born in February 27, 1867 in Saugerties, New York, United States of America and died on 29th April, 1947 in New Haven, Connecticut. Fisher as

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one of the classical economists was recognised for his postulations in the field of capital theory, as well as his immense contributions to the development of modern monetary theory. Fisher's quantity theory of money began in 1911 with his publication of the book titled, "The Purchasing Power of Money" in the 19th century. In quantity theory of money, Irving Fisher postulated that the quantity of money is the key determinant of the value of money or the price level. A change in the quantity of money in circulation will result to a proportionate change in the price level of goods in the economy [29].

Accordingly, the demand for money is necessitated with the view that goods and services have to be exchanged for it. Essentially, money demand is made mainly for transaction purposes. The demand for money is not made for its own sake but for the sake of the things it would help to buy. Money demand equates the aggregate value of all the transactions of goods and services in the economy during a specific period. Fisher used equation of exchange to demonstrate his quantity theory of money believing that transactions demand for money results from the velocity of money in circulation. According to him, money acts as a medium of exchange and therefore, it facilitates the exchange of goods and services in the economy. Fisher expressed his equation of exchange thus:

$$MV = PT \qquad 3$$

Where; M is the quantity of money, V is the velocity of money in circulation, P is the price of goods and services while T is the quantity of goods and services traded at any given year.

The equation of exchange stated that quantity of money multiplied by the velocity of money in circulation (MV) is equal to the nominal income (PT), so that when the quantity of money changes, the nominal income changes in the same direction. To convert the equation of exchange into a theory of nominal income, a better understanding of the factors that determine velocity is required. To Irving Fisher, velocity is determined by institutions in the economy that affect the way individuals conducts in their transactions behaviours. However, the Fisher's theory failed to recognise the role of liquidity trap in which monetary policy fails to stimulate economic activities.

Similarly, in the developing economies like Nigeria, higher money stock actually does not result to inflationary pressures; rather, what affect change in price level of goods and services in the economy are changes in exchange rate and oil prices. This is because; any attempt to increase money stock is absorbed by corrupt leaders and few capitalists who never allowed the money to circuit in the economy.

Keynes Liquidity Preference Theory

Keynes in his famous book titled, "The General Theory of Employment, Interest rate and Money", published in 1936, developed a theory of money demand that he referred to as "Liquidity Preference Theory". Keynes in his liquidity preference theory abandoned the classical economists' viewpoint that assumed velocity as being constant and laid more emphasis on the importance of interest rate. Keynes postulated that there exist three motives for money demand. He identified these three motives for money demand to include transaction motive, precautionary motive and speculative motive.

According to Keynes, the transaction demand for money arises when there is lack of synchronization of receipt and disbursement, which are determined primarily by the level of people's transactions. In other words, people are not likely to get paid at the exact time, but would want to conduct transactions. Between the pay cheques, people would want to keep some money around them in order to buy foodstuff, pay their transport fare to work and conduct other daily business transactions. Keynes believes that these transactions were proportional to income like the one the classical economists postulated in their theories of money demand. In the precautionary motive for money demand, Keynes recognised that people hold money not only for current transaction purposes but also to take care of unexpected needs such as sudden sickness, death of a relative, accident and other unforeseen circumstances. This is because; people are uncertain about the payment they might make if such circumstances occur, and therefore, if they do not have money with which to pay, they would incur losses. Thus, when one is holding precautionary money balance, he can take advantages of these sales. Keynes also believe that the amount of precautionary money balances

people want to hold is determined by the level of transactions that they expected to be make in the future and that these transactions are proportional to their income.

Finally, Keynes also discussed the speculative motive for holding money balances. All along the discussions on the transaction motive and the precautionary motive for money demand are all focused on the medium of exchange function of money because each of the discussion refers to the need to have cash balance at hand to make payments. Meanwhile, Keynes agreed with the classical Cambridge economists that money function as a store of wealth or value, and this reason for holding money, he calls the speculative motive for money demand. He considered that wealth is tied closely to income. The speculative component of money demand relates to income. Keynes believed that interest rate have an important role in influencing the decisions relating to how much money to hold as a store of wealth. Therefore, Keynes divided assets that can be used as a store of value or wealth into money and bond. According to him, individuals may decide to hold their wealth in the form of bond, rather than in money form because they believe that the expected return on money is zero. Keynes argued that there are two components of expected returns on bond, which he identified to include interest payment and the expected rate of capital gains. This is because; when interest rate rises, the price of bond falls. Meanwhile, when the interest rate is expected to rise, the price of bond will also be expected to fall and suffer negative capital gains. In this view, people would want to store their wealth in money form because its expected return is higher in that form. Its zero returns exceed the negative return on the bond. However, Keynes theory of money demand was criticized on the ground that he employed indirect mechanism of monetary changes when the influence of monetary changes is direct. The theory also assumed that changes in quantity of money are largely absorbed by changes in money demand while Friedman empirically revealed that money demand is highly stable.

Theories of International Trade
Theory of Absolute Trade Advantage
The absolute cost advantage theory of international trade was postulated by Adam Smith in the year 1776 in his famous book titled "Inquiry into the Nature and the Wealth of Nations". The emergence of this theory was due to the demise of the Mercantilism trade theory. The Mercantilism trade theory suggested for government's intervention in international trade of the country. In that, the theory argued that a country would be better off, if it exports more goods than it imports goods. Therefore, they advocated for continuous accumulation of treasure in the form of gold and silver. In so doing, they believe that the country would be economically and politically strong.

In contrary, Adam Smith advocated for free trade among nations. In the argument, Smith postulated that if free trade is allowed to exist among countries, each nation would specialize in the production of goods and services that they can efficiently produce at a lower cost and import those ones they could not produce efficiently and at a lower cost from other countries. He argued that international specialization of factors of production lead to increase in the total world output, and that foreign trade is a positive sum game because, both countries will gain in the exchange [30]. However, the theory argued that in the course of engaging in the foreign trade, a nation should not gain in the expense of other nations. Therefore, all nations should gain from trade simultaneously and make goods available to all nations of the world. According to theory, the reasons for absolute cost advantage include:

i. The theory assumes that specialization of labour results to higher productivity and less labour cost per unit of output.
ii. The theory also believed that suitability of skill of labour helps to produce certain products in the country.
iii. It also asserts that economics of scale helps to reduce labour cost per unit of output.

Generally, this theory emphasized that nations engage in the international trade in order to produce and export goods and services more efficiently across the countries of the world. It helps countries to export goods that is not hard for them to produce efficiently and import goods that they cannot produce efficiently in order to cater for its citizens. However, the theory was criticized on the ground that it lacked something sharpness. What would happen to a country if it can

produce all the commodities at a lower cost than another country? This was the major issue that the theory failed to address, thereby leading to the emergence of the comparative cost advantage trade theory.

Heckscher-Ohlin Trade Theory

Heckscher-Ohlin foreign trade theory analysis the differences in the relative factor endowments and factor prices among nations on the assumption that there is existence of equal technology and tastes. Basically, the theory focused on two major propositions. These include; firstly, that a nation should specialize in the production and export of commodities in which the production requires intensive use of abundant resources. Secondly, that all nations differ in factor endowments. The authors argued that some countries are endowed with capital- intensive resources while others have labour-intensive resources. Similarly, the theory recognises the differences in pre-trade product prices between nations as the immediate basis for trade as the prices depend on production possibility curve as well as tastes and preferences [31]. Accordingly, the theory stated that production possibility curve obviously depends on factor endowment and technology. Hence, a country should produce and export a product for which the resources used is either capital or labour intensive [32].

[33] explained that elasticity of demand for labour will be high in relative to greater trade openness when imperfect competition prevailed. The author maintained that foreign trade leads to a rise in output demand and hence, makes demand for labour more elastic. Consequently, it generates more employment and wage shock in the economy. [34] were of the view that trade reform results to both employment creation and job destruction in all sectors when imperfect competition prevails in the economy. Thus, both net-export and net-import are characterized by high productivity and low productivity of the firms. [35] expressed therefore, that the economies of the developing countries are characterized by unproductive surplus labour, land surplus and natural resources which are idle and unproductive. They can be productive via trade openness. International trade serves as a vent for surpluses and as well creates effective demand for output of surplus resources.

The theory further maintained that global trade leads to surplus resources' utilization, and consequently generates more demand for surplus labour and other surplus resources. For instance, in Nigeria where there are surplus resources, external trade acts as a vent for its surplus labour, and generates more demand for its labour.

In addition, the theory argued that since labour in developing countries are in abundant, they should dwell much on the production of primary products such as agricultural products, and import capital-intensive products such as manufactured goods from the developed countries. It also assumed that there is existence of two countries, two commodities and two factors in engagement of foreign trade and that two factor inputs such as labour and capital are homogenous. Production function was assumed to exhibit constant returns to scale. However, the theory postulated that trade increases total world outputs and that all countries gain from trade as it enables them to secure capital and consumer goods produced by other countries. The simplified version of the H-O theory in terms of its assumptions is as follows:

i.   It assumed that foreign trade include two factors, two commodities and two country models where both commodities are produced in each country.

ii. Factor endowments are quantitatively different in different nations but qualitatively, they are homogenous,

iii. Similarly, the production functions of the two commodities are assumed to have different factor intensities (labour and capital intensities).

In the review above, it is discovered that the absolute cost advantage trade theory and the comparative cost advantage trade theory agreed that countries should maintained specialization in the course of their engagement in the international trading. Thus, while the absolute cost advantage trade theory failed to recognise a situation where one country could specialize in the production of the two commodities at lower costs over another, the comparative cost advantage trade theory came in to fill in the gap thereby x-raying that even if such situation occurs, trade will still take place between the two countries as efficiency will still be the

basis. However, the failure of comparative cost advantage theory recognises the different factor endowment among nations brought about the Heckscher-Ohlin trade theory. The Heckscher-Ohlin trade theory though agreed with Adam Smith and David Ricardo theories of international trade on the need for countries to approach external trading with specialization, argued that the reason for international trading by countries is based on different endowment of factor resources among countries.

THEORETICAL FRAMEWORK

Fiscal and monetary policy instruments deal with the use of government spending and taxes as well as other instruments of monetary policy such as money supply, interest rate, exchange rate, etc to influence levels of economic activities in the economy. The important of fiscal and monetary policy instrument in economic management arises from the role of monetary authorities and government in pursuit of certain macroeconomic goals including sustainable economic growth, price stability, exchange rate stability, financial sector stability and balance of payments equilibrium. Conventionally, fiscal policy is considered as an instrument of demand management. Hence, as expenditure and taxation changes, it leads to counter–cyclical measures for decreasing business cycle influences in the nation.

In this view, this research adopts St. Louis modified model as the theoretical framework of this study. The model of St. Louis shows that gross domestic product equals money supply, government expenditure and merchandise exports. Thus, the equation form of the St. Louis model is illustrated as:

$$GDP = \Sigma M_{t-1} + \Sigma G_{t-1} + \Sigma EX_{t-1}$$

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Where; GDP is the gross domestic product, M is money supply, G is government expenditure and EX is the merchandise exports. St. Louis actually combined fiscal and monetary policies in his model. Hence, he argued that such combinations are necessary to promote economic growth of a nation, such that a fall in any of the aggregate demand components is expected to be compensated by government via combined monetary and fiscal expansionary policies so as to maintain the same level of GDP. According to [36], such a policy naturally operates through the multiplier effect and reflects how shocks to one sector are transmitted through other sectors of the economy.

Empirical Review

[4], carried research on the role of net exports on economic growth in the United States of America (USA) for the period 1970: Q1-2015:Q1 through the applications of cointegration test and Vector Error Correction Model (VECM) approach. The variables specified in the model include gross domestic product, net exports, imports levels and unemployment. The results revealed evidence of long run relationship between net exports and economic growth in USA. Similarly, the results showed that import levels and unemployment have negative influence on economic growth in the economy.

More so, [37], examined the effect of fiscal policy and trade openness on economic growth in Indonesia from 1990 to 2015. The instruments of fiscal policy involve government expenditures on human resources, infrastructures and routine spending whereas government tax revenue and borrowing are source of financing government's projects. The study found that government expenditures on human resources and infrastructure have significant and positive influence on economic growth if they are financed by tax revenue while it is insignificant when they are financed by external loans. More so, the routine government expenditure has insignificant and negative influence on economic growth for both financed by taxes and external loans. The trade openness has insignificant and positive influence on economic growth in Indonesia.

[38], examined the impact of foreign direct investment, exports and exchange rate on economy intensification of Pakistan for the period 1990-2010 through the application of unit root test and ordinary least square (OLS) technique. The variables employed in the study include gross domestic product, foreign direct investment, export and exchange rate. The study illustrated that foreign direct investment had positive influence on GDP in Pakistan. [39], studied the efficiency and the effectiveness of monetary and fiscal policies in Iran using IS-LM-AS

model. The model is prominent in analyzing policies in relation to the advancement of macroeconomics, especially as it affects economics. The results demonstrated that monetary and fiscal policies are highly efficient and effective in Iran's economy and affect the country's national income. Accordingly, the findings showed that Iran's GDP is negatively associated with expectation inflation, budget deficiency to GDP ratio, and coin prices and positively related to oil incomes and exchange rates.

[40], investigated the influence of monetary policy on economic growth of Rwanda for the period 1980-2006. The methods of analysis utilized in the investigation include cointegration test, vector error correction model and the technique of ordinary least square (OLS). The following variables were employed in the modelling of the study; money supply (M2), exchange rate (EXCR) and gross domestic product (GDP). The study found that there is cointegration among the variables employed in the investigation. It was also showed that monetary policy instruments have significant impact on money supply and exchange rate in the economy.

[41], studied the influence of quantitative monetary and fiscal policy instruments on foreign direct and national investments in Jordan for the period 2000-2011. Two models such as the model which examined the influence of quantitative monetary and fiscal policy on the national investment were employed in the study. The results indicated that discount rate has insignificant and negative effects on domestic investment, whereas mandatory cash reserve had significant and positive impact on national investment due to banks' excess cash reserves in Jordan. Similarly, the study indicated that taxes influence national investment negatively while government capital expenditure had positive influence on national investment. The second model illustrated the influence of quantitative monetary and fiscal policy on foreign direct investment (FDI). In this case, the results revealed that rediscount rate had negative and significant impact on FDI while taxes showed positive effect on FDI in the economy.

[42], examined the impact of monetary and fiscal policies on trade balance of Iran for the period 1979-2012 using autoregressive technique and vector error correction model (VECM) method.

International balance of payments is used to measure the flow of trade exchanges and capital transfer in an open economy. In developing countries, the payments balance and current account are very crucial macroeconomic variables and macroeconomic strategic constraints. On the other hand, monetary and fiscal policies are the most important political instruments of each country that affect macroeconomic variables. The results showed that monetary and fiscal policies instruments had negative impact on balance of payments in the long run. [43], investigated the effects of fiscal policy shocks on net export performance and the sectoral composition of output in Greece using baseline structural vector auto regression (VAR) model. The results indicate government expenditure had negative response on output in Greece. The study also showed that although real aggregate output declines following a cut in government spending, the tradable sector output responds positively, further improving net exports.

[44], studied the effect of fiscal policy instruments on the growth of the Nigerian economy for the period 1981-2014 through the applications of Ordinary Least Square technique and vector error correction model (VECM). The variables used in the study include gross domestic product (GDP), recurrent expenditure (RE), capital expenditure (CE), public external debt (PED) and Public domestic debt (PDD). The results indicated that recurrent expenditure and public domestic debt have negative impact on growth whereas capital expenditure and external debt have positive effect on the economic growth of Nigeria.

[45], investigated the effect of monetary policy variables on net export of Nigeria from 1981 to 2016 through the applications of Auto Regressive Distributed Lag (ARDL) model and Pairwise Granger causality test. The variables used in the study were net export, interest rate, money supply, exchange rate, total exports, total imports and foreign direct investment. The results showed that money supply has positive and insignificant influence on Nigeria's net export whereas total export had positive and significant impact on net export. More so, it was also indicated in the study that interest rate, FDI, exchange rate and total import (TIMP) had insignificant and negative effect on net export of Nigeria.

Furthermore, the results of the Pairwise Granger causality test revealed that money supply has unidirectional relationship with net export (NEX) with causality runs from money supply to net export while other variables showed no causation.

[46], evaluated the effect of the relative impact of monetary and fiscal policy on the Nigeria's economic growth for the period 1986-2014 through the application of the modified St. Louis equation and Ordinary Least Squares (OLS) technique. The study showed that growth in money supply and exports have significant and positive influence on growth in the output of the Nigerian economy whereas growth in government expenditure had insignificant and negative influence on the economy. Similarly, the estimation indicated that monetary policy had higher significant influence on the economy of Nigeria than the fiscal policy did. [47], examined the impact of exchange rates on imports and exports in Nigeria for the period 1996 – 2015 using Vector Auto Regressive (VAR) model. The variables employed in the investigation were exports, imports and exchange rates. The results indicated that exchange rates have insignificant and positive impact on imports whereas exchange rates have insignificant and negative impact on exports. Similarly, exports have negative effect on exchange rates while imports have positive effect on exchange rates.

[48], studied the influence of monetary policy instruments on exchange rate, inflation and economic growth in Nigeria. The study utilized analysis approach by using both primary and secondary information. The review found that monetary policy involves trade-off due to its implication on the whole economy and that each economic agent reacts to each monetary policy depending on the extent of its positive or negative effects on business or activity. It also discovered that concerning the foreign exchange market, monetary policy makers needs to analyse the fundamentals of export and import as well as the country's elasticity to export before, taking policy on whether to devaluate or not.

[49], examined the impact of monetary policy on economic growth in Nigeria for the period 1990-2010 using multiple regression analysis. The variables of the study include money supply, financial deepening, interest rate and gross domestic product. The results found

marginal impact on the economic growth of Nigeria. The study also showed the aims and objectives of monetary policy, which includes price stability, maintenance of balance of payment equilibrium, full employment and economic growth. [50], investigated the effect of fiscal policy measures on the balance of payments in Nigeria for the period 1980-2012, using Johansen-Juselius co-integration approach and parsimonious ECM. The variables used in the investigation include the balance of payment, government expenditure, government tax revenue and government debt. The result of the ECM also revealed that 80% changes of the explained variable is accounted for by the explanatory variables. More so, the study found that tax revenue has significant positive influence on the Nigerian payments balance (BOP), whereas public spending and public debt have significant and negative influence on the payments balance (BOP) of Nigeria.

[51], examined the effect of monetary policy instruments on the performance of banking sector in Nigeria for the period 1970-2006 using ordinary least square (OLS) technique. The variables employed in the study include deposit liabilities (DL), deposit rate (DR), minimum discount rate (MDR) and exchange rate (EXR). The estimation results indicated that monetary policy significantly affects the banks deposit liabilities. In that, the results showed that minimum discount rate (MDR) and deposit rate (DR) had a negative effect on the Nigeria's banks deposit liabilities, while exchange rate (EXR) had significant and positive effect on the Nigeria's banks deposit liabilities. Thus, the study concluded that monetary policy is very crucial in the determination of the volume of bank's deposit liabilities in Nigeria.

[52], examined the influence of monetary policy instruments on the balance of payment (BOP) of Nigeria from 1986 to 2013 using error correction model (ECM) technique. The variables employed in the study include exchange rate, money supply, interest rate, trade openness, bank credit to private sectors and inflation. The results showed that long-run equilibrium relationship exists among the variables. The results also indicated that money supply, exchange rate and credit to private sectors are the major determinants of balance of payments in Nigeria. Hence, the study concluded that monetary policies

and implementation capacity is important in the Nigerian economy, because it is very special for determining the provision of interest rate to private sector that produce for export, which is spill-over effect on economic growth and balance of payments.

[53], investigated the influence of the instruments of fiscal and monetary policies on the growth of the Nigerian economy for the period 1986-2010. The study was set to find the monetary and fiscal policy instruments determinants that significantly impact on the economic growth of Nigeria. The study used the method of ordinary least squares (OLS) in the data analysis. The results showed that government revenue has significant and positive impact on economic growth. Similarly, it was revealed in the study that money supply has significant positive impact on economic growth. The study also found that exchange rate has positive impact on the performance of the Nigeria's economy. However, the study indicated that inflation insignificantly and positively affects economic growth. [54], studied the influence of monetary policy on economic growth in Nigeria for the period 1981-2012, using the test of Johansen co-integration and Vector Error Correction Mechanism (VECM) in the analysis. The variables employed in the investigation include interest rate, exchange rate, money supply and liquidity ratio. The results of the co-integration test revealed evidence of long-run equilibrium relationship among the variables under study. The VECM results showed that exchange rate has significant influence on the growth of the Nigerian economy whereas other variables were not. More so, money supply has positive and insignificant influence on growth of the economy.

[55], examined the impact of fiscal policy on economic growth in Nigeria from 1986 to 2010 through the application of Autoregressive Distributed Lag (ARDL) model. The variables employed in the study involves the gross domestic product, federal government total debt, federal government non-oil taxes, federal government capital expenditure, federal government recurrent expenditure. The results of illustrated that long equilibrium relationship exists between fiscal policy and economic growth in Nigeria. More so, the study showed that government recurrent and capital expenditures have significant and positive influence on economic growth while non-oil taxes and government total debts have insignificant impact on real gross domestic product in Nigeria. [56], examined the effect of exchange rate on exports and imports in the economies of the emerging countries for the period 1985-2012 through the application of panel. The results indicated evidence of long run relationship among the variables.

[57], investigated the impact of exchange rate volatility on non-oil exports in Nigeria from 1986(1) to 2008(4) using cointegration test and error correction model (ECM). The results demonstrated that real export had significant relationship with exchange rate in the economy. Similarly, the results showed that exchange rate volatility, exchange rate and foreign income had positive and significant impact on non-oil exports in the long run while imports had negative impact on exports in the long run. The results of ECM indicated that foreign income impact on non-oil positively and significantly. More so, it was also showed that imports had positive effect on import in the short run. [58], examined the influence of monetary policy on the current account's components in Nigeria from 1970 to 2010. Johansen cointegration test, Ordinary Least Square (OLS) technique and Error Correction Model were utilized in the study. The study showed evidence of long run relationship between monetary policy and the components of current account. The estimation results also indicate that money supply had positive effect on exports, imports and industrial output expect exchange rate which showed negative.

[59], examined the effectiveness of the interaction of fiscal and monetary policies on price level and growth of the Nigerian economy. Impulse response and variance decomposition were utilized in the analysis to examine the dynamic correlations of the variables. The results revealed that money supply and public revenue in the long run impacted positively on economic growth of Nigeria. Thus, it is clear from the estimation results that economic activities of Nigeria are dominated by its internal dynamics, even though that the fiscal and monetary policy variables affect economic activities significantly in most of the periods. [60], examined the effects of fiscal policy

shocks on the current account dynamics in Nigeria for the period 1980-2010 through the application of structural Vector Author Regressive (VAR) approach. The macroeconomic variables applied in the study include real output, real interest rate and exchange rate. The results showed that the expansionary fiscal policy shock has negative effect on current account balance and interest rate in the economy.

[61], examined the influence of fiscal and monetary policy instruments on the growth of the Nigerian economy. The focus of the study was to identify the policy that has greater influence on economic activities of Nigeria. Cointegration test and VAR model were applied in the study's analysis. The variables used in the modelling of the equation include interest rate, minimum rediscount rate, liquidity rate, company income tax (CIT) and federal budget. The results showed that the above mentioned variables have significant impacts on gross domestic product in both the previous and current year. However, liquidity rate and interest rate have negative impact on the gross domestic product (GDP) while minimum rediscount rate, federal budget and company income tax have positive effect on GDP. Fiscal and monetary policies jointly showed significance to the growth of the Nigerian economy.

[38], investigated and measured the short run and long run influence of fiscal and monetary policy instruments on Nigeria's economic growth using cointegration test and the method of Vector Error Correction Model (VECM) in the analysis. The study discovered that money supply is the major determinant of the Nigerian economy. It was also showed in the results that monetary variables such as minimum rediscount rate and money supply affect economic growth significantly. From all indications, the results showed that monetary policy instruments have more influence on economic growth than the fiscal policy instruments had on economic growth, more especially during the period of reduced inflation rate. Despite these findings that both fiscal and monetary and fiscal policy instruments contribute to growth in the long run and in the short run, it is clear that monetary policy instruments would have more influence on growth if it promotes supply side of the economy via the supply of money. [8],

studied the relationship between the monetary policy instruments and the balance of payments position in Nigeria for the period 1980-2010 through the application of Ordinary Least Squares (OLS) method of multiple regression models. The variables used in the study include balance of payments), exchange rate, money supply and interest rate. The results revealed that interest rate and money supply had significant relationship with balance of payments while exchange rate had insignificant effect on the balance of payments of Nigeria.

[34], investigated the impact of fiscal and monetary instruments on economic growth in Nigeria for the period 1999-2008 using descriptive statistics and correlation analysis. The variables used in the investigation include interest rate, inflation, broad money, narrow money, government capital and government recurrent expenditures. The results indicated that broad money and recurrent expenditure have positive impact on real gross domestic product (RGDP) while the recurrent expenditure has significant impact with broad money influencing the economy insignificantly. The correlation results as well revealed that broad money, narrow money, government recurrent expenditure and government capital expenditure have significant effect with inflation and interest rate showing insignificant and negative effect on economic growth in Nigeria.

[48], investigated the effect of fiscal policy instruments on Nigeria's economic growth for the period 1970-2006 by employing the method of cointegration test and Granger causality analysis. The study used government expenditure (GE) as a proxy for fiscal policy while GDP was proxied for Nigeria's economic growth. The empirical results revealed that unidirectional relationship exists between government expenditure and gross domestic product with unidirectional relationship running from government expenditure to gross domestic product, which met the a priori expectation of the study. The study therefore, concludes that the Nigeria's fiscal operations have within the period under study affected the economic growth significantly.

Gap in Empirical Review
This empirical study is an extension of other studies carried out on the related topic being investigated. The study reviewed several empirical studies in

order to lay credence to this study. However, of all the studies reviewed across the countries of the world including Nigeria, this study is not aware of any other study that examined the effect of fiscal and monetary policy instruments on net-export, especially in Nigeria. Most of the studies reviewed dwells much on either the fiscal or the monetary policy in relation to the growth in the economy, with little study carried out on both the monetary or fiscal policy instruments and the payments balance. Hence, the above gap and the desire to contribute to knowledge in literature is the major motivation of this study.

RESEARCH METHODOLOGY

In order to empirically investigate the effectiveness of monetary and fiscal policy instruments on net-exports of Nigeria's economy for the period 1981-2016, unit root test, Auto Regressive Distributed Lag (ARDL) and Granger causality test were employed in the analysis. The unit root test is conducted to examine the order of integration among the series used in the study. The ARDL model is undertaken to investigate the short-run and long-run coefficients of the variables under study, while the Granger causality test is applied to examine the causality among the variables of interest. Data obtained from the Central Bank of Nigeria (CBN) on net-exports (NEX), money supply (LMS), interest rate (INR), exchange rate (LEXCR), government expenditure (LGEX), tax revenue (LTAR), public debt (LPUDT) and foreign direct investment (LFDI) were used in the study.

Model Specification

The model specification followed the lead of St. Louis modified model with modification. The model expressed GDP as a function of money supply, government expenditure and merchandise exports. Under the model specification, three equations are specified as shown below.

Equation 1

NEX = f(MS, INR, EXCR, FDI)   5

Where; NEX is the net exports; MS is the money supply, INR is the interest rate; EXCR is the exchange rate; FDI is the foreign direct investment.

In linear function, it is specified thus:

$$NEX_t = \varphi_0 + \varphi_1 MS_t + \varphi_2 INR_t + \varphi_3 EXCR_t + \varphi_4 FDI_t + U_t \qquad 6$$

In log function, it is illustrated as:

$$NEX_t = \varphi_0 + \varphi_1 LMS_t + \varphi_2 INR_t + \varphi_3 LEXCR_t + \varphi_4 LFDI_t + U_t \qquad 7$$

Where; NEX is the explained variable; whereas LMS, INR, LEXCR and LFDI are the explanatory variables; U_t = stochastic variable; φ_0 = constant term; L is the log function, whereas φ_s are the coefficients of the regression equation. The model represents the relationship between monetary policy instruments and net-exports.

Equation 2

NEX = f(GEX, TAR, PUDT, FDI)   8

Where; NEX is the net-exports; GEX is the government expenditure, TAR is the tax revenue, PUDT is the public debt, FDI is the foreign direct investment.

In linear function, it is represented as:

$$NEX_t = \varphi_0 + \varphi_1 GEX_t + \varphi_2 TAR_t + \varphi_3 PUDT_t + \varphi_4 FDI_t + U_t \qquad 9$$

In log function, it is illustrated as:

$$NEX_t = \varphi_0 + \varphi_1 LGEX_t + \varphi_2 LTAR_t + \varphi_3 LPUDT_t + \varphi_4 LFDI_t + U_t \qquad 10$$

Where; NEX is the explained variable while LGEX, LTR, LPUDT and LFDI are the explanatory variables; φ_0 = constant term, U_t = stochastic variable and t = current period t. Thus, the above model represents the relationship between net-exports and fiscal policy instruments.

Equation 3

This equation followed the lead of the modified St. Louis model as developed by Andersen and Jordan (1968). It is shown below.

NEX = f(GEX, TAR, MS, INR, EXCR)   11

Where; NEX is the net-exports; GEX is the government expenditure, TAR is the tax revenue, INR is the interest rate, MS is the money supply and EXCR is the exchange rate.

In linear function, the model is represented as:

$$NEX_t = \varphi_0 + \varphi_1 GEX_t + \varphi_2 TAR_t + \varphi_3 MS_t + \varphi_4 INR_t + \varphi_5 EXCR_t + U_t \qquad 12$$

In log function, it is expressed as:

$$NEX_t = \varphi_0 + \varphi_1 LGEX_t + \varphi_2 LTAR_t + \varphi_3 LMS_t + \varphi_4 INR_t + \varphi_5 LEXCR_{t+} U_t \qquad 13$$

This equation represents the synthesis of the fiscal policy and monetary policy variables and net-exports.

A Priori Expectation

Theoretically, it is expected that foreign direct investment, money supply, government expenditure, exchange rate, public debt and foreign direct investment will have positive relationship with net-export while tax revenue and interest rate are expected to assume negative relationship with the net-export of Nigeria.

Empirical Results and discussion

This stage of the study illustrates the estimation results and consequently, discusses the results in accordance with the objectives of the study.

Stationarity Test

Stationarity test is conducted to examine the order of integration of the series used in the study by applying the Augmented Dickey-Fuller (ADF) unit root test. The results of the ADF unit root test are shown in the table 1 below.

Table 1: ADF Unit Root Test between Monetary variables and Net Export
Trend and Intercept

Variables	Level		First Difference		Remarks	Rank
	ADF Statistic	5% Critical Value	ADF Statistic	5% Critical Value		
NEX	-1.686105	-2.948404	-4.434107	-2.951125	Stationary	I(1)
LMS	-0.276238	-2.948404	-3.294147	-2.951125	Stationary	I(1)
INR	-3.188450	-2.948404	-8.063030	-2.951125	Stationary	I(0)
LEXCR	-2.087826	-2.948404	-5.782584	-2.951125	Stationary	I(1)
LFDI	-1.569765	-2.954021	-4.938916	-2.951125	Stationary	I(1)

Sources: Researcher's computation from E-view 9

The table 1 above illustrates ADF unit root test between monetary variables and net-exports of Nigeria at 5% level of significance. The results indicated that all the variables such NEX, LMS, LEXCR and LFDI except INR were non-stationary in level. However, all the variables became stationary after first differencing. This result implies that all the variables possessed long run properties. In other words, their mean, variance and covariance are constant overtime. Hence, it can be used in the investigations.

Table 2: ADF Unit Root Test Fiscal variables and Net Export at Level and First Difference
Trend and Intercept

Variables	Level		First Difference		Remarks	Rank
	ADF Statistic	5% Critical Value	ADF Statistic	5% Critical Value		
NEX	-1.686105	-2.948404	-4.434107	-2.951125	Stationary	I(1)
LGEX	-1.177745	-2.948404	-7.079965	-2.951125	Stationary	I(1)
LTAR	-1.368476	-2.951125	-6.371471	-2.954021	Stationary	I(1)
LPUDT	-3.189977	-2.948404	-4.546020	-2.951125	Stationary	I(0)
LFDI	-1.569765	-2.954021	-4.938916	-2.951125	Stationary	I(1)

Sources: Researcher's computation from E-view 9

Table 2 above depicts the results of ADF stationarity test between fiscal variables and net-exports in Nigeria. From the results, it is observed that all the variables including NEX, LGEX, LTAR and LFDI except LPUDT were non-stationary at level. But at first differencing, all the variables became stationary. The stationarity achieved after first differencing, implies that all the variables possessed long-run properties, and that their variance, mean and covariance are constant overtime. Thus, the series can be used in the investigations.

Auto Regressive Distributed Lag (ARDL) Bounds Cointegration Tests

ARDL Bounds cointegration test is one of the estimation procedures that deals with analysis of the long run relationship and short run dynamic interactions among the underlying variables. It was developed by [43] and 44] in an attempt to investigate the long run and short run coefficients of the variables under study. ARDL model is

better applied when there is mixed order of integrations among the variables [i.e. I(0) and I(0)]. The model is relatively more efficient even when the size of the data is small and finite. Its technique ensures unbiased estimation results of the long run model [29]. The ARDL results are shown in table 5 below.

Table 3: ARDL Model between Monetary variables and Net-Exports
Dependent Variable: NEX

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
NEX(-1)	1.052221	0.152693	6.891072	0.0000
NEX(-2)	-0.987690	0.275220	-3.588729	0.0014
LMS	808.7645	384.7833	2.101870	0.0454
INR	-43.64250	59.00769	-0.739607	0.4662
LEXCR	-898.9377	431.6451	-2.082585	0.0473
LFDI	558.2911	425.8493	1.311006	0.2013
C	-3804.371	1935.123	-1.965958	0.0601
R-squared	0.822090	Mean dependent var		1424.915
Adjusted R-squared	0.781033	S.D. dependent var		2087.341
F-statistic	20.02351	Durbin-Watson stat		1.964915
Prob(F-statistic)	0.000000			

Sources: Researcher's computation from E-view 9

The results in the table 3 show the relationship between monetary variables and net exports in Nigeria. The results revealed that money supply (LMS) has a positive and significant effect on net-exports while LFDI has a positive and insignificant influence on net-exports. Similarly, the results indicated that interest rate (INR) has a negative and insignificant impact on net-exports whereas exchange rate (LEXCR) has a negative and significant impact on net-exports. These are evident by the coefficients and the p-values of the corresponding variables. From the results, the coefficients of LMS, INR, LEXCR and LFDI are 808.7645, -43.64250, -898.9377 and 558.2911, respectively while the corresponding p-values include 0.0454, 0.4662, 0.0473 and 0.2013, respectively. The R^2 is 0.822090, which means that 82.2% of the variations in the dependent variable are accounted for, by the independent variables. The F-statistic is 20.02351 and its Prob(F-statistic) is 0.000000. This result implies that the joint influence of the explanatory variables on the explained variable is statistically significant. More so, the Durbin-Watson stat is 1.964915 which confirmed that evidence of serial correlation is not found in the model; hence, it cannot produce spurious result. To confirm the absence of serial correlation, Breusch-Godfrey Serial Correlation LM test was conducted and the results showed Observed R-squared of 1.903694 while the p-value is 0.3860, which further confirmed the earlier assertion. The study also tested for homoscedasticity, and the results indicated evidence of homoscedasticity in the equation. The results showed Obs*R-squared of 2.437918 with Prob.Chi-Square of 0.1351, which is greater than the 5% critical value. It also tested for non-stability of the model, and the results indicated a stability model. This is evident by the F-statistic and t-statistic of 0.768061 and 2.663749 respectively with the p-value of 0.1086, which further supported the claim.

These results imply that 1% increase in LMS and LFDI will lead net-exports to increase by 808.8 and 558.3 units respectively while 1% increase in INR and LEXCR will decrease net-exports by 43.6 and 898.9 units respectively.These findings are in line with the monetarists' theory of money which postulated that quantity of money stock determines the volume of goods and services traded in an economy. Hence, they argued that positive relationship exists between growth of money stock and country's international trade position as free enterprise economy leads to strong self-adjustment tendencies. Accordingly, private initiative, induced by profit motive, yields a satisfactory real national income growth [17].

Table 4: ARDL Bounds Test on monetary variables and net exports

Test Statistic	Value	K		
F-statistic	6.270746	4		
Critical Value Bounds				
Significance	I0 Bound	I1 Bound		
10%	2.45	3.52		
5%	2.86	4.01		
2.5%	3.25	4.49		
1%	3.74	5.06		

Source: Researcher's compilation from E-view 9

The table 4 illustrates the results of ARDL bounds. From the estimation results, evidence of long run relationship is established among the variables under study, since the F-statistic of 6.270746 greater than the critical value bounds. Hence, the study concludes that evidence of long-run relationship is found among the variables.

Table 5: ARDL Model between Fiscal variables and Net Exports
Dependent Variable: NEX

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
NEX(-1)	1.241536	0.240453	5.163318	0.0000
NEX(-2)	-0.976965	0.230782	-4.233280	0.0003
LGEX	572.2977	1016.780	0.562853	0.5785
LTAR	480.2844	242.5269	1.980334	0.0588
LPUDT	-913.5016	697.1311	-1.310373	0.2020
LFDI	528.5218	546.7673	0.966630	0.3430
C	-2549.635	2654.229	-0.960594	0.3460
R-squared	0.846637	Mean dependent var		1489.594
Adjusted R-squared	0.809829	S.D. dependent var		2086.873
F-statistic	23.00191	Durbin-Watson stat		2.107053
Prob(F-statistic)	0.000000			

Source: Researcher's compilation from E-view 9

Table 5 above depicts ARDL model results between fiscal policy variables and net-exports of Nigeria. The results indicated evidence that government expenditure (LGEX), tax revenue (TAR) and foreign direct investment (LFDI) have a positive and insignificant effect on net-exports (NEX) while public debt (LPUDT) has a negative and insignificant effect on net-exports (NEX) of Nigeria. These claims are evident by the coefficients and p-values of the variables such as LGEX, LTAR, LPUDT and LFDI. The coefficients of the variables include 572.2977, 480.2844, -913.5016 and 528.5218 while the p-values are 0.5785, 0.0588, 0.2020 and 0.3430 respectively. The R^2 is 0.846637, implying that 84.7% of the variations in the dependent variable explained by the explanatory variables. More so, the F-statistic is 23.00191 whereas the Prob(F-statistic) is 0.000000. This result indicates

that the joint influence of the independent variables on the dependent variable is statistically significant. The Durbin-Watson stat is 2.107053, which imply that evidence of serial correlation is not found in the model. This shows that any result obtained using this model cannot produce spurious result. In an attempt to confirm the serial correlation results, Breusch-Godfrey Serial Correlation LM test was investigated and the results showed Observed R-squared of 3.229135 whereas the p-value is 0.1990, which further confirmed the earlier result. Similarly, presence of homoscedasticity was tested, and the results showed evidence of homoscedasticity in the model, which implies that the sequence of the linear regression has equal statistical variance. The results indicated Obs*R-squared of 2.894864 and Prob.Chi-Square of 0.0889, which is greater than the 5% critical value. The study also tested for non-stability of the model, and the results revealed a stability model. This is evident by the F-statistic and t-statistic of 1.913788 and 1.383397, respectively while the p-value is 0.1793; hence, it further supports the claim.

Thus, it is estimated that 1% rise in LGEX, LTAR and LFDI will lead net-exports to increase by 572.3, 480.3 and 528.5 units respectively, while 1% increase in LPUDT will decrease net-exports by 913.5 units. These findings are in accordance with the Keynesians school of thought, which postulated that government interventions are required in an economy to stimulate aggregate demand, and improve economic growth [54]. The finding is also in line with the discovery of Nursini [41] who examined the effect of fiscal policy and trade openness on economic growth and found positive relationship between the two variables. However, the discovery negates the finding of [11] that carried research on the related topic and found negative relationship between the two variables.

Table 6: ARDL Bounds Test between fiscal variables and net exports

Test Statistic	Value	K	
F-statistic	8.686769	4	
Critical Value Bounds			
Significance	I0 Bound	I1 Bound	
10%	2.45	3.52	
5%	2.86	4.01	
2.5%	3.25	4.49	
1%	3.74	5.06	

Source: Researcher's compilation from E-view 9

The table 6 shows the results of ARDL bounds on the relationship between fiscal policy variables and net-exports of Nigeria. The results revealed evidence of long run relationship among the variables under study. This claim is evident by the F-statistic of 8.686769, which is greater than the critical value bounds. Thus, the study concludes that long-run relationship exists among the variables.

Table 7: ARDL Bounds Test between Fiscal-Monetary variables and Net Exports

Dependent Variable: NEX

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
NEX(-1)	1.314146	0.207348	6.337870	0.0000
NEX(-2)	-1.046610	0.240849	-4.345507	0.0002
LGEX	2593.009	1118.048	2.319228	0.0288
LTAR	218.4515	200.0254	1.092119	0.2852
LMS	-1279.070	866.4723	-1.476181	0.1524
INR	-120.5285	53.28145	-2.262110	0.0326
LEXCR	-1093.668	495.0594	-2.209165	0.0366
C	-2133.514	1512.726	-1.410377	0.1708
R-squared	0.859824	Mean dependent var		1444.594
Adjusted R-squared	0.820575	S.D. dependent var		2070.209
F-statistic	21.90683	Durbin-Watson stat		1.935114
Prob(F-statistic)	0.000000			

Source: Researcher's compilation from E-view 9

The ARDL model in the table 7 shows the results of the synthesis of the fiscal-monetary policy variables and net-exports of Nigeria. The results demonstrated that government expenditure (LGEX) has a positive and significant effect on net-exports while tax revenue (LTAR) has a positive and insignificant influence on net-exports. The results also revealed that interest rate (INR) and exchange rate (INR) have negative and significant impacts on net-export (NEX) while money supply (LMS) has a negative and insignificant influence on the net-exports. Evidence of these claims is shown by the coefficients and p-values of the underlying variables. From the results, the coefficients of LGEX, LTAR, LMS, INR and LEXCR are 2593.009, 218.4515, -1279.070, -120.5285 and -1093.668 respectively while their p-values include 0.0288, 0.2852, 0.1524, 0.0326 and 0.0366, respectively.

The R^2 is 0.859824, which implies that 86% of the variations in the explained variable (NEX) are accounted for, by the explanatory variables (LGEX, LTAR, LMS, INR and LEXCR). F-statistic is 21.90683 and its associated Prob(F-statistic) is 0.000000, which indicates that the joint influence of the explanatory variables on the explained variable is statistically significant. The Durbin Watson (DW) statistic is 1.935114.This result implies that presence of serial correlation is not found in the model. This further indicates that any result generated via this model will not produce spurious result. To verify this claim, Breusch-Godfrey LM Serial Correlation was conducted, and the results showed Observed R-squared of 0.286174 while the p-value is 0.8667, thereby confirming the earlier result of no serial correlation. More so, the study tested for the presence of homoscedasticity, and the results showed evidence of homoscedasticity in the model, which implies that the sequence of the linear regression has equal statistical variance. The results indicated Obs*R-squared of 2.701128 and Prob.Chi-Square of 0.1003, which is greater than the 5% critical value. The study also tested for non-stability of the model, and the results revealed a stability model. This is evident by the F-statistic and t-statistic of 0.032443 and 0.180118, respectively with the p-value of 0.8586; this further supports the claim.

Thus, these results imply that 1% rise in LGEX and LTAR will lead net-exports of Nigeria to increase by 2593.01 and 218.45 units, respectively while 1% increase in LMS, INR and LEXCR will decrease net-exports by 1279.1, 120.5 and 1093.7 units, respectively. However, the above findings negate the postulations of St. Louis modified model. The model conceived that fiscal (government expenditure) and monetary policy (money supply) instruments are the key determinants of growth in any economy; since the study found government expenditure to be significant to net-exports in the economy.

Table 8: ARDL Bounds Test between fiscal-monetary policy variables and net exports

Test Statistic	Value	k
F-statistic	1.933575	5

Critical Value Bounds

Significance	I0 Bound	I1 Bound
10%	2.26	3.35
5%	2.62	3.79
2.5%	2.96	4.18
1%	3.41	4.68

Source: Researcher's compilation from E-view 9

Table 8 revealed the results of ARDL bounds between fiscal-monetary policy variables and net-exports. The results indicated no evidence of long-run relationship among the variables under review. This is evident by the F-statistic of 1.933575, which is less than the critical value bounds as indicated in the estimation results in the table 8 above. Since the F-statistic of 1.933575 is less than any of the critical value bounds, the study concludes that evidence of long-run relationship is not found among the variables.

Granger Causality test

The Pairwise Granger Causality test is used to test for causality effects among the variables of the study. Thus, the results of the test are shown in table 12 below.

Table 9: Pairwise Granger Causality test

Null Hypothesis:	Obs	F-Statistic	Prob.
LGEX does not Granger Cause NEX	34	2.49078	0.1004
NEX does not Granger Cause LGEX		0.63421	0.5376
LTAR does not Granger Cause NEX	33	0.49453	0.6151
NEX does not Granger Cause LTAR		2.27740	0.1212
LMS does not Granger Cause NEX	34	4.04617	0.0282
NEX does not Granger Cause LMS		0.49055	0.6173
INR does not Granger Cause NEX	34	0.46229	0.6344
NEX does not Granger Cause INR		1.78145	0.1863
LEXCR does not Granger Cause NEX	34	1.41293	0.2597
NEX does not Granger Cause LEXCR		1.24775	0.3021

Source: Researcher's compilation from E-view 9

The table 9 portrays the results of Pairwise Granger causality test between monetary-fiscal policy variables and net-exports of Nigeria. In the estimation, the results showed that money supply (LMS) has unidirectional relationship with net- exports (NEX) with causality runs from LMS to NEX. This claim is evident by the p-value of the causality running from LMS to NEX in the estimation model. From the results, the p-value of the causality is 0.0282, which is less than 5% level of

significance. However, the study also indicates no causality among other variables such as LGEX, LTAR, INR and LEXCR, and net-exports (NEX). These claims are supported by the respective p-values of the corresponding causalities of the variables as shown in the table 9 above.

Policy Implications of the Results

The study examined the effectiveness of monetary and fiscal policy variables on net-exports of Nigeria from 1981 to 2016 using ARDL model. The results showed positive and significant relationship between LMS and NEX; but in the St. Louis model, LMS influenced NEX negatively and insignificantly. It also indicated that LEXCR had negative and significant impact on NEX, while INR affects NEX negatively. It further revealed that LGEX had positive and insignificant effect on NEX; in the St. Louis model, LGEX had positive and significant influence on NEX. Similarly, the results showed that LTAR and LFDI impact on NEX positively, while LPUDT had negative effect on NEX. The causality test found unidirectional relationship with causality runs from LMS to NEX only.

These results imply that 1% rise in LMS and LFDI will lead net-exports of Nigeria to increase by 808.8 and 558.3 units respectively, while 1% increase in INR and LEXCR will results to a decrease in net-exports by 43.6 and 898.9 units, respectively. Similarly, the results also imply that 1% rise in LGEX, LTAR and LFDI will lead net-exports to increase by 572.3, 480.3 and 528.5 units, respectively, while 1% increase in LPUDT will decrease net-exports by 913.5 units. Using the St. Louis modified model, the study estimate that 1% increase in LGEX and LTAR will improve the net-exports by 2593.01 and 218.45 units, respectively while 1% rise in LMS, INR and LEXCR will decrease net-exports by 1279.1, 120.5 and 1093.7 units, respectively.

CONCLUSION AND RECOMMENDATIONS

The study examined the effectiveness of monetary and fiscal policy variables on net-exports of Nigeria for the period 1981-2016. ARDL model and Pairwise Granger causality test were utilized in the analysis. Data obtained from the Central Bank of Nigeria (CBN) statistical bulletin on net-exports (NEX), money supply (LMS), interest rate (INR), exchange rate (LEXCR), government expenditure (LGEX), tax revenue (LTRA), public debt (LPUDT) and foreign direct investment (LFDI) were analyzed in the study. Stationarity test was conducted by applying the Augmented Dickey-Fuller (ADF) unit root test. The results revealed that all the variables except INR and LPUDT were non-stationary at level. However, all the variables became stationary at first differencing. The results of the ARDL model showed positive and significant relationship between LMS and NEX; but in the St. Louis model, LMS influenced NEX negatively and insignificantly. It also indicated that LEXCR had negative and significant impact on NEX, while INR affects NEX negatively. It further revealed that LGEX had positive and insignificant effect on NEX; in the St. Louis model, LGEX had positive and significant influence on NEX. Similarly, the results showed that LTAR and LFDI impact on NEX positively, while LPUDT had negative effect on NEX. The results of the Granger causality test found evidence of unidirectional relationship with causality runs from LMS to NEX, whereas no causality is found between other variables and NEX.

These results imply that between the two major macroeconomic policies (monetary and fiscal policies) when investigated separately, monetary policy variables contribute significantly to net-exports of Nigeria, than the fiscal policy variables. However, when the both macroeconomic policy variables are investigated combined, on net-exports, the study observed that fiscal policy variables (government expenditure) contribute significantly to net-exports against the monetary policy variables. Thus, the study recommends that government should apply monetary policy instruments (money supply) more than it uses fiscal policy instruments (government expenditure) and use fiscal policy variables more than the monetary policy variables when combining the two macroeconomic policy variables if the case require such to achieve higher net-exports inflows in the economy.

REFERENCES

1. Abata, M. A., Kehinde, J. S.,& Bolarinwa, S. A. (2012). Fiscal/monetary policy and economic growth in Nigeria: A theoretical exploration. *International Journal of Academic*

Research in Economics and Management Sciences, 1(5), 75-88.

2. Abdulazeez, M. N. (2016). Impact of monetary policy on the economy of Nigeria. *Journal of Business and Finance Management Research*, 2(10), 163-179.

3. Adesuyi, O. O.,& Odeloye, O. D. (2013). Foreign trade and economic growth in Nigeria. *Journal of Economics and Sustainable Development*, 4 (13), 73-88.

4. Akalpler, E.,& Shamadeen, B. (2017). The role of net exports on economic growth in United States of America. *Journal of Applied Economic Sciences,* 3(49), 772– 781.

5. Alex, E. O.,& Ebieri, J. (2014). Empirical analysis of the impact of fiscal policy on economic growth of Nigeria. *International Journal of Economics and Finance*, 6(6), 203-211.

6. Andersen, L. C.,& Jordan, K. M. (1970). *A monetarist model for economic stabilization.* Federal Reserve Bank of St. Louis Review.

7. Aniekan, O. A., & Sikiru, J. B. (2013). Effects of real exchange rate on trade balance: empirical evidence from Nigeria. *Asian Journal of Empirical Research*, 3(5), 605-617.

8. Anthony, I. I., Lekan, M. O.,& Bosco, I. E. (2013). Monetary policy and its implications for balance of payments stability in Nigeria. *International Journal of Economics and Finance,* 5(3), 197-204.

9. Anthony, E. A.,& Victor, A. A. (2014). Exchange rate volatility and non-oil exports in Nigeria: 1986-2008. *International Business and Management*, 9(2), 70-79.

10. Ateyah, M. A., Torki, M. A.,& George, N. S.(2015). The impact of the fiscal and quantitative monetary policies on the domestic and foreign direct investment in Jordan: An empirical study. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 5(4), 1-10.

11. Athanasios, O. T. (2014). Fiscal policy, net exports, and the sectoral composition of output in Greece. *Working Paper*, Bank of Greece Eurosystem, 1-37.

12. Ayakumar, A., Kannan, L., & Anbalagan, G. (2014). Impact of foreign direct investment on imports and exports in India. *International Review of Research in Emerging Markets and the Global Economy (IRREM)*, 1(1), 51-58.

13. Balami, D. H., Ahmed, F. F.,& Yusuf, A. B. (2016). Impact of monetary policy in Nigeria on inflation, exchange rate and economic growth. *IIARD-International Journal of Economics and Business Management,* 2(5), 67-82.

14. Batten, D.,& Hafer, R. W. (1984). How robust are the policy conclusions of the St. Louis Equation? Some Further Evidence. *Federal Reserve Bank of St. Louis Review.*

15. Bernard, A.B., Redding, S.J.,& Schott, P.K. (2006). Comparative advantage and heterogeneous firms. *Review of Economic Studies,* 74(1), 31-66.

16. Burcu, T.,& Fatih, R. S. (2011). Foreign direct investment inflows and net exports relationship in turkey: an analysis for the post 1980 period. *International Journal of Social Sciences and Humanity Studies,* 3(2), 83-93.

17. Chigbu, E. E.,& Njoku, M. (2013). The impact of monetary and fiscal policies on Nigerian economic growth. *European Journal of Business and Management*, 5(2), 13-24.

18. Chris, O. U.,& Anyingang, R. A. (2012). The effect of interest rate fluctuation on the economic growth of Nigeria, 1970-2010. *International Journal of Business and Social Science,* 3(20), 295-302.

19. Danmola, R. A., & Abba, M. W. (2013). Solid mineral resources: Alternative source of revenue for the Nigerian economy. *Journal of Emerging Trends in Economics and Management Sciences (JETEMS),* 4(5), 487-492.

20. Danmola, R. A.,& Olateju, A. O. (2013). The impact of monetary policy on current account balance in Nigeria. *IOSR Journal of Humanities and Social Science (IOSR-JHSS),* 7 (3), 67-72.

21. David, U.,& Adaobi, S. (2013). Trade flows and exchange rate shocks in Nigeria: An empirical result. *Asian Economic and Financial Review*, 3(7), 948-977.

22. Dennis, B. E.,& Joseph, B. O. (2015). Fiscal policy measures and balance of payments in Nigeria. *Journal of Global Economics*, 3(4), 2-6.

23. Elbeydi, K. R. M. (2010). The relationship between export and economic growth in Libya: Arab Jamahiriya. *Theoretical and Applied Economics*,1(542), 69 – 76.

24. Elif, G. G.,& Oksan, K. A. (2014). The effect of exchange rates on exports and imports of emerging countries. *European Scientific Journal*, 10 (13), 128-141.

25. Engle, R. F.,& Granger, C.W.J. (1987). Cointegration and error correction: representation, estimation and testing. *Econometrica*, 55, 1-87.

26. Eze, O. M.,& Atuma, E. (2017). An empirical study of the effect of monetary policy variables on net-exports of Nigeria. *IOSR Journal of Economics and Finance (IOSR-JEF),*8(5), 71-82.

27. Farah, D.,& Ishtiaq, Q. (2016). A historical analysis of the theories of money. *International Journal of Business and Economic Development*, 4(1), 71-84.

28. Greg, E. E., Udude, C. C. & Hope, I. U. (2015). The impact of monetary policy on the banking sector in Nigeria. *International Journal of Economics, Commerce and Management*, 3(5),1015-1031.

29. Harris, R., & Sollis, R. (2003). *Applied time series modeling and forecasting.* West Sussex: Wiley.

30. Hossein, O.,& Bahram, T. (2015). The impact of monetary and fiscal policies on balance of payments in order to fulfil the objectives of the Fifth Development Plan in Iran. *Journal of Scientific Research and Development*, 2 (6), 71-74.

31. Ilham, H. M.,& Sri, Y. S. (2017). Impact of foreign direct investment, net exports, and budget deficit on economic growth: Case 10 ASEAN countries period 2000-2015. *Conference Paper*, 399-404.

32. Imoughele, L. E.,& Ismaila, M. (2015). Monetary policy and balance of payments stability in Nigeria. *International Journal of Academic Research in Public Policy and Governance,* 2 (1), 1-15.

33. Johansen, S.,& Juselius, K. (1990). Maximum likelihood estimation and inference on cointegration with applications to the demand for money, *Oxford Bulletin of Economics and Statistics,*52(2), 169–210.

34. Kareem, R. O., Afolabi, A. J, Raheemand, K.A.,& Bashir, N.O. (2013). Analysis of fiscal and monetary policies on economic growth: evidence from Nigerian democracy. *Current Research Journal of Economic Theory*, 5(1), 11-19.

35. King, R. G.,& Wolman, A. L. (1996). Inflation targeting in a St. Louis model of the 21st Century. *Federal Rerserve Bank of St. Louis Review*, 78(3), 251-352.

36. Michael, A. A.,& Olufemi, A. A. (2017).Evaluating the relative impact of monetary and fiscal policy in Nigeria using the St. Louis Equation. *Economica*, 13 (1), 102-113.

37. Morakinyo, F. O., David, J. O.,& Alao, J. A. (2018). Impact of fiscal policy instrument on Economic growth in Nigeria. *International Journal of Economics and Financial Management*, 3(1), 14-29.

38. Musa, Y.,& Asare, B. K. (2013). Long and short run relationship analysis of monetary and fiscal policy on economic growth in Nigeria: A VEC Model Approach. *Research Journal of Applied Sciences, Engineering and Technology*, 5(10), 3044-3051.

39. Meyer, V. (1981). A comparison of the St. Louis model and two variations: Predictive performance and policy implications. *Federal Reserve Bank of St. Louis Review.*

40. Nathan, P. A. (2012). The impact of fiscal policy on the Nigerian economy. *International Review of Social Sciences and Humanities*, 4 (1), 142-150.

41. Nursini, N. (2017). Effect of fiscal policy and trade openness on economic growth in Indonesia. *International Journal of Economics and Financial Issues*, 7(1), 358-364.

42. Nwankwo, G. O (2000). *The Nigeria financial system.* London: Macmillan Publishers

43. Neil-Angelo, C. H.,& Leah-Melissa, T. D. (2004). Efficiency of fiscal and monetary Policies in the

Philippines: The St. Louis model approach. *Bangko Sentral Review*, 33-44.

44. Pesaran, M. H., &Shin, Y. (1999). An autoregressive distributed lag modeling approach to cointegration analysis. Chapter 11 in S. Strom (ed.), *Econometrics and Economic Theory in the 20th Century: The Ragnar Frisch Centennial Symposium.* Cambridge University Press, Cambridge. (Discussion Paper version).

45. Pesaran, H. M., Shin, Y.,& Smith, R. J. (2001). Bound testing approaches to the analysis of long-run relationships. *Working Paper*, University of Cambridge, 65-77.

46. Prince, U. C. A., Waleru, H. A. & Fred, B. K. (2013). Exchange rate dynamics and balance of payments repositioning in Nigeria. *European Journal of Business and Management*, 5(29), 84-91.

47. Ohlin, B. (1933). *Interregional and international trade.* Cambridge. Harvard University Press, 2nd edn, 1967.

48. Ogar, A., Nkamare, S. E,& Emori, E. G. (2014). Fiscal and monetary policy and its effect on the growth of Nigeria economy. *European Journal of Business and Management*, 6(29), 220-232.

49. Ogbole, F. O., Amadi, S. N.,& Isaac, D. E. (2011). Fiscal policy and economic growth in Nigeria: A granger causality analysis. *American Journal of Social and Management Sciences,* 357-359.

50. Oloyede, O.,&Essi, D. I. (2017). The effect of exchange rate on imports and exports in Nigeria from January 1996 to June 2015. *IIARD International Journal of Economics and Business Management*, 3(2), 66-77.

51. Oluwasola, O.,& Olumide, A. (2012). Does trade promote growth in developing countries? Empirical evidence from Nigeria. *International Journal of Development and Sustainability,* 1(3), 743-753.

52. Oseni, I. O.,& Onakoya, A. B. (2013). Empirical analysis of fiscal policy shocks and current account dynamics in Nigeria. *An International Multidisciplinary Journal, Ethiopia,* 7 (1),228-250.

53. Rana, M. S. Y., Shoukat, A.,& Inamul, H. (2016). Impact of foreign direct investment and exports on economic growth of Pakistan. *Developing Country Studies*, 6(1), 78-86.

54. Robert, D. K. (2009). Fiscal Deficit and the external sector performance of Sierra Leone: A simulation approach. *Journal of Economic and Monetary Integration*, 9(1), 51-73.

55. Rodrik, D. (1997). *Has globalization gone too far?* Washington, D.C.: Institute for International Economics, 45-76.

56. Sam, S. E. (2011). Foreign direct investment and export growth in Nigeria. *Journal of Economics and International Finance*, 3(11), 586-594.

57. Samson, O.,& Abass, A. S. (2012). The dynamics of monetary and fiscal policy as a tool for economic growth: Evidence from Nigeria. *Journal of Management and Sustainability, 2(2), 247-258.*

58. Seyed, E. A., Saeed, M.,& Mohammad, S. (2016). An Analysis of the efficiency of the monetary and fiscal policies in Iran economy using IS – MP – AS model. *Procedia Economics and Finance,* 36 (2016), 522 – 531.

59. Sylvie, N.,& Wilson, T. (2015). The impact of monetary policy on Rwanda's economy: Analysis of vector error correction model. *International Journal of Contemporary Applied Sciences*, 2(5), 12-28.

60. Udude, C. C. (2014). Monetary policy and economic growth of Nigeria. *Journal of Policy and Development Studies*, 9(1), 234-247.

61. Yakubu, M., Barfour, K. A.,& Shehu, U. G. (2013). Effect of monetary-fiscal policies interaction on price and output growth in Nigeria. *CBN Journal of Applied Statistics*, 4(1), 55-74.