Multilateralism Vs. Regionalism: An Analysis of Nigeria's Bilateral Trade Flows Using the Gravity Model

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Abstract

International trade is critical to economic development. The 20th century ushered in an era of global trade that was dominated by multilateral and regional systems. Both concepts influence bilateral trade flows, but their outcomes for each nation differ. A valid approach to ascertain the efficiency of the concepts for any country is to subject them to empirical investigation. This study used the gravity model to empirically examine annual time series data of twenty-nine countries from 2000 to 2014 to determine the impact of multilateral and regional trades on Nigeria's bilateral trade flows. The study revealed that some factors including gross domestic product(GDP), distance, GDP per capita, global competitiveness, market concentration and the type of trade concept influence the bilateral trade flows. Empirical evidence suggests that the multilateral system generates a greater bilateral trade flow for Nigeria than the regional system. The study concludes that multilateralism is more efficient for Nigeria than regionalism. Therefore, this paper recommends that Nigeria should trade more with the multilateral partners while maintaining its position within the regional economic bloc to sustain the regional demand for its manufactured exports.

Keywords: Multilateralism, Regionalism, Gravity Model, Bilateral trade flows, Nigeria.

1. Introduction

Multilateralism and regionalism are two essential trade concepts that characterize modern trade. They are both used as a means of achieving peace, stability, and prosperity within the context of international trade and economic cooperation. These concepts have dominated the frameworks that shape national trade policies of almost all the nations because autarky has become more of a theoretical concept in a globalized world that provides a platform for the interdependence of nations. Multilateralism and regionalism are distinct, but their outcomes remain inseparable. Robert Z. Lawrence (2013), observed this phenomenon and described it as an uneasy coexistence. Lawrence argued that the coexistence of the World Trade Organization (WTO), and multilateral or regional trade systems would continue to be uneasy, but the WTO will remain active in enforcing its existing rules and offering platform for discussion and review of the trade policies (Lawrence, 2013). Krugman (1993) admits that the issue of multilateralism versus regionalism is a difficult one to deal with. His argument hinges on two levels; first, from a narrow economic perspective, preferential trading arrangements led to the discovery of the Byzantine complexities of second best. Second, from a non-narrow economic perspective, trading regimes are used as a political economy tool by nations to protect their interests from their economic groupings and others outside the group.

The purpose of this paper is to empirically investigate the relationships that multilateralism and regionalism have with Nigeria's bilateral trade flows. This paper will use the gravity model to analyze critical variables including GDP, GDP per capita and distance as well as the global competitiveness index (GCI), market concentration, landlockedness and types of trade concepts to examine the volume of bilateral trade. Total trade, oil trade only, and all trade except oil products will be analyzed to determine the level of impact regional and multilateral trade have on Nigeria's bilateral trade flows.

Evidence from merchandise and service trade will be analyzed to find the historical trade growth trends of Nigeria's top multilateral and all regional trade partners between 1970 and 2016. Total trade and vital economic statistics of twenty-nine countries that are trade partners with Nigeria will be analyzed. The paper will discuss the effects of transportation cost, institution and port efficiency that was brought to bear by Clark et al. (2004) which represent global competitiveness. They serve as critical factors that define both trade concepts. Despite the influence that distance has on bilateral trade, transportation cost, port efficiency, and market concentration explained the pattern of Nigeria's two-way trade flows more succinctly. Nigeria belongs to the Economic Community of West African States (ECOWAS); a regional economic bloc, but the country's top trading partners for both oil and non-oil products are the multilateral partners. This phenomenon raises the question of the efficiency of multilateralism and regionalism in Nigeria's bilateral trade flow which is the primary purpose of this study.

This paper, therefore, is a significant effort to evaluate the impact of both trade concepts on Nigeria's bilateral trade flows and contribute to the growing body of literature on trade flows patterns. Assessing the efficiency of multilateral and regional trade approaches in implementing a country's trade policy has significant implications. This study could help nations (or Nigeria) determine which trade concept generates the best

bilateral trade outcome, thus providing the necessary guide to evolve a trade policy mix that will aid them in pursuing economic growth. Trade theories suggest that regional trade promotes deeper economic integration, unlike multilateral trade that spread across vast geographical space involving nations with different economic ideologies. Such claims could be over-simplistic and generalized. Assumptions could not provide evidence that economic integration leads to higher growth and development. An empirical study could give a definite direction whether regionalism is the leading approach to economic growth and development or if multilateralism leads to a higher outcome. Research that provides answers to this question could contribute to the debate whether membership of regional economic bloc or global competitiveness is the new paradigm of bilateral trade flows. The knowledge will help policymakers in shaping future trade policies.

2. Literature Review

Trade theorists have become more interested in probing into the question of whether the regional trade is more efficient than the multilateral system. This paper provides a detailed review of relevant literature that presents evidence of the impact of multilateralism and regionalism on bilateral trade flows. The literature review focuses on five areas. The first section of the review discusses the nexus between trade and economic growth. The second part compares multilateralism with regionalism and the effects that transport cost, port efficiency, and infrastructure have on multilateral and regional trade. The third section reviews multilateralism and its relationship with global trade governance to understand their contributions to economic growth and development. The fourth part discusses regionalism and its role in regional economic integration to understand the impact it has on local trade and welfare. Finally, the fifth section of the review will present an overview of Nigeria's total merchandise trade with the multilateral and regional partners from 1970 to 2016 and total service trade between 1980 and 2016.

2.1 The connection between International Trade and Economic Growth

International trade is an integral part of economic growth which is an essential determinant in investigating the standard of living of an economy (Gwaindepi et al., 2014). The theoretical relationship between international trade and economic growth has been established in the literature including Lee and Huang (2012), Chatterji et al. (2013) and Steiner et al. (2014) as well as in Gwaindepi (2014). The trade flow pattern influences the policy discussions on the choice of economic growth strategies such as import substitution and export-led growth. Economic growth which is an increase in the productive capacity of a nation is measured using the gross domestic product (GDP) that includes net trade as an essential component. GDP as the total value of final goods and services produced in a country in a year (Krugman et al., 2014), shows that there is an empirical link between trade and economic growth. Thus, the net international trade influences the size of GDP. Thus, GDP as a national accounting system takes the form:

$$GDP = C + I + G + (EX - IM) \tag{1}$$

Where C is consumption, I is investment expenditure, G is government spending, EX is exports, and IM is imports. Equation 1 above shows that a positive or higher net trade increases the size of GDP while a negative or lower net trade decreases the size of GDP. As the size of GDP grows, increase in government spending generates a higher multiplier effect on the economy. If government relaxes foreign exchange rate and interest rate control, investment will rise, promoting new technologies (Gwaindepi et al., 2014) and capital mobility which leads to economic growth and provides more opportunities for trade. Gains from trade rely on productivity, trading regimes and economic policies pursued by a country. Neo-classical economists including Solow (1956), Romer (1986) and Lucas (1988) argued that trade facilitates economic growth through technological spill over. Grossman & Helpman (1990) and Chen (2013) reinforced this claim and showed that endogenous growth theories of trade demonstrate the critical role that knowledge accumulation and technological progress play in economic growth.

The African Development Bank identified trade as a powerful tool that has the highest potential for building sustainable economic development (African Development Bank, 2017). Romer (1986), Lucas (1988) and Grossman & Helpman (1990) models produced endogenous growth rates that link trade and economic growth through knowledge and technological diffusion. However, Frankel and Romer (1999) found that the productivity of Asia and Pacific Economic Cooperation (APEC) member countries rose from 2 percent to 3 percent for every percent increase per point of the ratio of trade to GDP. This evidence supports the relationship between trade and economic growth.

The neo-classical growth models especially, Solow (1956) show that long-run growth is exogenously determined by three key variables which include capital, labor, and technological progress. The idea is that output is a function of capital and labor such that long-run growth is determined by labor (L), capital (K), and savings (S) or investment (I). The production function: Y=F (K, L) has a constant return to scale which implies that if inputs are doubled, output also doubles. Constant return of the factors of production changes the production function into a different form such that output per worker (Y) equals capital per worker (K): y = f(k).

This phenomenon indicates that as the capital-labor ratio rises, increases in productivity diminishes till an equilibrium is reached at a point where savings and investment to maintain stable capital-labor ratio are in the steady state as shown below in equation 2.

$$Sf(k*) = (\delta + n)K \qquad (2)$$

Where k is capital per worker, s is savings rate, δ is depreciation, and n is the growth rate of the population. The implication is that nations keep on pushing the steady state by investing in creating an enabling environment for growth till they attain the desired level of the steady state. However, the new endogenous growth theorists such as Stonier & Hague (1972) and Romer (1994) disagreed with Solow's model and argued that technology should be endogenously determined. The idea is that long-run economic growth induces innovation that results in capital and knowledge accumulation.

From the trade theory perspective, trade contributes immensely to economic growth when the control of macroeconomic variables such as foreign exchange rates are relaxed. Ndulu and Njuguna (1998) found that trade liberalization with both concepts leads to a positive relationship between economic growth and trade in Southern African countries. Additionally, Asam et al. (2002) showed that the strength and quality of economic growth depend on the quality of export products and the proportion of exports in the total trade. The implication is that more exports lead to favorable terms of trade and a positive current balance which induces economic growth.

Gwaindepi et al. identified that exports are the engine for economic growth and a critical source of revenue, emphasizing that successful export-led trade has a higher multiplier effect than import-led trade on the economy (Gwaindepi et al., 2014). However, on the contrary, imports show a negative influence on the demand side of the trade in the form of leakages which impede growth. Kim et al. (2007) argued that rising imports shrink a domestic economy that adopts an import-substitution growth strategy which contracts investment and productivity. A counterclaim by Mishra (2012) concludes that the evidence of the link between import and economic growth is complex and inclusive. However, a vital construct of the Heckscher Ohlin (HO) model is that imports improve the welfare of domestic consumers, thus contributing to economic development. Salvatore (2010) showed in his analysis of the HO model that trade based on comparative advantage affects the return to labor. Importation may shrink domestic production but increases consumers' welfare and induces economic development.

2.2 Multilateralism vs. Regionalism

Winter (1996) explained that as the literature on regionalism vs. multilateralism is burgeoning. Many economists and political scientists have been striving to provide a definite answer to the question- whether regional integration agreements are good or bad for the multilateral system. The concern is that the proliferation of regional blocs could likely undermine the WTO's efforts in sustaining a steady momentum towards greater trade liberalism. Bhagwati (1992) noted a shift in the anti-multilateralism ethos that has reinforced the view that regionalism is an alternative to multilateralism. The connotation for the US government's desire to replace the Canada-United States Free Trade Agreement in 1994 with NAFTA to include Mexico was to exploit regional market opportunities to look after the interest of the country and that of the region to close the wage differential gap and reduce immigration pressure from Mexico (Peach and Williams, 2000).

Bhagwati presented an alternative view that regionalism is a useful supplement and not an alternative to multilateralism and argued that regionalism does not merely supplement multilateralism but also accelerates the multilateral process (Bhagwati, 1992). Bhagwati differentiated preferential trade arrangements into FTAs and customs unions (CU) with regionalism strictly associated with CU to address the question raised in Viner (1950); if such discriminatory trade arrangements will divert trade instead of creating trade. The rationale for Bhagwati's approach is that Viner's concepts of FTAs and CUs are two dimensional because they liberalize trade among members and raise barriers against non-members. An important issue is to find out which aspect of the FTA and the CU is dominant within the context of bilateral trade flows. The concerns of participants in the trade arrangements come down to the goals of being part of the FTA or CU. The reality check will be if the FTA or CU diverts trade by taking trade away from efficient outsider partners and giving it to insiders that are inefficient. Also, members of FTAs can ascertain if the trade arrangements are trade-creating by generating the trade flows from more efficient members at the expense of other less efficient members. This concern was the fear that the United Kingdom had that necessitated Brexit from the German-dominated EU like the fears of other ECOWAS member states of Nigeria's dominance once a common currency (i.e., the Eco) is adopted.

One of the best-held assumptions in trade theory is that bilateral trade decreases with distance. However, Disdier and Head (2008) argued that in the factor proportion model, spatial separation does not raise cost but leads to intense pressure for factor price equalization. The models that have increasing returns to scale have a profound penalty for geographic isolation. Disdier and Head showed that the spatial effect is persistent in two ways; they hold in a wide range of samples and are not declining in literature employing recent data (Disdier &Head, 2008).

Nigeria is a signatory to many bilateral trade agreements including multilateral and regional trade

agreements such as the African, Caribbean, and Pacific Countries with preference in the EU (ACP), ECOWAS, African Group, G-90, G-20, and G-33. Prominent among these trade agreements are ACP, ECOWAS, G-90, and G-20. This study will analyze Nigeria's trade flows within the context of multilateralism and regionalism using the gravity model as the theoretical foundation to examine the impact of the trade concepts. Sohn (2001), Clark et al. (2004) and De (2006 & 2007) used the gravity model to analyze trades flows and investigate factors that impact the volume of bilateral trade. The study will use the gravity model to examine trade patterns with factors that influence bilateral trade as variables.

2.2.1 The effect of transport cost, port efficiency, and infrastructure on multilateral and regional trade

The implicit assumption is that institutions, transportation cost and efficiency in ports operations are all crucial for the success of either multilateral or regional trade flow patterns. This claim has been justified in the literature including Baier and Bergstand (2001), Clark et al. (2004), De (2006 & 2007), and Jacks & Pendakur (2010). Clark et al. (2004) discussed the impact of port efficiency and maritime transport cost on bilateral trade and argued that transport cost remains a significant barrier to international trade despite a global effort to lower artificial barriers through trade liberalization. The claim is that both multilateralism and regionalism have reduced tariff and nontariff barriers but have brought to bear the relative importance of transport cost and efficiency as critical determinants of trade flow, showing that there is a link between the success of the trade concepts and transaction cost.

The Nigerian experience shows that institutional factors, infrastructure and the level of efficiency of the ports influence the cost of bilateral trade regardless of the form of the trade agreement. The demurrage and delays in clearing of shipments add to the cost of trade and influence business decisions of most firms doing business in Nigeria. In a related study, Clark et al. (2004) analyzed U.S. average tariffs and transport costs in comparison with some of the South American countries and found that there is a marked difference between these countries and U.S. regarding trade cost. For example, in countries like Chile and Ecuador, the transport costs exceed the tariffs they face in the U.S. market by over twenty times. The results in Clark et al. show that that geography (i.e., the distance between markets), trade composition, directional imbalances between countries, increasing return to scale, technological changes, restriction and anticompetitive practices, onshore infrastructure, and more importantly, port efficiency determine bilateral trade volume.

De (2006 & 2007) and Clark et al. (2004) looked at other factors rather than restrict their investigation only to transaction cost. They observed that port efficiency has a direct impact on transport cost because it imposes a constraint on trade and influences corporate income. Studies including Clark et al. (2004) have shown that the longer the distance between markets, the higher the cost of transportation. Limao and Venables (2001), analyzed shipping companies' quotes for transporting a standard container from Baltimore to different worldwide destinations and find that an additional 1000 km increases transport cost by $380. Clark et al. (2004) explained that further breaking down of transportation into overland haul and sea components show that additional 1,000 km by sea only raises transport cost by $190 while similar distance by overland haul increases costs by $1,380. The differences represent 4 and 30 percent of the median shipment cost for sea and overland transport respectively. The transport cost for the landlocked countries rises by over 50 percent on average characteristically common to some West African countries including Niger, Mali, and Burkina Faso.

2.3 Multilateralism

Multilateralism is the coming together of three or more nations to explore the opportunity of working together to realize shared goals, such as trade, socioeconomic stability, counter-terrorism, and global environmental preservation. Bouchard et al. (2014) described multilateralism as a system of interaction that combines rules, institutionalized cooperation, and inclusiveness recognized as a distinct form of the international collaboration that is rooted in voluntary decisions taken by participants involving multiple actors. This system of interaction is based on accepted standards rather than asymmetrical arrangements. Multilateralism is founded on both the classical international trade theory and the free trade theory which promote comparative advantage and specialization among participating nations as explained in Markusen et al. (1995), Salvatore (2001) and Gandolfo (2014). The ACP, G-90, G-20, G-33 and the African Group of the World Trade Organization (WTO) provide a broad platform for Nigeria to engage in multilateral trade apart from several bilateral trade arrangements with the traditional trade partners.

Bhagwati (1992) raised the question of the dynamic time-path which he described as a difficult one because multilateralism was still evolving when he wrote the article. He argued that the time-path to multilateral free trade for all as an "optimum optimorum" which implies the best of the best could be made monotonic. Bhagwati did not specify whether FTAs will expand, and if it does will welfare be improved in a monotonical manner.

Bhagwati presupposes that multilateralism is a more economically inclined approach than a tool to build political alliances, but Gill (2016) offered a more political perspective of multilateralism that is less economic in context. Gill argued that multilateralism seeks to improve the operation of international organizations and improve cooperation incrementally to correct the flaws of the existing order that is commensurate with the

reproduction of the existing structures and forms of power (Gill, 2016). His idea is that multilateralism is a tool for promoting global-cooperation, congruent political and ideological struggle for the emerging global and civil community, hence the assumption that globalization has become the launching spring for multilateralism. Bhagwati's perspective offered a more realistic possibility from an economic standpoint because the purpose of any form of FTA or CU is the maximization of the welfare of the citizens. All trade policies have national interests as the core goals. This assumption forms the rationale of Bhagwati's bold step to decry regionalism which he described as dangerous because inefficacies in trade will diminish welfare and impede the pathway to global free trade.

2.3.1 Multilateralism, global governance, and the offshoring nexus

Cox (2016) described multilateralism from a perspective like Gill's but under two broad concepts. Cox likened multilateralism to global governance defining it as the procedure and practices that exist at a global or regional level for the management of the economic, social and political affairs (Cox, 2016). Cox's first approach assumes necessary stability in the interstate system as a way of incremental change while the second was normative that offers multilateralism as an alternative to the existing world order. Baldwin (2016), provided a fresh perspective that captures the current state of multilateralism describing it as the established rule of trade that promotes negotiation of mutually beneficial trade liberalization. Although Baldwin acknowledged multilateralism as the economic governance structure of global trade that is deeply rooted in the GATT principles and later WTO, his conceptualization of multilateralism is purely economic. He argues that the recent reforms in WTO's three main rules following the Doha round-table have not slowed down the growth of global trade and opportunities to adjust the regulations unilaterally by members of WTO.

A great deal of tariff cutting has been done unilaterally by many developing countries leading to the establishment of new disciplines on international investment flows regarding trades in goods and services. Baldwin (2016) explained that over 3,000 networks of bilateral investment agreements had been set up with new rules that promote rapid growth of offshoring and the internationalization of production between industrialized and emerging economies. Baldwin argues that the challenge of frenetic tariff cuttings and re-writing of rules by members outside the WTO framework undermines multilateralism. The idea is that the Doha Agenda has become obsolete because of the rise of China, offshoring, and unilateralism, the Doha Agenda no longer provide a level playing field. Additionally, the procedure that expands the WTO agenda to incorporate stringent rules of disciplines for regional trade agreements is blocked by dissatisfied nations that are left out because of the paradigm shift in globalized production that is powered by rising offshoring.

2.4 Regionalism

Regionalism involves the formation of free trade blocs and customs unions through regional trade agreements. Renard (2015) described regionalism as an elusive concept with competing interpretations that can be centered mostly on economics, other sectoral issues or alternative political process. In the literature, regionalism is a unique expression of multilateralism. Prominent among such literature is Adler (2001) who defined regionalism as a thick multilateralism portraying it as deliberate efforts to build regional identities using multilateral platforms and organizations. Burfisher et al. (2003) explored the historical development of regional trade agreements (RTAs) in the United States and distinguished the trend into the first and the second wave of RTAs. They classified regional integration on the differing degrees of the integration into shallow and deep integration (Burfisher et al., 2003). The shallow integration involves reduction of barriers in commodities trade while deep integration is the harmonization of national policies and promotion of internal factor mobility. Burfisher et al. (2003) explained that the first 20 -30 years after World War II is regarded as the period of shallow integration while 10 – 15 years before the publication of their article is the period of deep integration.

In the literature, several waves of regionalism date back to the nineteenth century, but Choi and Caporaso (2002) were confident that the end of the cold war in the 1990s prompted a surge in registrations of many regional agreements with the WTO. It is possible that most of the regional trade agreements got started after the end of World War II, but many of them came to fruition in the 1990s and 2000s. For instance, the attempt of forming an economic union in West Africa started in 1945 after the formation of the CFA franc single currency union for the Francophone West African countries. The second attempt was in 1964 by then Liberian president, William Tubman when he proposed an economic union for West Africa but it was not until 1975 that the West African leaders signed the ECOWAS treaty in Lagos, Nigeria (ECOWAS, 2016). The regional body has recorded tremendous success in achieving sociopolitical integration especially in military peacekeeping operations and building of democratic institutions. The region has made progress in the areas of conflict resolution, movement of people and capital mobility but the achievement of full economic integration has been elusive due to the lack of commitment in the provision of infrastructure and resentment by some countries in adopting the proposed single currency (the Eco).

Borzel (2011) explained that the slow evolution of regionalism indicates that it is neither a new phenomenon nor is experiencing rapid growth. Borzel perceived the dynamic nature of regionalism as a

bifurcation between deeper regional integration within the existing regional economic blocs and as a proliferation of lighter intergovernmental cooperation within the framework of the existing regional cooperative arrangements. The proliferation of agreements deepens regionalism and opens new opportunities for region-to-region collaboration in a more stronger fashion. This idea presents regionalism as a threat to trade liberalization.

2.4.1 Regionalism, Welfare and National Identities

The Harvard Center for International Development explained that free trade blocs such as NAFTA and customs unions like EU allow nations to lower trade barriers among members while retaining flexibility over which sectors to liberalize and issues to negotiate (CID Harvard University, 2004). Yoo-Duk Kang described regionalism, as any form of institutionalized regional cooperation involving more than two countries (Kang, 2016). His idea of regionalism is that trade barriers are lowered to benefit member states. The question confronting regionalism is if there are losers and gainers in regional trade agreements. Primila Crivilli explained that whether preferential trade liberalization leads to an increase or decrease in protectionism against nonmembers, it is crucial to determine welfare effects for both members and nonmembers (Crivelli,2016). Regional economic blocs such as ECOWAS formed within a regional framework offers a platform to achieve more economic integration, but it seems these regional economic blocs are deviating from the goal of economic integration to a more political alliance. For instance, some ECOWAS member countries with reasonably large markets including Cote d'Ivoire, Ghana, Mali, and Senegal have not taken full advantage of Nigeria's market size and proximity to boost their bilateral trade within the regional economic bloc framework to maximize welfare for their citizens.

Borzel and Risse identified two core dimensions of regionalism; preferential trade agreements (PTA), and regional organizations (ROs) such as ECOWAS and Association of Southeast Asian Nations (ASEAN) that has deeper regionalism attributed to the process of diffusion (Borzel & Risse, 2016). As the spatial effects of regional cooperation and integration expand, the constraint on geopolitics loosens. Hanson described regionalism from the economic integration perspective as getting together of various states within a region, sometimes at different levels of socioeconomic development and institutional capacities to enlarge the economic opportunities and better responds to globalization in an organized process of dialogue, cooperation, integration and ownership (Hanson, 2016). Hanson suggests that member states give up control of some economic activities to integrate under one umbrella to maximize the welfare of their citizens. The question is how far any reasonable government can go to maximize the welfare of its citizens. The inability of members of a regional trade agreement to give up national identities to maximize their citizens' welfare is the greatest set back that weakens the efficiency of regionalism. The current exit process of the United Kingdom from the EU for greater trade and immigration policy control and the fear of Nigeria's dominance by the rest of ECOWAS shows that many countries are not willing to surrender their national autonomies for the more significant benefits of their citizens.

2.5 Nigeria's Multilateral and Regional Trading Partners

This study selected the top fifteen multilateral partners in terms of volume of bilateral trade and fourteen regional partners. Table 1 below which presents a brief economic profile of these partners shows that all Nigeria's multilateral partners except South Africa are from outside the continent of Africa. The fifteen multilateral partners have a combined total GDP of $72.754 trillion with a combined population of 4.114 billion in 2017. The regional partners comprising fourteen members of ECOWAS have a total GDP of $257.23 billion and a combined population of 173.54 million in 2017. Nigeria alone has a GDP of $633.11 billion and a population of 188.89 million in 2017. These statistics show that the multilateral partners combined economy and the population is 283 and 23.7 times bigger than those of the regional partners.

The large GDP and population of the multilateral partners translate to more prominent market opportunities for Nigeria, meaning that the multilateral partners offer a better chance for a higher volume of trade than the regional partners.

Additionally, in 2017, Nigeria's economy was 2.5 times bigger than the combined economy of its regional partners and its GDP per capita was higher than the rest of the countries in the region except Cape Verde. The implication is that Nigeria's international trade will gravitate towards the multilateral partners because of the size of their economies, a concept explained in Tinbergen's (1962) gravity model. Table 1 above shows that the multilateral partners have relatively large economies and high-income levels compared to the regional partners. Therefore, the multilateral partners have a large market for Nigeria's exports and can provide differentiated products to domestic consumers. Apart from that, consumers in multilateral countries have higher purchasing power than those in the regional trading bloc. The disparities in market size and personal incomes translate to higher demands of Nigeria's products in the multilateral countries compared to relatively smaller demands in the regional market.

Table 1. Nigeria's Multilateral and Regional Partners' Economic Statistics, January 2017

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Partners	GDP (in billions of U.S. dollars)	Population (in millions).	GDP/Capita (in U.S dollars at PPP)	Real GDP growth (in %)
Regional:				
Benin	$ 14.86	11.40	$ 2,219.01	3.4
Burkina Faso	$ 22.23	18.94	$ 1,884.48	6.4
Cabo Verde	$ 2.37	0.55	$ 6,942.18	4.0
Côte d'Ivoire	$ 63.26	24.96	$ 3,856.99	7.6
Gambia	$ 1.34	2.19	$ 1,686.34	3.0
Ghana	$ 65.13	28.27	$ 4,604.52	5.9
Guinea	$ 13.22	12.97	$ 2,039.42	6.7
Guinea- Bissau	$ 1.91	1.74	$ 1,805.94	5.0
Liberia	$ 2.98	4.51	$ 867.10	2.6
Mali	$ 20.45	18.89	$ 2,168.82	5.3
Niger	$ 11.70	18.76	$ 1,152.69	4.2
Senegal	$ 24.99	16.09	$ 2,677.51	6.8
Sierra Leone	$ 5.60	6.56	$ 593.90	6.0
Togo	$ 7.19	7.71	$ 1,611.69	5.0
Total	$ 257.23	173.54		
Nigeria	$ 633.11	188.69	$ 5,927.50	0.8
Multilateral:				
India	$ 3,923.76	1,316.90	$ 7,749.51	6.7
Netherlands	$ 1,002.53	17.08	$ 53,581.67	3.1
Spain	$ 1,628.33	46.33	$ 38,170.86	3.1
Brazil	$ 2,629.46	207.68	$ 15,500.38	0.7
France	$ 3,162.20	64.90	$ 43,550.59	1.6
United Kingdom	$ 2960.82	66.03	$ 43,620.43	1.7
South Africa	$ 419.40	56.50	$ 13,403.23	0.7
Portugal	$ 250.05	10.29	$ 30,257.71	2.5
Italy	$ 2,243.53	60.76	$ 37,970.50	1.5
Indonesia	$ 1,580.09	261.99	$ 12,378.23	5.2
United States	$ 23,505.31	325.44	$ 59,495.34	2.2
Japan	$ 5,482.01	126.71	$ 38,550.09	1.5
Turkey	$ 1,132.19	80.62	$ 26,453.47	5.1
Germany	$ 4,452.16	82.65	$ 50,206.21	2.0
China	$ 18,382.66	1,390.03	$ 16,624.41	6.8
Total	$ 72,754.50	4,113.91		
Source: International Monetary Fund World Economic Outlook, 2017.				

2.5.1 Overview of Nigeria's Merchandise Trade

Nigeria merchandise trade involves exports and imports of physical goods. Oil remains the dominant product, especially in the export trade. UNCTAD (2017) classified Nigeria's merchandise trade into three groups including all food items, fuels, and others. In 2016, trade in fuels accounted for 89 percent of Nigeria's total merchandise trade while others and food items accounted for 6 percent and 4 percent respectively (UNCTAD, 2017). Figure 1 compares the historical trend of Nigeria's total merchandise trade with those of the regional partners between 1970 to 2016. Nigeria's total merchandise trade grew higher than the volume of the regional partners except for the periods between 1986 and 1989, the time the country implemented structural adjustment program (SAP) and in 1998 during the political crisis leading to the transition to democracy. Colman and Okorie (1998) explained that the introduction of SAP helped Nigeria meet IMF conditions and eligibility requirements for borrowing.

Figure 1: Nigeria's Total Merchandise Trade Compared to the Regional Partners, 1970 - 2016
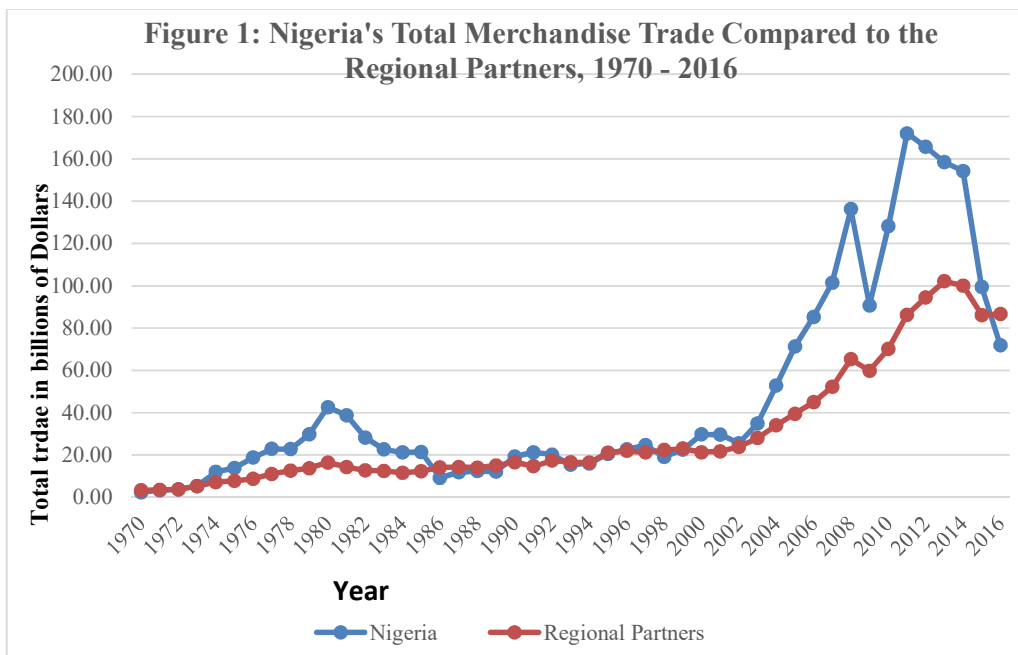
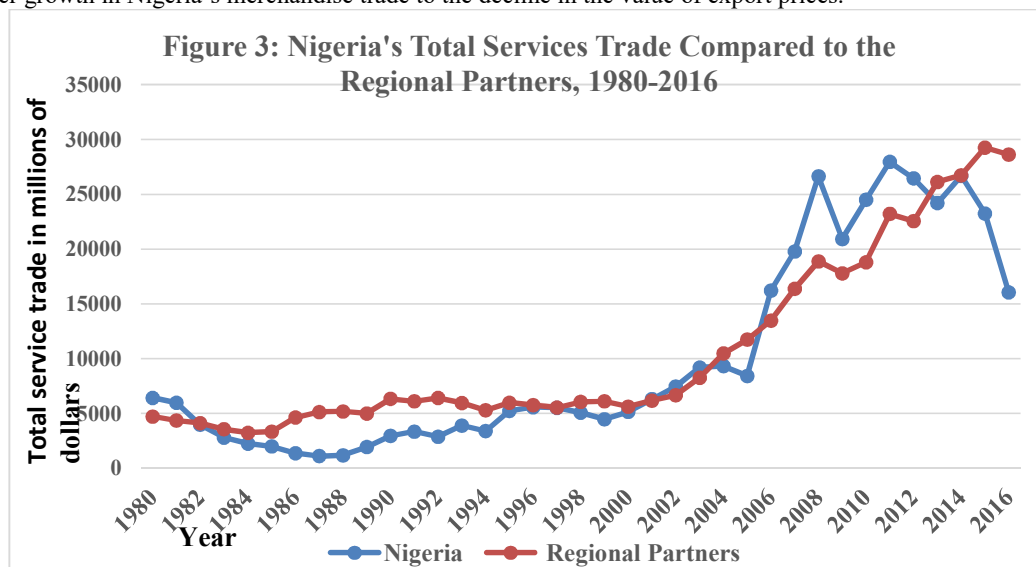Source: United Nations Conference on Trade and Development (UNCTAD).

In 1970, Nigeria's total merchandise trade was $ 2.3 billion compared to $3.32 billion for the regional partners. The volume of merchandise trade for the regional partners grew slower than Nigeria's but showed less volatility. Both Nigeria and the regional partners experienced a rapid rise in the volume of trade between 2003 and 2011, but merchandise trade slowed down in 2009 due to the global economic recession. In 2016, the volume of merchandise trade for Nigeria and the regional partners were $71.80 billion and $86.59 billion respectively suggesting that total merchandise trade has risen significantly from the initial volume in 1970.

Figure 2: Nigeria's Total Merchandise Trade Compared to the Multilateral Partners, 1970 - 2016
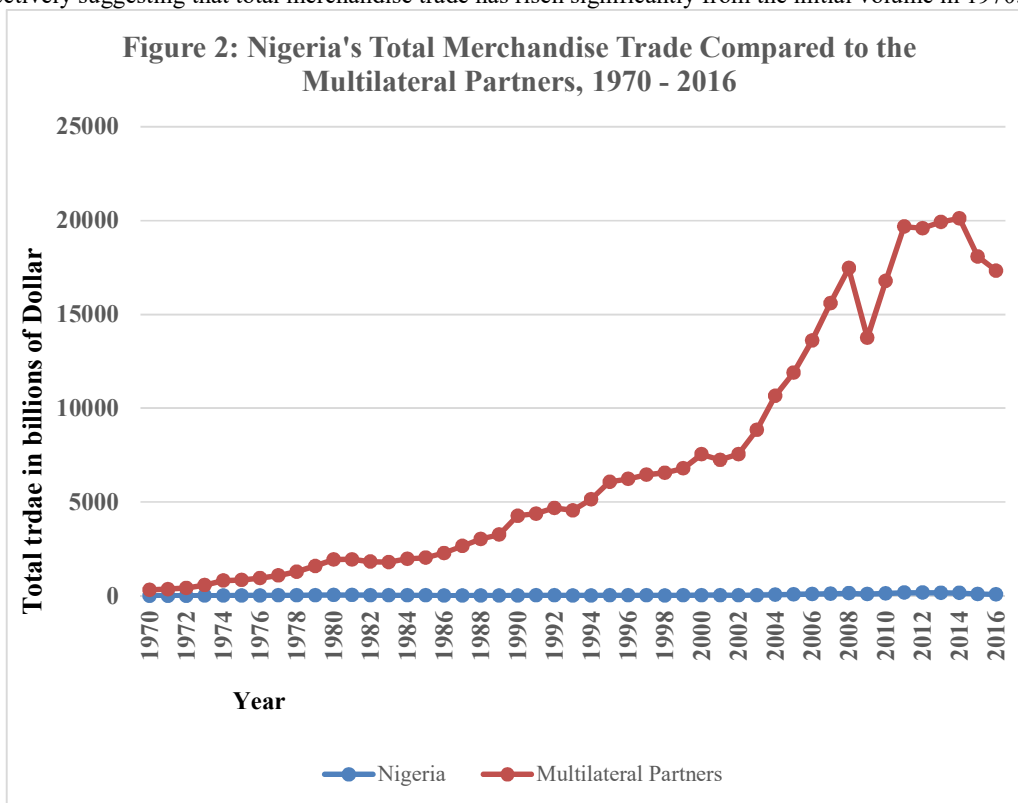
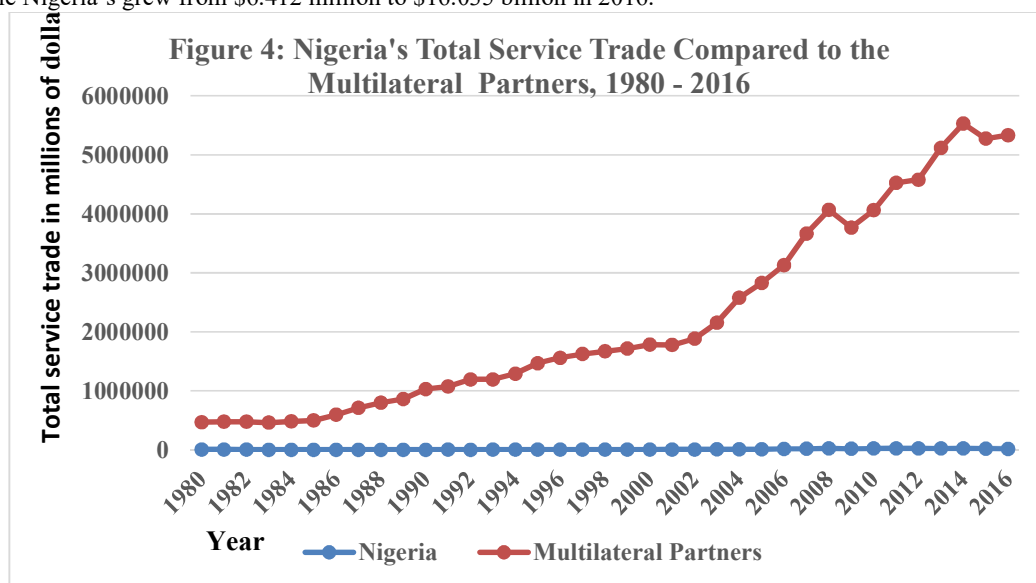Source: United Nations Conference on Trade and Development (UNCTAD).

The trend in figure 2 shows a vast difference in the growth of trade volume between Nigeria and the multilateral partners. The growth pattern of the multilateral partners' merchandise trade rose consistently from $311.25 billion in 1970 to $17.332 trillion in 2008 and declined slightly in 2009 to $13.758 trillion due to the global economic recession. The Multilateral partner's merchandise trade bounced back in 2010 and maintained a sluggish growth trend until 2014 and started to decline which continued until 2016. Nigeria's merchandise trade trend remained almost flat compared to the multilateral partners' trend, rising from $2.3 billion in 1970 to $71.80 billion in 2016. WTO (2017) explained that although all regions recorded similar growth in merchandise trade, the strongest performance came from Asia and North America. IMF (2017) and UNCTAD (2017) attributed the lower growth in Nigeria's merchandise trade to the decline in the value of export prices.

Figure 3: Nigeria's Total Services Trade Compared to the Regional Partners, 1980-2016

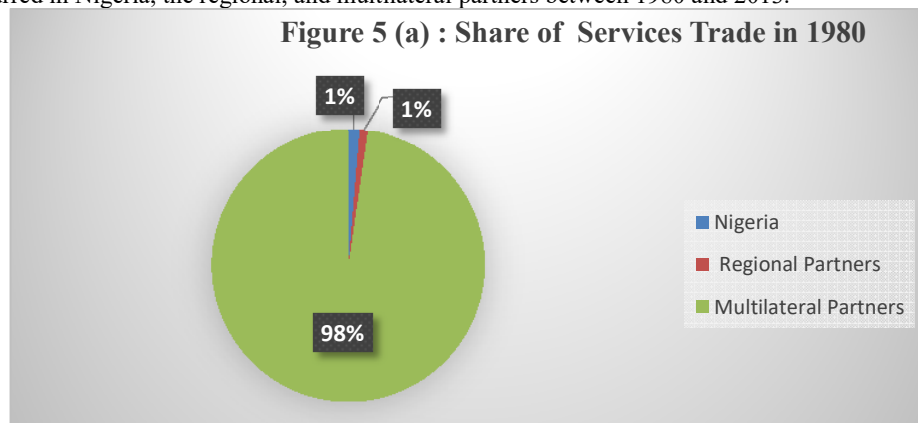Source: United Nations Conference on Trade and Development (UNCTAD).

Figure 3 compares the service trade of Nigeria with those of the multilateral partners. Unlike the regional partners' trend, the multilateral partners' volume of service trade grew exceedingly higher. Nigeria's trend was flat compared to the multilateral partners' trend which showed the disparity in the size of the economies. The multilateral partner's combined services trade grew from $470.311 million in 1980 to $5.334 trillion in 2016 while Nigeria's grew from $6.412 million to $16.035 billion in 2016.

Figure 4: Nigeria's Total Service Trade Compared to the Multilateral Partners, 1980 - 2016

Source: United Nations Conference on Trade and Development (UNCTAD).

Figure 4 shows that Nigeria's service trade did not grow at the same rate with the combined rate of the multilateral partners. Both UNCTAD (2017) and World Bank Integrated Trade Solution (2017) show that

Nigeria and the regional partners share of services trade declined from 2 percent in 1980 to about 1 (0.84 actual) percent in 2016. Out of the actual 0.84 percent share of services trade for Nigeria and the regional partners in 2016, Nigeria's share was 0.30 percent while the regional partners had 0.54 percent. The implication is that service trade in Nigeria and the ECOWAS region has been on the decline while the multilateral partners have experience exceedingly increase in the volume of service trade. Figures 5(a) and 5(b) illustrate the changes that have occurred in Nigeria, the regional, and multilateral partners between 1980 and 2013.

Figure 5 (a) : Share of Services Trade in 1980

1% 1%

- Nigeria
- Regional Partners
- Multilateral Partners

98%

Source: UNCTAD (2017) and WITS (2017)

Figure 5 (b) Share of services trade in 2016

0% 1%

- Nigeria
- Regional Partners
- Multilateral Partners

99%
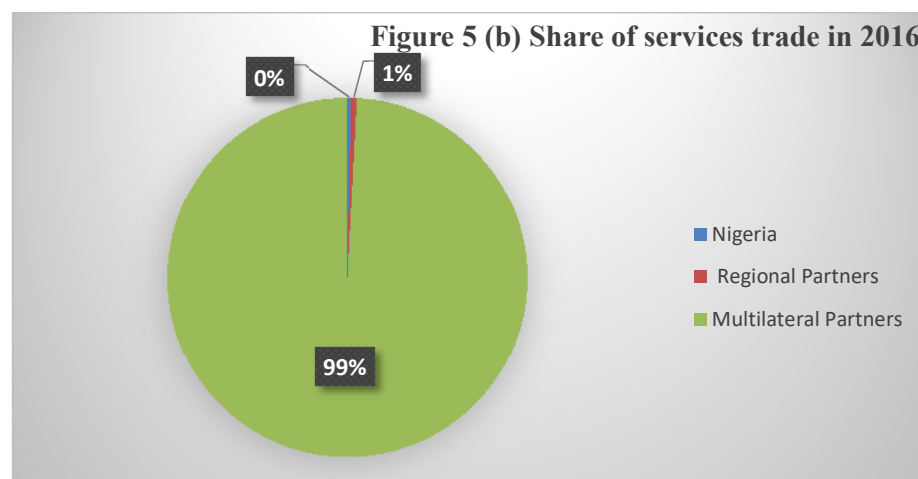
Source: UNCTAD (2017) and WITS (2017).

3. Methodology, Data and Econometric Model

3.1 Research Methodology

The theoretical foundation of this study is the gravity model that was conceptualized by William Reilly (1931) and Jan Tinbergen (1962). The study will use a similar application in Sohn (2001) and Koo et al. (1994) to analyze Nigeria's bilateral trade flows. The gravity model is based on the idea that two bodies are attracted to each other in the proportion of their mass and the reciprocal of the squared distance between them. The use of the gravity model in analyzing international trade flows and pattern among economies is to show that trading partners are like endogenous bodies that attract each other in the proportion of their market size represented by the GDP and inversely by their physical distance.

Sohn (2001) demonstrated that the gravity model indicates that bilateral trade flows are positively related to the products of the two countries' GDPs and negatively related to the distance between the trading countries. The gravity model in its simplest form demonstrates Newton's law of gravity. The mass of goods or labor or other factors at the origin i (i.e., E_i) is attracted by the mass of demand for goods or labor or other factors at a destination j (i.e., E_j) but the potential flow is reduced by the spatial distance ($Ø2ij$) between them (Salvatici, 2013). Strictly applying the model gives the estimated flow of goods, labor or other factors between the two destinations i and j such that the outcome is:

$$X_{ij} = E_i \, E_j \, / \, Ø^2_{ij} \qquad\qquad (3)$$

In Equation (3) there is no set of parameters that the equation will hold exactly for an arbitrary set of

variables. The reason for the departure from the original model is that the traditional gravity equation has flexibility. The flexibility makes the coefficient of 1 to apply to the mass variables and 2 to apply to the bilateral distance so that the data generated will fit the statistically deduced relationship among the flow, the mass variables, and the spatial distance. The meaning is that the gravity model takes a stochastic form shown in the equation 4 below:

$$X_{ij} = a_0 E_{a1i} E_{a2j} \varnothing_{a3ij} E_{ij} \tag{4}$$

Where a_0, a_2, and a_3 are not known parameters but a_1 is the mass variables.

Note that the modified version of Jan Tinbergen's (1962) gravity model was expressed in log form that ensured that the parameters are the elasticities of trade flow measured against the explanatory variables. Considering equation (4) above it is observed that neighboring nations are assumed to have more substantial trade flows than distance predicts. Salvatici (2013) suggested that the strategy of considering the effect of preferential trade agreements (PTA) is the use of a dummy variable which has become prominent in recent literature. Sohn (2001), applied this suggestion successfully and it becomes appropriate to follow the method.

The theoretical foundation for this study strictly followed the basic gravity model used in Sohn (2001) which is expressed in the following form:

$$T_{ij} = A. (Y_i Y_j / D_{ij}) \tag{5}$$

Where: T_{ij} = bilateral trade flows (i.e. import + export)

        Y_i = GDP of country i

        Y_j = GDP of country j

        D_{ij} = Distance between country i and j

        A = Constant of the proportionality

However, the model included other variables like per capita income, global competitive index (GCI), trade concepts, and HH market concentration index. Also, spatial and sociocultural factors can be represented using dummy variables including lingua franca, adjacency, and landlockedness. The specified model in equation 5 above is modified to include variables suggested in the literature that are related to international trade as the explanatory variables. Thus, the dependent variable - bilateral trade flow (T_{ij}), is expressed as function of the product of GDP of country i and j ($Y_i . Y_j$), product of per capita income between country i and j ((Y/P) i. (Y/P) j) and the distance between country i and j (D_{ij}) as follows:

$$T_{ij} = f(Y_{i.} Y_j, (Y/P)_i . (Y/P)_j, D_{ij}) + \varepsilon_{ij} \tag{6}$$

3.2 Data

This study used annual data from different secondary sources including World Bank, World Bank Integrated Trade Solution (WITS), United Nations Conference on Trade and Development (UNCTAD), International Monetary Fund (IMF), Nigeria National Bureau of Statistics (NBS), World Economic Forum (WEF), and Sea-distance.org. Following the theoretical foundation and evidence in the literature, eight-variables were selected for analysis. The variables selected are bilateral trade flows (imports + exports), GDP, per capita income (to distinguish income level and market size), distance, global competitiveness index, Herfindahl-Hirschman (HH) market concentration index, and landlockedness while trade concepts (i.e., regional and multilateral partners) served as dummy variables. This paper used annual time series data from 2000 to 2014 for a pool of twenty-nine countries including fifteen multilateral and fourteen regional partners listed in Table 1.

3.2.1 Description of Variables

Dependent Variable: Bilateral trade flow (T_{ij}),

In line with the literature and theoretical foundation, Tij is used to measure the bilateral trade flows. Tij was calculated by summing up the exports and imports trade between Nigeria (country i) and each of the trading partners (i.e., country j) for the observed years. It measures the volume of trade between Nigeria and each of the trading partner for each year.

Independent Variables:

The product of the GDP ($Y_i \cdot Y_j$)

The product of the GDPs measures the combined market size of Nigeria and each partner. To calculate it, the GDP for Nigeria is multiplied by that of the trading partner for each year.

The product of the per capita income ((Y/P)_i $\cdot$ (Y/P)_j)

This captures the level of income of Nigeria and each of the trading partner. The per capita income shows the purchasing power of the consumers which reflects the size of the market demand. It is calculated by multiplying the per capita income of Nigeria with that of each bilateral partner.

Distance

Spatial distance measures the geographic space between Nigeria and each trading partner. It is calculated as the geographic distance between Nigeria's main shipping port and the bilateral partners' main port. Where the bilateral partner is landlocked, distance is estimated based on land distance because road and rail transport is the only available cost-effective means of transportation.

Global competitiveness index (GCI)
GCI is used to measure the ease of doing business and port efficiency which confers a competitive advantage to a trade partner. The index was generated from the standard index computed by the World Economic Forum (WEF) annually for each country. It measures global competitiveness for each country from the scale of 0 to 6. The least score is 0 while 6 is the highest possible score.

HH market concentration index
This index shows the dispersion of trade values across exporter's partners (World Integrated Trade Solution, 2014) suggesting that the index is useful in evaluating bilateral and regional trades. This index was generated from the World Integrated Trade Solution's annual index for each country. It indicates exporters dependency on the trading partners and possible vulnerability to changes in trade policies that raise barriers. HH market concentration index is measured on a scale of 0 to 1. A high HH market concentration index has a value close to 1 which indicates that it concentrates in a few markets and vulnerable to shock. Conversely, HH market concentration index close to 0 shows a diversified export market which is less vulnerable to shock because of it is concentrated in many markets.

Landlockednes
Landlockedness captures lack of access to marine transportation and port facilities. Landlocked countries have the value of 1 while countries that have access to sea takes the value of 0.

Trade Concepts
The trade concepts capture the regional and multilateral trade systems which measure the trade outcomes between Nigeria and the multilateral and regional partners. This was represented with dummy variables, the value for the regional partners is 0 while 1 represents multilateral partners.

3.3 Econometric Model
The econometric model is developed to determine the relationship between the bilateral trade flows and the explanatory variables suggested in the literature that is related to international trade. The relationship between trade flows and these explanatory variables are important in developing trade policy and adopting an economic development strategy. Four of the variables in the econometric model was expressed in natural logarithm as follows:

$$Ln\ T_{ij} = \beta_0 + \beta_1 Ln\ [Yi \cdot Yj] + \beta_2\ Ln\ [(Y/P\ _i \cdot (Y/P)\ _j] + \beta_3\ Ln\ D_{ij} + \beta_4\ GCI + \beta_5\ HHMARKCON + \beta_6\ LAND + \beta_7\ TRADCPT + \varepsilon_{ij.} \qquad (7)$$

Where β_0 is the intercept while β1, β2, β3, β4, β5, β6, and β7 are the coefficients of the variables for estimation and εij is stochastic. To ensure consistency in the estimation, bilateral trade flow (Tij), the product of GDP of country i and j (Yi. Yj), product of per capita income between country i and j ((Y/P) i. (Y/P) j) and the distance between country i and j (Dij) are transformed to their natural logarithm. Other variables including global competitive index (GCI) and HH market concentration are left in their original forms while landlockedness and the trade concepts are expressed as dummy variables.

4. Estimation and Empirical Results
4.1 Estimation
The technique used to estimate the relationship between Nigeria's bilateral trades flow and the explanatory variables is pooled-ordinary least square (OLS). A unit root test was performed to determine the stationarity of the data. The test shows that the data had no unit root and was stationary at levels. The stationarity diagnosis is necessary to control for non-stationarity to avoid spurious estimation results that are misleading which were explained by Greene (2003). It was done by comparing the P-values of each variable to the absolute P-values at 90%, 95% and 99% significant levels. The implication is that if the computed p-value is less than the absolute P-value of 0.05, the null hypothesis that there is unit root or non-stationarity of the variables is rejected and we chose the alternative hypothesis. The stationarity test for each variable in the estimated data shows that the computed P-values were less than the absolute P-values of the t-statistics. The null hypothesis that there is non-stationarity (unit root) is rejected and the study, therefore, concludes that there is no unit root which implies that the variables are stationary at 90% level and better.

The diagnostic test for the unit root showed that the variables are stationary and need no further corrective measure. The stationarity of the variables for all trade, oil trade only and non-oil trade are shown in figures 6, 7 and 8. The dataset displayed stability between the actual values and the values of the residuals for all trades, oil trades only and non-oil trades. The result of the diagnosis reinforces the alternative hypothesis that the variables have no unit root and are stationary at levels.

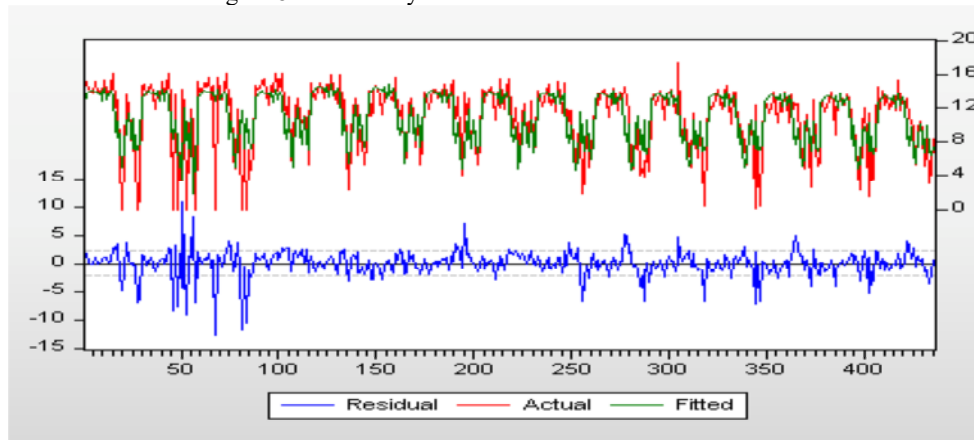Figure 6: Stationarity of Variables for All Trade Data.
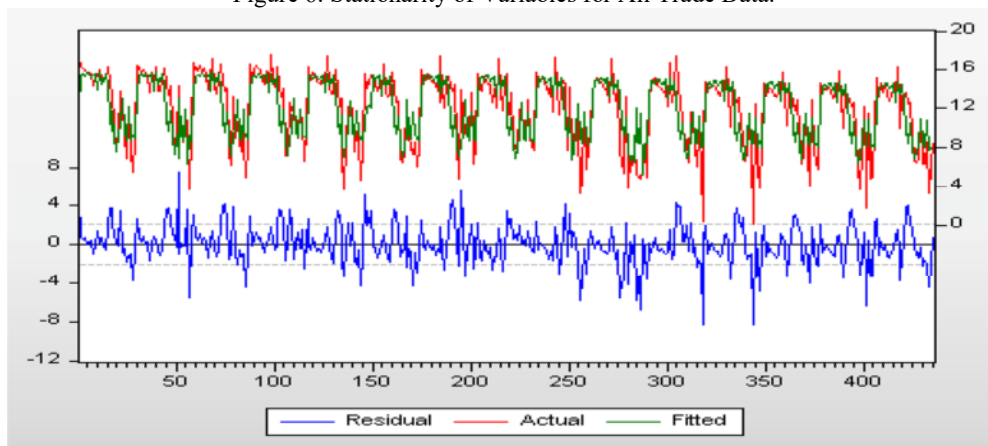
Source: Authors estimation with E-Views 10SV.

Figure 7: Stationarity of Variables for Oil Trade Only Data.
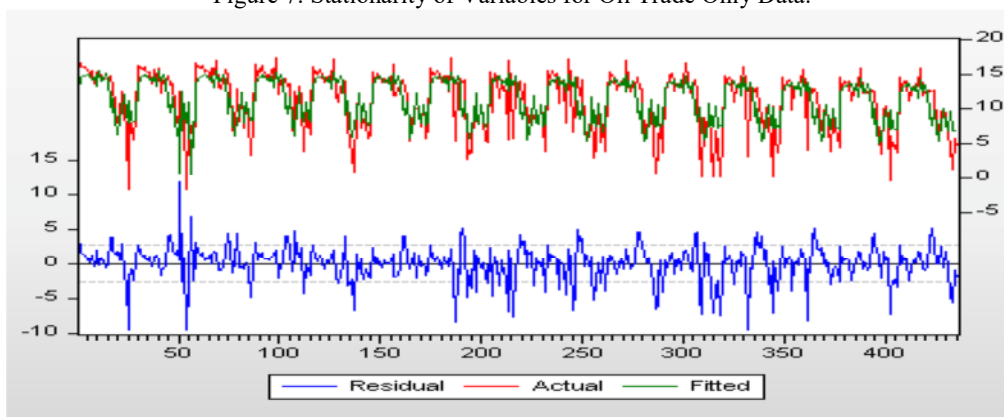
Source: Authors estimation with E-Views 10SV

Figure 8: Stationarity of Variables for Non-Oil Trade Data

Source: Authors estimation with E-Views 10SV

The Durbin-Watson statistics show that the error terms were positively auto-correlated. Two-period time lag was taken to correct the auto-correlation. The white test was carried out which detected heteroscedasticity that was corrected using Huber-White-Hinkley (HC1) heteroscedasticity-consistent standard errors and covariance suggested in MacKinnon and White (1985). A similar approach was explained in Hayes and Cai (2007) on procedures of correcting for heteroscedasticity when errors are homoscedastic.

4.2 Empirical Results

The regression results of the model for all trade, oil trade only and non-oil trade that was corrected with the Huber-White-Hinkley (HC1) heteroscedasticity-consistent standard errors and covariance reported in Table 2. The correction for heteroscedasticity was necessary to avoid the problem of biases and reduce the size of distortion by residuals that are outliers to produce estimation results that are not spurious. Table 2 presents the empirical evidence of the variables that influence the volume of bilateral trade flow between Nigeria and its twenty-nine trading partners selected for this study. The regression results show that the values of the adjusted R2 are 0.663, 0.575 and 0.60 respectively for all trade, oil trades only and non-oil trade. The results indicate that the variability in bilateral trade flows can be explained by 66.30%, 57.50% and 60% of the variations in the products of GDPs, the products of per capita GDPs and distance as well as GCI, HH-market concentration index, landlockedness, and trade concepts. The F-test shows that the explanatory variables are jointly significant for all trade, oil trade only and non-oil trade.

The evidence presented in Table 2 shows that after correcting for heteroscedasticity, the coefficients of the product of the GDPs variable are 0.15 and 0.41 at 90% significance level for all trades and oil trades only respectively. The coefficient of the product of GDPs for non-oil trade was not significant. It suggests that if all other variables are held constant, one percentage point increase in GDP will result in approximately 0.15 and 0.41 percentage point rise in Nigeria's bilateral trade flow respectively for all trade and oil trade only. The implication is that an increase in the size of GDP increases the volume of trade because as the economy grows, it has the domestic capacity to produce and trade more.

The empirical evidence indicates that the coefficient of the product of the per capita GDPs for all trade is 0.28 and significant at 95%. In contrast, the coefficients of the products of the per capita GDPs for oil trades only and non-oil trades were not significant. This means that Nigeria relies on the size of the economies of its partners instead of their income level. Therefore, this result indicates that Nigeria's focus is on the export of quantity-based primary commodities (raw materials) and oil rather than quality-based expensive manufactured products. The negative coefficient of non-oil trade suggests that Nigeria's non-oil trade focused on low-cost products that experience a decrease in quantity demanded when per capita income rises in the partner countries. This trend is like the decrease in quantity demanded of inferior goods which decrease when income rises.

Table 2: Pooled Least Squares Regression Results corrected with Huber-White-Hinkley (HC1) heteroscedasticity consistent standard errors and covariance. Dependent Variable: LnT$_{ij}$								
Explanatory Variables	All Trades			Oil Trade only			Non-oil Trades		
	Coef.	Std. error	T- stat. [p value]	Coef.	Std. error	T- stat. [p-value]	Coef.	Std. error.	T- stat. [p-value]
Constant	9.91***	1.73	5.71 [0.000]	4.19	3.97	1.05 [0.292]	10.39**	3.28	3.17 [0.001]
Prod. of GDPs	0.15*	0.06	2.57 [0.010]	0.41*	0.20	1.99 [0.047]	0.30	0.17	1.74 [0.08]
Prod. of Per Capita GDPs	0.28**	0.09	3.07 [0.002]	0.09	0.18	0.48 [0.631]	-0.09	0.17	-0.54 [0.588]
Distance	-1.13***	0.16	-6.87 [0.000]	-1.10***	0.18	-6.06 [0.000]	-1.21***	0.20	-6.12 [0.000]
GCI	0.05	0.11	0.49 [0.62]	0.14	0.13	1.14 [0.257]	0.08	0.12	0.71 [0.477]
HH-Market Concentration index	-2.77**	0.97	-2.84 [0.004]	-2.70*	1.20	-2.25 [0.025]	-3.74**	1.18	-3.16 [0.002]
Landlocked.	-0.16	0.44	-0.36 [0.72]	-0.36	0.61	-0.58 [0.560]	0.76	0.60	1.27 [0.205]
Trade Concepts (MUL)	4.75***	0.74	6.38 [0.000]	3.54***	1.04	3.39 [0.000]	-4.78***	0.88	5.44 [0.000]
Observations	435			435			435		
Adjusted R^2	0.663			0.575			0.60		
F-Stat (prop)	123.02 (0.000)			84.84 (0.000)			94.73 (0.000)		

Note: (1) Std. error is standard error. (2) The numbers in the parenthesis are p-values. (3) ***, ** and * means significant at 99%, 95% and 90% levels, respectively.

Source: World Bank WITS (2014) data, WEF (2015), UNCTAD (2017) and IMF 2017.

The coefficients for the distance between Nigeria and its trading partners were – 1.13, -1.10 and -1.21 for all trade, oil trade only and non-oil trade respectively at 99% significant levels. The evidence suggests that one

percentage point increase in distance between Nigeria and its partners decreases bilateral trade flow by 1.13, 1.10, and 1.21 percentage points respectively for all trade, oil trade, and non-oil trade respectively. This trend is consistent with the results in Zarzoso and Lehman (2002), Sohn (2001), and Rahman et al. (2006) which suggest that increase in spatial distance reduces bilateral trade flow. Distance remains a significant factor in the regression results of all the studies shown in Table 3 below.

Table 3: Comparison of Distance Coefficients	
Studies	Distance Coefficient
Zarzoso & Lehmann (2002)	-0.93
Rahman et al (2006)	-0.868
Sohn (2001)	-0.924
This study	-1.13 all trades, -1.10 oil & -1.21 non-oil trades

The coefficients for the GCI were 0.05, 0.14 and 0.08 respectively for all trade, oil trade only and non-oil trade. The GCI shows that the trading partners' competitiveness enhances bilateral trade flow, although it was not significant in all cases. However, its impacts were positive. The reason could be attributed to the dominance of Nigeria's export by oil and primary export products.

The coefficient for the HH market concentration index was -2.77, -2.70 and -3.74 respectively at 95%, 90% and 95% for all trades, oil trades only and non-oil trades. HH market concentration index closer to 1.00 shows concentration on fewer export products while the index that is closer to 0.00 shows a diversified export market (World Integrated Trade Solution, 2014). The evidence suggests that an increase in HH market concentration index decreases bilateral trade flow by 2.77%, 2.70%, and 3.74% respectively in all trade, oil trade only and non-oil trade. The implication is that Nigeria's export trade leans towards partners with diversified markets that are less concentrated on few products.

The coefficients for Landlockness represented by a dummy variable of 0 for partners that have access to the sea and 1 for landlocked partners were -0.16, -0.36 and 0.76 for all trades, oil trade only and non-oil trade respectively. The coefficients for all trade and oil trade only were negative and not significant. The coefficient for non-oil trade was not significant but positive which indicates that landlockedness creates dependence on Nigeria's ports for the three landlocked regional partners that have no access to the sea. Nigeria trades more non-oil goods with landlocked regional partners than the multilateral partners.

The variable of interest is the trade concepts (TRADCPT) which are represented by dummy variables. The coefficients for TRADCPT were 4.75, 3.54 and -4.78 for all trade, oil trade only and non-oil trade respectively and were significant at 99%. The coefficients for all trade and oil trade only indicate that multilateral trade has a positive and significant relationship with bilateral trade flow while the coefficient for non-oil trade has a negative and significant relationship with bilateral trade flow. This result suggests that Nigeria's bilateral trades flow with multilateral partners are 475% and 354% higher than Nigeria's bilateral trade flow with regional partners for all trade and oil trades only. However, bilateral trades flow in non-oil trades with multilateral partners is 478% lower than bilateral trade with regional partners. The coefficients for the dummy variables for the trade concepts suggest that multilateral trades generate higher two-way trade flow for Nigeria in all trades and oil trades only. In contrast, regional trade creates more bilateral trade flow for Nigeria in non-oil trades.

5. Conclusion and Recommendations

The impact of multilateral and regional trade systems on Nigeria's bilateral trade flows has been analyzed. The evidence suggests that multilateralism is more efficient compared to regionalism. However, regional trades generate less bilateral trade flow for all trades and oil trades only but create greater non-oil trade when compared to Nigeria's multilateral trades. The empirical results imply that Nigeria's export trade which is dominated by oil and primary products follows the size and income level of the trading partners.

Therefore, this paper rightly concludes that multilateral trade generates greater trade flows for Nigeria than regional trade. Regionalism seems to divert trade flow and leads to inefficiency (Bhagwati, 1992). The regional trade system seems to provide a better model for political integration than an economic approach to growth from the Nigerian experience. Improvement of the infrastructure and efficiency of the ports to meet the growing demand for multilateral trade will improve bilateral trade flows. The proposed Continental Free Trade Area (CFTA) by Africa Union (AU) leaders that will create a broader market will bring 1.2 billion people together with a combined GDP of over $3.4 trillion (Akorede, 2018) will boost regional trade.

This study recommends that Nigeria should trade more with the multilateral partners while maintaining its position within the regional economic bloc to sustain the demand for its low-cost manufactured exports. The opportunities are more extensive in the multilateral markets, unlike the regional market that is smaller compared to the size of the domestic market in Nigeria. Most multilateral partners have less market concentration and offer diversified products to Nigeria consumers. Also, the multilateral partners have adequate infrastructural facilities and high level of efficiency in ports operations and cheaper transportation cost that promotes the ease of doing

business. The trend can only change if the income level and market size expand faster than those of the multilateral partners.

Studies to examine the impact of trades by product groups such as capital, consumer, and intermediate goods, as well as raw materials and type of services on Nigeria's bilateral trade flow are possible areas of future research. Investigation of trades on product groups, individual products and types of services will provide specific trade information that will help policymakers improve the trade policy mix to target higher bilateral trade flow. The results of future research can enable Nigeria, and other countries determine the trade concept that is best suitable for each product group, individual product or type of services trades.

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