Economic Development, Technological Change, and Growth

Financing the Current Account Deficit through Foreign Direct Investments versus External Loans

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Abstract: The purpose of the article is to compare the financing of the current account deficit by foreign direct investments and by external loans, presenting the advantages and disadvantages of each type of financing. The analysis shows that both foreign direct investments and external loans may have positive and negative effects on the economy of the host country. In addition, some advantages of foreign direct investments have disappeared in recent years (eg stability has been partly replaced by volatility). In the article, the author also presents the characteristics of current account deficit financing in Romania during the period 2006-2018. Concerning the foreign debt, it is noticed that in Romania there has been a replacement of institutional creditors with private creditors, which we consider to be a negative evolution of the situation of the Romanian economy from the point of view of the reimbursement effort and the sustainability. The research methods used consist in comparative analysis in time, qualitative and quantitative evaluations, interpretations and correlations.

Keywords: positive and negative effects; disequilibrium; microeconomic and macroeconomic level; current account deficit funding

JEL Classification: F14; F21; F32; F34

1. Introduction

In the article, the author presents the characteristics of the current account deficit financing in Romania during the period 2006-2018, through foreign direct investments (FDI) and external loans. It also analysed, theoretically, the financing of the current account deficit by foreign direct investments compared to the financing through external loans, presenting the advantages and disadvantages of each type of financing.

Although apparently, it is more advantageous for an economy to use foreign capital in the form of foreign direct investments to cover the current account deficit, in the

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article the author shows that foreign direct investments may also have negative effects in the recipient economy.

We chose as the base year for the analysis, 2006, as it is the year before Romania has joined the European Union, in order to have the possibility to compare the present situation with the one before our country has became a member state of this community.

2. The Financing the Current Account Deficit in Romania

The high and rising (up to 2008) current account deficit as share of GDP in our country shows a negative effect of the current account balance over the domestic economic process. Between 2004 and 2008, the conventional sustainability threshold of the current account deficit (5% of GDP) has been constantly exceeded, being necessary the supervision and, most importantly, the enactment of policies to ensure the sustainability of the current account deficit over the medium and long term. These include deep, coherent and consistent measures to restructure the national economy. Although it was high by the international standards, Romania's current account deficit as a share of GDP was not a cause of alarm as long as its funding was secured, in particular by inflows of foreign direct investments. It seems that the Romanian economy has opened faster than it has restructured.

Thus, in our country, the current account deficit after 1998 has been mainly funded by foreign direct investments (autonomous sources of financing), which showed a high level of sustainability of the current account deficit of our country.

2009 represents a year of breach in terms of financing the current account deficit. Thus, in 2009, foreign direct investment inflows have declined significantly, and the foreign capitals borrowed by the government have increased. We notice that until the onset of the global economic and financial crisis, the inflows of foreign direct investments were high in Romania, certifying the high level of confidence of foreign investors. But with the outburst of the crisis, the possibilities of attracting FDI decreased both internationally, by showing quite widespread risk aversion and liquidity diminishment, as well as locally and regionally (amid regional tensions, including the war in Ukraine, and the characteristics of our country). These include exhaustion of objectives to be privatized, the lack of tax incentives, the deficiency of designing viable strategies for attracting strategic investors, the poor transport infrastructure, the very weak economic growth which failed to attract greenfield investments, etc. All these have led to a modest degree of attraction and capitalization of foreign direct investments in Romania after 2009.

In the years 2006, 2009, and 2013-2017 there is a high level of funding the current account deficit by foreign direct investments, amid a sharp decline in both the external deficit and the inflows of foreign direct investments (until 2015).

The inflows of foreign direct investments rose from 2930 million EUR in 2013 to 4880 million EUR in 2017. Although in 2018 the FDI balance increased by 70% compared to the level recorded in 2013, the degree of financing the current account deficit by foreign direct investments declines gradually over the period 2015-2018, in the context of a sharp rise in the current account deficit.

Romania enjoys inflows of foreign direct investments, as it is shown by the direct investment sub-account balance during the period 2006-2018. The inflows of non-resident direct investments increase over the period 2013-2018, reflecting the improving perception of foreigners over our country. Between 2013 and 2016, Romanians' direct investments abroad are also increasing. The net balance of direct investments increases between 2015 and 2018, which means the growth of our country's commitments towards non-residents, thus a negative influence over the international investment position.

The rise in foreign direct investment inflows was due to the raise of equity, except in the year 2018, when reinvested earnings are higher than equity. This shows the improvement of the quality of capital flows since 2015 and the reduction of debt instruments, except in 2018 when they grow. Against the background of improving investors' confidence in the Romanian economy, after having negative values in 2008-2014, the reinvested earnings remain positive and is increasing in the period 2016-2018.

In Romania, *the financing of the current account deficit by external debt has some characteristics.*

Thus, medium and long-term external loans received have increased significantly in 2007, the year when Romania has joined the European Union. In 2009 also, the medium and long-term external loans have a peak explained by the loans received by Romania this year from the International Monetary Fund, the World Bank and the European Union. In 2011, the trend of medium and long-term external loans shows a turning point. Thus, over the period 2005-2010, the medium and long-term loans have concurred to counteracting the current account deficit. However, starting from 2011, in the context of paying back a part of the previously contracted loans, the medium and long-term external loans have contributed to the formation of the external deficit with absolute values declining over the period 2013-2017, with a sharp decrease in 2016 and 2017.

Under these circumstances, it can be said that Romania is paying, starting with 2011, for the massive external credits obtained the previous years.

The private non-guaranteed external debt held the majority weight in the total medium and long-term external debt of our country between 2005 and 2010, which shows the dependency on the foreign financial markets in conditions of risk and uncertainty for both borrowers and creditors.

Analysing the structure of the external direct public debt by creditors, we note that between 2013 and 2018, the loans from multilateral institutions drop significantly in favour of bond issues (25. 7% in 2018 compared to 73. 9% in 2013), which become the majority since 2014. Bond issues have increased significantly between 2011 and 2014, an upward trend continuing until 2018 inclusively, concurring to an increase in the medium and long-term external direct public debt.

Therefore, there has been a replacement of institutional creditors with private creditors. Given that debt from multilateral institutions enjoys lower costs (taking into account the interest rates charged to countries perceived as having a high risk on the private market of international capital), longer grace period; longer total term; we consider that the replacement of creditors represents a negative evolution of the Romanian economy in terms of reimbursement effort and sustainability. Instead of paying back our foreign debt, Romania becomes more indebted, under harsher credit conditions.

On the other hand, the loans received from official creditors have also disadvantages: their availability is limited and the large-scale call for this type of funding sends a negative message to foreign investors, given that exceptional funding is intended to cover the current account deficit and to support the efforts of structural adjustment of the economy, in the context that that signal shows efforts to reform the economy, never finalized.

Analysing, in figures 1 and 2, the structure of the sources of financing of the current account deficit, we find that foreign direct investments counteract the current account deficit. Instead, starting with 2011, the medium and long-term net loans have concurred to the increase of external deficit.
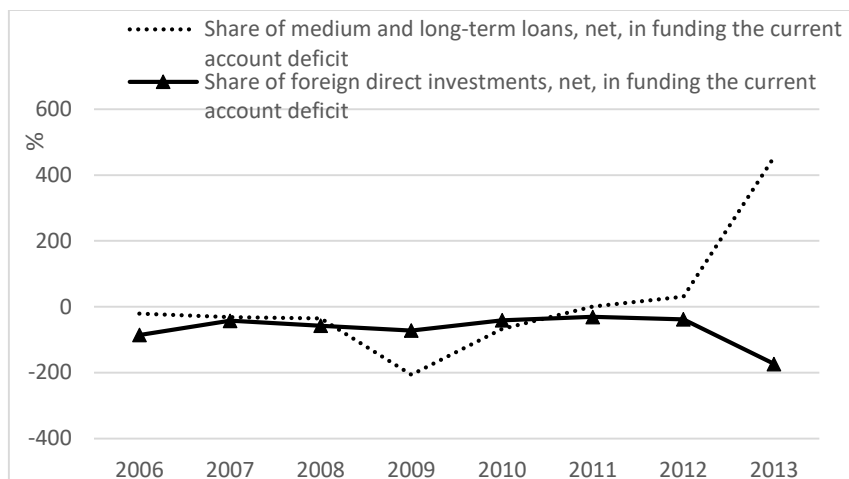
Figure 1. Sources of Financing the Current Account Deficit in Romania During the Period 2006-2013

Source: National Bank of Romania data, Monthly bulletins December 2007, December 2010, January 2012, January 2013. Data are calculated according to BPM5 methodology

Note: the negative sign shows that the current account deficit is being funded, and the positive sign means the contribution to the formation of the current account deficit

Figure 2. Sources of Financing the Current Account Deficit in Romania During the Period 2013-2018

Source: National Bank of Romania data, Monthly bulletins January 2013, January 2014, June 2014, December 2016, December 2017, January 2018, February 2018, December 2018, February 2019. Data are calculated according to BPM6 methodology

Note: the negative sign shows that the current account deficit is being funded, and the positive sign means the contribution to the formation of the current account deficit
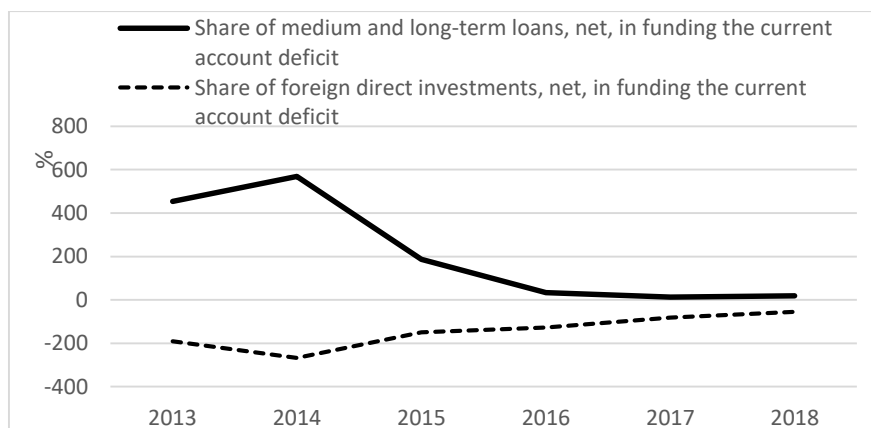
3. Theoretical Considerations Regarding the Financing of the Current Account Deficit through Foreign Direct Investments and External Loans

In an economy, foreign direct investments have effects both at the macroeconomic and at the microeconomic level. These effects may represent advantages or disadvantages for the economy receiving the foreign direct investments.

At the macroeconomic level, the inflows of foreign direct investments represent a way of offsetting the balance of payments, concurring to the increase of the surplus or to the decrease of the deficit of the capital and financial account, directly, but also to the improvement of the current account balance by increasing export earnings (when foreign direct investments support the rise in exports of the host country). On the other hand, however, in the current account, the inflows of foreign direct investments generate, with a certain time lag, effects in the direction of increasing the deficit or decreasing the surplus due to the repatriation of profits and to the payment of interest and principal when the investments are financed by external loans.

There may be even situations when the outflows resulted from inflows of foreign direct investments (in the form of repatriated profits - when projects are profitable - and payments of principal and interest) exceed the initial inflow of foreign direct investments. Thus, the more profitable the project is, the lower is the inflow of foreign funds. This situation may be in the national interest of the host country when the foreign direct investments induce the capitalization of business, and the economic growth, thus supporting the creation of adequate conditions or sufficient funds to balance the balance of payments and to support the sustainable development of the country host.

The inflows of foreign direct investments can generate a rise in tax revenues to the state budget from foreign direct investment firms, but also from their suppliers (if foreign direct investment firms use domestic suppliers).

Foreign FDI inflows can lead to the growth of domestic production and, implicitly, to exports increase, generating the rise of international trade flows and the improvement of the balance of goods situation in the host country.

Excessive leverage may limit the benefits of foreign direct investments. If the investments made in the host country by international investors come largely from funds borrowed on the domestic credit market, then the share of domestic investment funded from foreign economies through foreign direct investment inflows may be small and the earnings from foreign direct investments may be diminished by the domestic borrowing made by firms with foreign control (Loungani & Razin, 2001).

In addition, foreign direct investments are considered to be more stable capital flows compared to portfolio investments because they do not leave the country

immediately when a turbulence occurs, which provides the premises for a sinuous evolution of the host economy. However, in recent years, there is a greater volatility in foreign direct investment flows, as foreign investors seek to maximize profits, to increase market share, and to exploit the domestic resources at low-cost. Thus, as the attracting elements of foreign direct investments disappear or diminish over time, foreign investors will move to other more attractive areas, leaving behind unemployment and the breakdown of the production and sales chain in the field and geographic area where the companies with foreign capital had the activity.

In addition, the volatility of foreign direct investment flows makes the recipient country more vulnerable to external shocks. The unstable nature of foreign direct investment flows is generated by financial transactions (intra-company loans), by the high risk aversion of foreign investors.

The speculative nature of foreign direct investments is another determinant of their volatility. Thus, there are foreign direct investors who engage in speculative business, who do not intend to develop a lasting business in the host country, but seeks profits from the price differences of some goods (e. g. the price of land and real estate in Romania).

Globalization has concurred, on the one hand, to changing the mentality of investors, for which the relocation of production has become a routine and, on the other hand, to reducing the cost of production shifts, and to diversifying the opportunities that foreign investors can use.

Inflows of foreign direct investment also influence the trend and the level of the exchange rate of the host country's currency. Thus, the inflows of foreign currency on the foreign exchange market generates the appreciation of the national currency, which on the one hand prevents the increase of the inflation rate and, on the other hand, stimulates the domestic demand for imports and hampers the external demand for exports, if the elasticity of imports and exports are supraunitary, causing the deterioration of the country's balance of payments.

Consequently, foreign direct investments may, in positive situations, lead to restoring some equilibria in the economy of the host country either directly as in the case of the balance of payments or, indirectly, as it is the case of the state budget.

At the microeconomic level, foreign direct investments influence the number of firms existing on the domestic market, but also their turnover, and thus competition between firms. When foreign direct investment firms call upon local suppliers for different services, but also for construction, equipment, accessories, business opportunities for national firms are emerging, and demand for local producers is increasing.

But direct foreign direct investment firms may also bring in the reduction of the turnover or even the bankruptcy of local companies due to "predatory practices"

("stealing" partners and/or customers) (Mazilu, 2004), to the use of foreign suppliers after eliminating local competition. Other times, foreign direct investment firms buy local competitors for annihilating them in order to obtain a market share with a minimal investment effort, lacking the ability to sustain a local investment or to develop in a highly competitive environment (Meyer, 1996).

The creation of foreign direct investment firms can help to increase competition in the internal market for goods and services, with the effect of improving the quality of goods and services produced in the economy, which is an advantage for local consumers.

Foreign direct investment firms concur to increased competition on the credit market by obtaining loans from the local market to fund their projects.

Foreign investors facilitate the access of domestic products on foreign markets.

The inflows of foreign direct investments may lead to the transfer of technology superior to the one existing in the host country through the infusion of machinery, equipment, production and marketing processes; the transfer of managerial techniques, of good corporate governance practices, accounting regulations (Kozenkow, ?) with effects on improving product processing, the quality of products, work productivity, on emerging new products, on increasing the added value of the goods and services obtained in the host economy, and not least in the direction of increasing the revenues to the state budget due to the widening of the tax base in the context of the business development.

The effects of foreign direct investments depend considerably on the host economy's capacities and skills necessary to use new technologies, to adapt them to the local conditions, to make possible improvements, but also on the existence of macroeconomic stability, foreign direct investment regulations, favourable business environment, a certain level of education, the existence of developed institutions and a high degree of openness of the economy.

With regard to environmental issues, foreign direct investment firms may have negative effects on the host country if there is no environmental protection policy or if the foreign direct investment has aimed at relocating the pollutant production from the mother country, or if the technology brought by the investment firms is old, and therefore "unfriendly" to the environment.

There are situations when foreign direct investment firms bring negative effects in the host country, such as: when they fail to comply with business ethics principles; when they try through different practices (e. g. transfer pricing) to pay lower income taxes to the recipient country's budget; when they use crucial information about the firms they control to the detriment of the domestic investors owning a number of stocks that do not give them control or access to that information.

When foreign direct investment firms reinvest a large part of their profits in the host country, this economy's development is supported in the medium and long term.

Inflows of foreign direct investment have also important effects on the labour force market. Thus, foreign direct investment firms can concur to the development of human resources by organizing training courses. Also, these companies usually create jobs by hiring local employees, but jobs can also be created at the suppliers of foreign direct investment firms if they use domestic suppliers. Thus, inflows of foreign direct investments can help to improve the standard of living of population.

But there may be also negative effects of foreign direct investment inflows on the labor force. The most important is the reduction in the number of jobs that can occur in several situations. Thus, multinational companies can lead to the bankruptcy of national firms or they may shut down their production or they do not use local suppliers. The reduction of jobs is also due to the fact that foreign direct investment enterprises are usually capital intensive and labour-efficient, so they invest in intellectual property and equipment, and less in wages (Vaknin, 2007).

If only the benefits listed above are taken into account, foreign direct investments concur to economic growth in the host country, to its development.

But when analysing the effects of foreign direct investment inflows on the recipient country, their negative effects must also be taken into consideration, which, as the above analysis shows, are not few neither insignificant.

For a country to take advantage of the inflows of foreign direct investments, a minimum of conditions is required. Thus, the economic, political, business environments must be stable. Institutions must be strong and independent of politics, especially in justice. Legislative and tax frameworks should be attractive and beneficial to the business environment, clear, stable and predictable. It is also necessary to have a developed infrastructure in the field of transportation, communications, etc.

The financing of the current account deficit through external loans has certain disadvantages, which include the costs (interest, commissions, possible penalties), the terms imposed by the lending institutions (which are not negotiable and sometimes have effects opposed to the sustainable development of the recipient economy),

Moreover, the external debt implies the existence of microeconomic risks (increased exposure to a possible external shock and the effects on the banking sector), but also macroeconomic implications from the point of view of the external debt sustainability. Thus, external debt may cause problems through the exchange rate channel (the sudden depreciation of the national currency would lead to a significant increase in the cost of external financing), through the trust channel (the change of the sentiment and perception of investors leads to an increase in the risk premium

and implicitly in the cost of external financing), by contagion (through an economic, political or social shock of a regional nature), or even through a shock of the national economy, of a conjunctural or structural nature. In addition, in the case of short-term external debt, there is a risk of capital volatility. Also, longer maturity supports the national economy sustainably, as the debt burden is staggered over a time horizon that does not "press" tightly on government budget decisions and jeopardize its development projects.

Also, the financing of the external deficit through external loans sends a negative message about that country at the international level, showing insufficient efforts to reform the economy.

4. Conclusions

In the positive scenario, if only the benefits outlined above are taken into account, foreign direct investments may lead to the retrieval of some disequilibria in the economy of the host country either directly (in the balance of payments) or indirectly (in the case of the state budget). Foreign direct investments may concur to the economic growth of the host country, to its development. But the inflows of foreign direct investments have also negative effects on the country of destination, which are neither little nor insignificant.

From the analysis, we find that foreign direct investments are no longer a source of foreign capital absolutely better than foreign loans in terms of positive effects. Although they have some advantages in addition to external loans (know-how infusion, human resource development, etc.), however, in the last years, some of the beneficial effects of foreign direct investments have disappeared, leaving place to negative consequences (for example, stability has been replaced by volatility).

A very important aspect, of national interest, for any economy, is the preservation of national sovereignty. Thus, it is imperative to avoid creating a dependency of the host country on foreigners as a result of foreign direct investments or external borrowing.

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The Relationship between Political Stability and GDP Growth: A Comparative Analysis of the Brics Nations

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Abstract: In many parts of the globe, the degree of political stability or otherwise largely determines the nature of nation building process. Ironically, both developed and developing countries at one time or another faces the challenge of poor political stability in their political dynamics and nation building history. This study investigates the nature of political stability amongst the BRICS nations with special emphasis on how it affects the Gross Domestic Product (GDP) of member states. The study was developed using quantitative methodology. Data on political stability were interpreted through regression analysis. The findings reveal that the degree of variation in economic growth due to political stability in the BRICS is relatively low but numerically, the higher the rate of political stability, the higher the positive growth of GDP within BRICS nations. Finally, it was recommended that nations within the BRICS member states should cooperate to ensure sustainable peace and political stability across their regions and multi-lateral organizations in order to have a positive GDP growth.

Keywords: Political Stability; GDP Growth; Emerging Economy; BRICS Nations

JEL Classification: O4; O57; P48

1. Introduction

BRICS is a platform for international relations amongst countries that represents 43% of the world population (Liu, 2016; Nayyar, 2016). They cooperate to promote peace, security and development in the globalized world. Members include Brazil, Russia, India, China and South Africa, which cuts across Latin America, Europe, Asia and Africa. Economic growth and political stability are believed to be directly connected (Mishra & Agarwal, 2017). It is also argued that the rise of autocratic and sit tight leaders naturally weakens the foundations for economic growth. On the other hands, when the economy of a state nearly collapses, there will be a lot of threats on

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political stability (Shen, Shuai, Jiao, Tan & Song, 2017). The hungry masses will begin to demonstrate and revolt against the existing national order. In many cases, the masses will call on the members of a country's leadership to resign on the ground that they are no longer able to provide the needed dividends of democracy or social welfare, which fundamentally drives the masses to vote.

Ironically, political stability in China and Russia unlike in South Africa, Brazil and India has been attained over the years through multi-dimensional approaches that include suppression of opposition and undermining human right issues (White, McAllister & Munro, 2017; Piper, 2015). The suppression of opposition has been used as an elitist model that sustained governance under the leadership of President Putin of Russia and the Chinese Communist party. Ironically, the same model, that is extensively criticized in many parts of the globe has promoted the economic growth of these countries more than the degree of economic growth that is witnessed in more stable democracies of South Africa, Brazil and India, where there is vibrant opposition as well as increased human rights consciousness (Öniş & Gençer, 2018; Shen et al. , 2017).

On the other hands, it is practically impossible to ensure economic growth through the suppression of the forces of demand and supply or production. Consequently, peaceful geopolitical environment promotes economic growth and development (Shahrokhi, Cheng, Dandapani, Figueiredo, Parhizgari & Shachmurove, 2017; White et al. , 2017). That is because an environment that is characterized with high protest like South Africa, Brazil and India, irrespective of the high human right and open governance culture will fundamentally have challenges with their economic growth. It is also practically impossible to ensure economic growth through the suppression of the forces of demand and supply or the suppression of the productive forces of a state. Consequently, peaceful geopolitical environment encourages economic growth and development (Zheng, 2017). Thus an environment that is characterized by armed conflict, terrorism and other forms of armed struggle will naturally weaken the chances for sustainable economic growth. Russia under President Putin could be described as a political stable sit-tight leader.

Unfortunately, a country that has a good culture of democratic stability but is very weak in managing corruption will fundamentally experience crippled or weakened economic growth and development (Hurrell, 2018; Mishra & Agarwal, 2017; Zheng, 2017). The degree of corruption in South Africa under President Jacob Zuma had a lot of negative implications for the economic growth and development of the rainbow nation. Consequently, Chinese fierce laws against national corruption ensures that greedy leakages are controlled and resources fully utilized for economic growth, unlike the situation in South Africa and Brazil, where disturbing cases of corruption are often experienced.

Innovation is a main driver of national development and national transformation. It creates opportunity for individuals and groups to invent new ideas, products and services that are of high demand or will solve a given problem of nation building (Ogbeide, & Akanji, 2018; Franco, & Oliveira, 2017). Consequently, when the innovative ideas are transformed into finished products that are reliable in meeting the needs of the masses, there will be high demand and popular patronage from the citizenry. Unfortunately, innovation and optimal productivity cannot be attained in a violent setting. This is because when the state is experiencing any form of insecurity or conflict, the workforce would concentrate their energy on the protection of their head as well as the preservation of their life and families (Shahrokhi et al. , 2017; White et al. , 2017). Competition and innovation also have implications for GDP growth. When there is growth in innovation within a country, many individuals and firms would begin to produce goods and services that deliver similar or related value at competitive cost. As innovation drives production, it promotes price reduction, increased consumer satisfaction as well as increased spending, which promoted promotes savings and GDP (Cavallo, Eichengreen & Panizza, 2018). It would be noted that with a stable body polity, there will be more innovation and increased competition.

Ironically, foreign direct investment (FDI) hardly attains its optimal level in a country that is under the yoke of conflict (Mishra & Agarwal, 2017; Liu, 2016). The conflict in Kashmir region of India and the quest by the Indian government to assert their sovereignty on the area naturally affects the aggregate economic growth and development of the country. Brazil in recent times has a rough history of protests that affected her national economy. The implication of Crimean conflict on Russia on one hand and Eastern Ukraine on the other also speaks volumes on the push and pull effect of economic growth on affected states. It is the relationship between political stability and economic growth variables that this study intends to unravel. Similarly, political stability is also meant to promote human capital development as well as private property rights, which could have positive or negative implications for productivity (Alper, 2018; Cox & Weingast, 2018). When there is sustainable human resource training, workforce will likely go back to the workplace and improve efficiency, quality and output, all of which are ordinarily meant to promote the multiplier positive effects on GDP growth.

2. Literature Review

The countries that made up where we know today as BRICS were historically characterized of warrior empires that constantly conquered communities and nations around it. At independence, some of the countries like Russia and China continued with territorial expansion, while the rest of the BRICS states struggled to be relevant through economic expansion (Li & Marsh, 2016; Ofondu & Eboh, 2016). Ironically,

all the countries in the BRICS has continued to experience one form of political unrest or another in their internal nation building process, thereby heating-up their body polity and influencing their GDP growth negatively.

Across Africa, there are enormous evidence to strengthen the argument that political instability undermines economic growth (Diao, & McMillan, 2018; Karra, Canning & Wilde, 2017). Firstly, the American led alliance that ensured the killing of Gaddafi institutionalized instability and economic collapse in Libya. "Libya is no longer a bastion of stability with comparatively well controlled borders in a conflict ridden and volatile regional neighborhood, as was the case in a relatively coherent state under Gaddafi. Libya has become factionalized around the sub-national structures that existed prior to Italian colonialism; that is Tripolitania in the Northwest, Cyrenaica in the East and Fezzan in the West" (Boas & Utas, 2013, p. 5). The American led invasion of Libya completely weakened the drivers of Libyan national economy, thereby institutionalizing political instability in the country.

Similarly, in the 1990s, Mali was heralded as a model for democratization in Africa (Boas & Utas, 2013, p. 5). The country had relatively high political stability that was necessary to drive their economy in the post-cold war era. Timbuktu became a major centre of human civilization and tourist attraction. There were massive reforms and liberalization which was soon to be high jacked by national political elites and selfish individuals. And the implication was that in 2012 the country became overtaken by the coup thereby weakening the bases of their national peace and economic development.

Wilfred (1968) identified the place of democracy in economic stability of states. The study showed how democracies could lead to higher rates of national development as it encourages small and medium scale businesses. Again, it advocates that more firms should enter the economic sector of the country. When there is political stability, there may be reliable environment for private companies to strive (Alper, 2018; Blackburn, Neanidis & Rana, 2017). Again, the presence of stable democracies would naturally promote the rise of stable economic institutions that in all cases may drive GDP growth. On the other hands, the adoption of democratic regime is not sufficient to achieve greater GDP growth but democracy with good institution might be (Pereira & Teles, 2010; Pereira & Teles, 2011).

Esposito, Kapoor and Mallur (2016) in their study found that while India still needs to invest its resources in meeting its basic human needs, countries such as China and Russia need to bring about institutional changes that could protect the rights and freedom of its people. They revealed that among the BRICS economies, South Africa, China and Russia should lay greater emphasis on policy dialogues to reduce the extent of their greenhouse gas emissions. In addition to that, they argued that South Africa and Brazil should focus on ensuring personal safety to its people.

Acemoglu and Robinson (2006) captured the continuous conflict of interest on the relations of economic institution's cost to the distribution of resources. Those institutions according to Rodrik (2007) are major source of economic growth across many countries. The institutions include property rights institutions, regulatory institutions, institutions for macroeconomic stabilization, institutions for social insurance and conflict management institutions. The nature and survival of economic institutions depends to some extent on the allocation and dynamics of political power across the elite in the BRICS states and the globe. That is because political institutions and their policies influences the constraints and incentives to key players in the economy of a country.

3. Methodology

This study investigated data on political stability and GDP growth of the BRICS nations for the period of ten years (2007-2016). Thus, the focus of the study was majorly on ascertaining the level of statistical impact of political stability on GDP growth. In essence, this study obtained the political stability rank indicator data from the Worldwide Governance Indicator (WGI) which comprise of variables such as stable political governance, absence of violence and terrorism. Secondly, a GDP data which comprise of annual percentage growth rate of GDP at market prices based on constant local currency and was obtained from World Bank national account data and OECD national account data files. However, for the purpose of this study, the following reasons justify the choice of data and the period investigated:

▪ The impact of political stability on GDP growth within BRICS nations after the global financial crisis;

▪ The political and business philosophy behind the recent rapid growth and industrialization of the BRICS nations;

▪ The contributions of political and institutional positive attributes towards GDP growth.

Thus, regression statistical analysis was used to ascertain the statistical relationship between the two variables investigated in this study. Indeed, regression analysis helps to statistically identify the level of relationships (positive or negative) between two or more variables (Desboulets, 2018; Ahlgren & Walberg, 2017). Indeed, the level of relationship between the two variables provides the explanation of X (independent variable) by the percentage variation of Y (dependent variable). Thus, given that there are several variables that affects the growth of GDP (Cox & Weingast, 2018), political stability in theory has been argued as one of the core variables that contributes to a platform that enhance the positive growth of GDP (Cox & Weingast, 2018; Amavilah, Asongu & Andrés, 2017; Giambona, Graham &

Harvey, 2017). As such, this study focus majorly on ascertaining the statistical relationship between political stability and GDP growth of the BRICS nations. Hence, the proposed regression model is presented below;

$$Y = \beta_0 + \beta_1 X + \varepsilon$$

Where;

Y represents GDP growth, β_0 represents Y-intercept, β_1 represents slop coefficient, X represents independent variable and ε represents random error term.

Thus, the objectives of a regression model afore, is focused on ascertaining the followings:

- Do we have a relationship between X and Y (Yes or No);

- If YES, how are they related (Positive or Negative);

- If they are related, how much impact does X have on Y (Numerical evidence);

- Is the impact statistically significant (Yes or No);

- Given that a relationship exists, what % of the variation in Y is explained by X (Numerical evidence; Goodness of Fit).

However, being that this study is underpinned by a comparative philosophy on the impact of political stability on the GDP growth within the BRICS nations. Thus, the regression analysis is performed individually on the five nations. Hence, this will enhance the identification of coefficient and the statistical significant within the variables of the individual nations.

4. Data Analysis and Discussion of Findings

Data analysis and discussion involves a statistical process that helps to give meaning to a mass collected data (Nishina et al. , 2018). Thus, this part of the study provides the statistical analysis and discussion on the relationship between political stability and GDP growth within the BRICS nations. In essence, the purpose of data analysis is to ascertain the different constituting elements of data by investigating the relationship between concepts and variables to identify if there are any patterns or trends among the variables (Andereck, 2017). Accordingly, when the results of the analysis are taken, inference and conclusions on the meaning and implications of the findings are made (Cranmer et al. , 2017). Hence, the subsequent section of this study presents the regression analysis output, which were used as a statistical method to identify the magnitude of relationship between political stability and GDP growth of BRICS nations within the period of 2007-2016.

4.1. Regression Output and Interpretation

The major question this study answered is how much effect political stability has on GDP growth. Thus, regression analysis was use to answer this question. However, going by the proposed linear regression model in this study, individual analysis was obtained for each of the nations to ascertain their statistical significant relationship. As such, the regression output is presented below.

Coefficient[a]

Country	Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
Brazil	1 (Constant)	-2. 239	6. 247		-0. 358	0. 728
	Political Instability	0. 109	0. 150	0. 236	0. 728	0. 485
Russian Fed.	1 (Constant)	1. 119	8. 429		0. 133	0. 897
	Political Instability	0. 077	0. 478	0. 054	0. 162	0. 875
India	1 (Constant)	5. 918	3. 520		1. 681	0. 127
	Political Instability	0. 121	0. 261	0. 153	0. 464	0. 654
China	1 (Constant)	0. 011	5. 774		0. 002	0. 998
	Political Instability	0. 324	0. 199	0. 477	1. 626	0. 138
South Africa	1 (Constant)	-5. 214	7. 029		-0. 742	0. 477
	Political Instability	0. 176	0. 161	0. 343	1. 094	0. 302

a. Dependent variable: GDP Growth (%)

The Coefficients table afore, contains the coefficients for the regression equation (model) and test of significance for the variable. The "Sig" column contains the p-values for the independent variable and the "B" column contains the coefficients for the independent variable in the regression model. Thus, to answer the first regression question whether relationship exist between political stability and GDP growth, the Sig column shows that the output has a P-value>0. 05 for the five nations indicating that the relationship between the two variables are insignificant. Although, the size of the P-value for a coefficient says nothing about the size of the effect that independent variable is having on the dependent variable (Shah & Bühlmann, 2018; Gelman & Carlin, 2017). It is possible to have a highly significant result P-value<0. 05 for a less or no effect (Peyvandi et al. , 2017).

24

However, in simple linear regression, the size of the coefficient for each independent variable gives the size of effect that the variable is having on your dependent variable, and the sign on the coefficient (positive or negative) gives you the direction of the effect. In regression with a single independent variable, the coefficient tells you how much the dependent variable is expected to increase (if the coefficient is positive) or decrease (if the coefficient is negative) when that independent variable increases by one. Accordingly, the sign of the coefficient is positive for the five nations. As such, if political stability by percentage increase by 1%, GDP growth for Brazil will increase by 10. 9%, Russia 7. 7%, India 12. 1%, China 32. 4% and South Africa 17. 6%. Hence, the regression output shows that mathematically the positive increase of political stability reflects a positive growth of GDP for the five BRICS nations.

Finally, to answer the question on what percent of the variation in GDP growth is explained by political stability, the R-square (coefficient of determinant) was used to obtain percentage of the variation. Thus, the R-square in a regression analysis shows the fraction of the variation in the dependent variable that is predicted by the independent variables (Zakariah et al. , 2018; Everhart et al. , 2017). In regression with a single independent variable, it is the same as the square of the correlation between your dependent and independent variable (Deo et al. , 2017; Meloni et al. , 2014; Taghiyari & Malek, 2014). Although, the R-squared is generally of secondary importance, unless the main concern of the study is focused on using the regression equation to make accurate predictions (Betancourth et al. , 2018). Thus, the model summary of the study is presented below;

Model Summary[b]

Country	Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
Brazil	1	0. 236[a]	0. 056	-0. 049	3. 780479162
Russian Fed.	1	0. 054[a]	0. 003	-0. 108	5. 102190796
India	1	0. 153[a]	0. 023	-0. 085	1. 992252253
China	1	0. 477[a]	0. 227	0. 141	2. 251432582
South Africa	1	0. 343[a]	0. 117	0. 019	2. 043243937

Accordingly, the model summary shows that an R-square value of 0. 056 was obtained by Brazil, Russia 0. 003, India 0. 023, China 0. 227 and South Africa 0. 117. As such, the R-square figures indicating that 5. 6% for Brazil, Russia 0. 3%, India 2. 3%, China 22. 7% and South Africa 11. 7% can be explained by the model containing political stability. This is quite low for prediction, as such, it also means that the balance percentage of the variation in each of the nations are still unexplained so adding other independent variables could improve the fit of the model.

4.2. Key Research Findings

▪ The P-value from the regression analysis for the five nations is greater than 0. 05 (P-value>0. 05) indicating that there is insignificant impact of political stability on GDP growth among the BRICS nations for the period of 2007-2016;

▪ Numerically, the higher the rate of political stability, the higher the positive growth of GDP within BRICS nations, indicating a positive effect between the two variables;

▪ The percentage of variation of GDP for the five nations that is been explained by political stability is low, indicating that there are other independent variables that explain more of this variation in the growth of GDP.

5. Research Contribution

The recent emerging powers of the BRICS are often deemed to the process changing in the political and economic domain of the 21st century. Especially the unprecedented economic growth observed in the "waking giants" of China, India and Brazil since the 1990s not only aroused the interest of investors in these future markets, but also astonished the political, scientific, economic and media world. However, what is unclear is what impact the political stability of these nations have in their GDP growth. Thus, this study succeeded in ascertaining the level of statistical relationship between political stability and GDP growth of the BRICS and thereby recommend the followings to policy makers:

▪ Policy makers within the BRICS should ensure a sustainable political stability as this study ascertained that numerically it positively increase GDP;

▪ The regression output is recommended for policy focusing as it reveals the variation between political stability and GDP growth;

▪ It is also evident that other variables apart from political stability exist which affects GDP growth and should be taking into consideration when making policies on how to improve GDP.

Hence, the argument that BRICS nations face significant political challenges, especially in terms of economic, social, environmental and demographic sustainability has been ascertained from the findings of this study that it has a minute statistical impact on GDP.

6. Conclusion

This study is centered on the BRICS Nations, which comprises Brazil, Russia, India, China and South Africa. They are amongst the world emerging economic giants. The study focused on the relationship between political stability and GDP growth in those states that are located in different continents. The study used secondary data to assess the statistical relationship between political stability and economic growth in the BRICS. The study recommends ethical politics, which will ensure that corrupt leaders as well as tyrants and other forms of protest politics that are promoted by selfishness does not arise. Again, the ruling governments of the BRICS states should increasingly diversify the foundation of their economic investment, production and export as a way of enhancing GDP growth. There is also need for increased exchange of goods and services amongst the BRICS states through increased trade agreement.

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Entrepreneurship Development and the
Growth of Micro, Small and Medium Enterprises in Nigeria

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Abstract: The study examines the impact of entrepreneurship development on the growth of Micro Small and Medium Enterprises (MSMEs') in Nigeria using a Lagos based MSME in the Information and Communication Technology industry, Befy Links Nigeria Limited. The roles of Micro, Small and Medium Enterprises (MSMEs), as a catalyst for economic growth, have been well documented in the economics literature. The recent global economic crisis negatively affected productive activities and reduces business operations, investments and demand for goods and services. This forced many countries to look for alternative means of growth and development. One of these alternative approaches is the encouragement of micro, small and medium scale enterprises. The study employed descriptive and Chi-square techniques for the analyses. Questionnaires were randomly administered to the workers and customers in the company. It was found that entrepreneurship development has a significant impact on the growth of MSMEs and that training and re-training of existing and intending entrepreneurs are necessary to ensure sufficient impact of entrepreneurship development on the growth of MSMEs in Nigeria. Government and stakeholders in entrepreneurship development should support, promote and ensure that MSMEs are given the necessary impetus to function efficiently. Entrepreneurs should also cultivate the right attitude that would engender partnerships and pooling of resources. The entrepreneurship programmes (EDPs), should not be left to the public sector and professionals in other sectors of the economy should utilize the potentials in these programmes. The unique contribution of the study is that it takes an interest in the information and communication technology sector.

Keywords: Investment; Industrial Growth; Economic Growth

JEL Classification: O4; L8; L260

1. Introduction

The roles of micro, small and medium enterprises (MSMEs) in the growth process of any country have been well documented in the economic literature. In many of the newly industrialized nations, more than 98% of all industrial enterprises belong

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to the MSMEs sector and account for the bulk of the labour force (Victor, 2008). Governments have realized that one way to economic buoyancy is to encourage the spirit of entrepreneurship in the citizens to contribute their quota to the growth and development of the economy. The recent global economic crisis affected productivity, business operations, and investments and reduced domestic and international demand for goods and services. Incidentally, past polices and strategies failed to generate self-sustaining growth largely because of their preference for the establishment of large scale industries. Since the 1970s, developing countries like Nigeria have been compelled, in the face of many economic problems to look for alternative approaches to development (Odubanjo, 2008). One of these approaches was the re-direction of efforts and encouragement of micro, small and medium scale enterprises. As a result, many MSMEs have metamorphosed into large industries over the years in Nigeria. The likes of Dangote industries, Domino Groups belonging to the Bruce's and others have their companies quoted on the stock exchange (Fadaunsi, 1999).

The potentials of MSMEs in contributing to economic growth and development have brought attention to the consideration of the impact of entrepreneurship development on the growth of micro, small and medium enterprises. But the impact of entrepreneurship development on MSMEs in Nigeria is not without difficulties. These include financial and non-financial problems. The financial aspect has coloured the perception of MSMEs owners and policymakers and consequently, the policy targeted at solving the problems of the sector. The non-financial problem includes a lack of effective demand for the products and services of the MSMEs and the stiff competition with larger enterprises. The problems also include the poor state of infrastructures, macro-economic instability and political unrest that affects the flow of information about markets. Also, the problem of regulatory and legal bottlenecks often creates barriers to their smooth operations. This study, therefore, investigates the impact of entrepreneurship development on the growth of MSMEs in Nigeria using a Lagos based MSME in the information and communication technology industry, Befy Links Nigeria Limited. The rest of the paper is organized into four sections. Section two contains a literature review and theoretical framework. Section three deals with methodology and section four have analysis and discussion of results. Section five covers the conclusion and policy implications.

2. Literature Review and Theoretical Framework

2.1. Review of Literature on the Importance of MSMEs

There are many views of the term entrepreneurship, some of which focus on business development aspects, while others focus on entrepreneurial behaviours (Ahmed & McQuaid, 2005). Entrepreneurship is often considered synonymous with 'new firms' and/or existing MSMEs, and/or owner-managers or in some cases 'dynamic' or fast-growing new firms. It can also be seen as having specific functions in the economy, particularly in innovation and resource allocation with entrepreneurs seen as innovators. The production is possible due to the cooperation of the various factors of production, management, and entrepreneurship. The entrepreneurship is a risk-taking factor, which is responsible for the result in the form of profit or loss. The term 'entrepreneur' was first used by Richard Cantillon in the eighteenth century, to describe a 'go-between' or a 'between-taker', whereby they bought goods at certain prices but sold at uncertain prices. So he or she bore the risk and uncertainty of a venture and keep the surplus. Later, the renowned French philosopher, Jean-Baptiste Say, and others widened the concept to include the bearing of risks, planning, supervising, organizing and owning of factors of production. According to Schumpeter (2002) "entrepreneurship is essentially a creative activity or an innovative function". The 19th century was a fertile time for entrepreneurial activity, as technological advances during the industrial revolution motivated inventions and innovations. Ahmed & McQuiad, (2005), argued that entrepreneurship has three levels. In the first level, entrepreneurship refers to small firms or enterprises; in the second level it refers to the new firm formation and in the third level, entails innovation and system-wide coordination of complex production. Therefore, entrepreneurship embraces small business, innovation, and regional and local development policies.

Entrepreneurship development is a process of enhancing entrepreneurial skills and knowledge through structured training and institution-building programmes. It aims to enlarge the base of entrepreneurs to hasten the pace of creating new ventures. This accelerates employment generation and economic development. Entrepreneurship development focuses on the individual who wishes to start or expand a business. MSMEs development, on the other hand, focuses on developing the enterprise, whether or not it employs or is led by individuals who can be considered entrepreneurial. Entrepreneurship development concentrates more on growth potential and innovation. However many of the lessons learned from experiences in both types of development are similar. There is a pervasive tendency to equate entrepreneurship development (ED) with self -employment. Many self-employed individuals are entrepreneurs, but the majority of entrepreneurs are not self-employed. Their businesses are simply micro-enterprises in the informal sector, with little growth potential. Entrepreneurship development training is usually more

effective when linked to finance and other services such as marketing, quality assurance, and productivity improvement. For example, involving the development banks at an early stage of the support process helps to prepare the entrepreneur for the credit process and facilitates the bank appraisal of the entrepreneur business plan.

Entrepreneurship can be examined under economic function, a form of behaviour, a set of characteristics, small business, and the creation of a new business. Considering the role of innovation, entrepreneurship was considered to generate innovation and changes rather than respond to them and so causes economic development. As Schumpeter (1942) argued, entrepreneurship leads to the implementation of new combinations of means of productions by introducing new products and methods of production, opening new markets, gaining new sources of inputs, or changing the structure of an organization or an industry. In terms of resource allocation, it has been argued that the role of the entrepreneur is partly to identify persistent shocks to the environment, which will offer long-term opportunities, and then synthesize the information and make judgmental decisions on it. On the second perspective, Drucker (1985) argued that entrepreneurship is a purposeful and organized search for changes, and in the systematic analysis of the opportunities such changes might offer for economic or social innovation. According to Drucker (1985), an entrepreneur is someone who 'always searches for change, responds to it, and exploits it as an opportunity. This perspective points to the need for a 'holistic' or comprehensive view of entrepreneurship incorporating the individual(s) involved, the organization they create and the external environment within which they operate. OECD (2003) submitted that support for the existing social enterprise should essentially be the same as for profit-oriented firms.

The third perspective on entrepreneurship focuses on the personal characteristics, cognitive styles and the social and institutional context in which it operates. In ancient times, the psychological traits of an entrepreneur were integrity, self-learning, courage, conscientiousness, patience, perseverance, self-discipline and self-respect. Psychological and sociological approaches to entrepreneurship concentrated on particular attitudes or qualities; motivation; being a 'great leader'; or social forces. This approach to the characteristics of entrepreneurs has been criticized providing a long list of traits, that when taken together would result in the description of a sort for generic 'everyman' (Storey, 1994). The study of characteristics can be useful in helping identify important policy questions. It has been argued that some groups, such as women or some minorities have in the past been held back by institutional forces, including not being able to easily access appropriate finance and information. As the fourth criterion, entrepreneurship has been considered as covering the role of the owner-manager of a small business. This is termed, 'routine entrepreneurship', which involves the routine coordination and management of an existing business that operates in a well-established and clearly defined market. This perspective of entrepreneurship can sometimes fall to

distinguish an 'ordinary', routine owner-manager from one who transforms the business. The final, but arguably the most common perspective on entrepreneurship is that it relates to the act or event of setting up a new business (Gartner, 1988). The focus is on looking at the process of creating a new organization rather than its current owner or manager, or even the individual persons who created it. This suggests that the entrepreneurial role ends once a new organization has been created. The organization itself may continue, but the original entrepreneur takes on different roles in each stage, moving from being an innovator to the non-entrepreneurial roles of being a small business owner, or senior manager of the firm. This view has been an important part of economic development policies at all levels, where encouragement of business start-ups often plays a major role.

In Nigeria and other developing economies, industrialization strategy can be in the form of an MSME approach. The Central Bank of Nigeria (2000) observed that the role of MSMEs as a catalyst for promoting economic growth in developing countries is widely accepted. The rationale for advocating MSMEs for developing economies is that the capital requirement is small and within the reach of indigenous entrepreneurs, and that MSMEs may achieve higher per capita productivity and contribute more to employment. Hisrich and Peters (2002) argued that the role of entrepreneurship in economic development involves more than increasing per capital-output and income; it also involves initiating and constituting changes in the structure of business and society. This change is accompanied by growth and increase output, which allows more wealth to be divided by various participants

Befy Link Nigeria Limited (BLL) as one of the leading information and communication technology providers in Nigeria was incorporated in 1993 with its office in Lagos mainland. With the deregulation of the oil sector by the government, the company diversified into the provision of oil and allied services in the sector. BLL distributes the full range of IBM computing equipment and provides the associated support service, being one of the IBM authorized dealers in Nigeria. This is due to past investment in training and skill development with a commitment to dedicate a substantial amount of income towards continuous education. With a clientele base of over 150 reputable organizations and staff strength of over 50 employees, BLL seeks to harness the potentials inherent in the MSME sector.

2.2. Theoretical Framework

Two theories of Entrepreneurship Development are examined. These are the Schumpeterian Circular Flow Theory and the Leibenstein's Critical Minimum Effort Theory. The Schumpeter theory assumed a perfectly competitive economy in stationary equilibrium, characterized by 'circular flow'. Development according to Schumpeter theory is a spontaneous and discontinuous change in the channels of circular flow. These are not forced upon it from without but arise by its initiatives within the economy and appear in the sphere of industrial and commercial activities

(Jhingan, 2004). According to Schumpeter (1942), it is the innovation, that is, the introduction of a new product and the continual improvement in the existing ones that lead to development. He assigns the role of an innovator not to the capitalist but to the entrepreneur, who is perceived as one who innovates to earn a profit. To perform his economic function, Schumpeter posits that the entrepreneur requires the existence of technical knowledge to produce new products and the power of disposal over the factors of production in the form of credit.

Leibenstein (1957) argued that underdeveloped countries are characterized by the vicious circle of poverty that keeps them around a low per capita income equilibrium state. The way out of this impasse is a certain 'critical minimum effort', which would increase per capita income to a level at which sustained development could be achieved. The rationale for the critical minimum effort theory rests on the existence of certain favourable economic conditions so that the income-increasing forces expand at a rate higher than the income-depressing forces. According to Leibenstein, in the development process, such conditions are created by the expansion of the 'growth agents'. The typical growth agents are the entrepreneur, the investor, the saver, and the innovator. The growth-contributing activities result in the creation of entrepreneurship, the increase in the stock of knowledge, the expansion of productive skills of the people and the increase in the rate of saving and investment. These two theories serve as the theoretical basis of this study to determine the significance of entrepreneurship development to the growth of MSMEs in Nigeria. These theories highlight the developmental indices to entrepreneurship such as the existence of technical knowledge, increasing the stock of knowledge, and the expansion of productive skills of the people.

3. Methodology

This study employed exploratory research design for the investigation of the impact of entrepreneurship development on the growth of micro, small and medium business enterprises in Nigeria. Primary data were collected through questionnaires and personal interviews conducted for workers.

3.1. Sampling Procedure

Random sampling was conducted in the eight departments of the company, including some selected customers and suppliers. This was done taking workers' working experience, length of service, qualifications, marital status and cadre into consideration.

3.2. Instruments for Data Collection

The instruments used for the study are questionnaires and personal interviews. The questionnaire is a formalized set of questions for eliciting a response. A closed and

open-ended question was used. Options were provided for the respondents to choose for the closed-ended questions. Open-ended questions were used to allow respondents to independently express their minds. The questionnaire was divided into sections A and B. Section A, contains general questions on demographics characteristics, while section B contained questions on the tested hypothesis. Lickerts attitudinal scale was employed for the closed-ended questions. The questionnaires were scored according to the respondents' options. A total of seventy-five questionnaires were recovered out of hundred sent out. Information collected through personal interviews was also used to supplement the questionnaires.

3.3. Statement of Hypotheses

The following hypotheses guide our analyses:

H_0: Entrepreneurship development does not have a significant impact on the growth of small enterprises.

H_1: Entrepreneurship development has a significant impact on the growth of small business enterprises.

H_0: Lack of finance and poor infrastructure do not serve as an impediment to the growth of entrepreneurs.

H_1: Lack of finance and poor infrastructure serve as impediments to the growth of entrepreneurs

3. 4 Data Analysis Technique

The study makes use of descriptive analysis and Chi-square test for the hypothesis testing. The Chi-square formula is given as:

$$X^2 = \sum \frac{(O - E)^2}{E}$$

Where:

O - Observed values obtained from the survey. These values represent the response from questionnaires received.

E – Expected values are the results expected from the variable under a given condition(s). This is obtained by dividing the total number of questionnaires received, by the questions five options.

Df - is the "degree of freedom" (with n-1), and tested at a 5% level of significance using chi-square χ2 - is Chi-Square

The percentages (%) are found to determine the response thus:

No. of responses X 100

Total sample size

4. Data Presentation, Analysis and Discussion of Results

The analyses center on the research instrument, which is structured to reflect the purpose and objective of this study. Data were analyzed using descriptive analysis. The hypotheses were tested and the results provide the basis for findings, conclusions, and recommendations.

4.1. Characteristics of the Study Population

The study population consists of both junior and senior staff of Befy Links Ltd and a sample of some customers and suppliers of the company. The sample was drawn randomly from various departments of the company. Efforts were made to include all levels of management and non-management staff. A total number of hundred questionnaires were distributed but seventy-five were returned. Fifty-five of the respondents were male while twenty respondents were female. The number of respondents aged between 18–29 years is 25 (33%), while 40 (53%) of the respondents are between the ages 30–39 and 10 (14%) of the respondents are 40 years and above. This shows that the majority of the respondents fall between ages 30 -39 years. The number of married respondents is 30 (40%) while those who are not married are 45(60%) of the total respondents.

The respondents with school certificate (WASC) were 15(20%), while those with NCE/OND/AL were 30(40%). Those with higher graduate qualifications HND/B. Sc. /BA were 25(33%). Those with a second degree and above were 5(7%). The numbers of respondents that have served the company below five years are 22(29%); those that have served for 5-10 years are 31(42%); while 11-15 years are 10(13%). The pioneer staffs of the firm, who have served since the inception of the company, are 12(16%).

4.2. Data Analysis and Discussion of Results

Out of the hundred (100) questionnaires distributed to the respondents, 75 were effectively completed and returned which represents 75% of the total population considered. Table 1 below shows that 17(23%) of the respondents strongly agree that there are adequate training and re-training of existing and intending entrepreneurs, 28(37%) also agree to the same assertion, whereas 5(7%) respondents were indifferent. Moreover, 16(21%) and 9(12%) respondents disagree and strongly disagree with this assertion. Therefore, one may infer from this that there are adequate training and re-training of intending and existing entrepreneurs. Also, the

Table shows that 20(27%) and 39(52%) respondents strongly agree and agree that there is adequate government support for entrepreneurship development. On the other hand, 16(21%) respondents disagree that there is adequate government support for entrepreneurship development. This also shows that there appears adequate government support for entrepreneurship development in Nigeria. Also, 15(20%) and 45(60%) strongly agree and agree that there is adequate information from which entrepreneurs can benefit. This indicates the availability of a dependable information system from which entrepreneurs can benefit.

Furthermore, 6(8%) respondents strongly agree and strongly disagree that there is available financial support for budding entrepreneurs; while and 40(53%) respondents agree that there is available financial support for budding entrepreneurs. Moreover, 5(7%) respondents disagree. This analysis and interviews conducted indicate that even though there is available financial support for entrepreneurs, access to financial support is hampered by bureaucracy in government institutions. In terms of energy availability and cost impediment to the success of entrepreneurs, the Table shows that 34(45%) respondents strongly agree while 40(53%) respondents agree and just about 2% of the respondents were indifferent. This is an indication that energy unavailability in form electricity and cost can impede the success of entrepreneurs in the Nigerian economy. Also, 50(67%) and 25(33%), strongly agree and agree respectively to the fact that unpredictable social, political and economic factors could hamper entrepreneurship development. There is no dissenting response to this question. These factors include cultural differences, unstable political environment, macro-economic instability, high inflation rates as well as depreciating the domestic currency**. The analysis shows that these factors could obstruct entrepreneurship development.

Table 1. Entrepreneurship Development

Factors Necessary for Entrepreneurship Development	Options and Responses*					
	Strongly Agree	Agree	Indifferent	Disagree	Strongly Disagree	Total
Adequate Training and Re-training of Existing and Intending Entrepreneurs	17 (23%)	28 (37%)	5 (7%)	16 (21%)	9 (12%)	75 (100%)
Adequate Government Support to Entrepreneurship Development	20 (27%)	39 (52%)	-	16 (21%)	-	75 (100%)
Availability of Dependable Information System that Entrepreneurs can tap from	15 (20%)	45 (60%)	7 (9%)	5 (7%)	3 (4%)	75 (100%)

Readily Available Financial Support for Budding Entrepreneurs	6 (8%)	40 (53%)	18 (24%)	5 (7%)	6 (8%)	75 (100%)
Energy Unavailability and Cost Impediment to the Success of Entrepreneurs	34 (45%)	40 (53%)	1 (2%)	-	-	75 (100%)
Unpredictable Social, Political and Economic Factors to Consider that can Hinder Entrepreneurship Development	50 (67%)	25 (33%)	-	-	-	75 (100%)
Adequate Infrastructural Support for Budding Entrepreneurs	-	38 (51%)	10 (13%)	20 (27%)	7 (9%)	75 (100%)
Entrepreneurs' Contribution to the Source of Government Revenue	42 (56%)	30 (40%)	-	3 (4%)	-	75 (100%)
Entrepreneurship Development has Significant Impact on the Growth and Success of Small Business Enterprises	28 (37%)	20 (27%)	9 (12%)	15 (20%)	3 (4%)	75 (100%)

Source: Field survey 2010

*Percentages are in parentheses

On adequate infrastructural support for budding entrepreneurs, the analysis shows that 38(51%) agree while 10(13%) and 20(27%) respondents were indifferent and disagreed. Moreover, 7(9%) strongly disagree with this. Hence, there could be infrastructural support for budding entrepreneurs, but the adequacy of the availability is the problem most small business enterprises face in Nigeria. The analysis further shows that 96% and 5% agree and disagree that the entrepreneurs with their innovation contribute to the source of government revenue respectively. Thus it can be concluded that entrepreneurs contribute to government revenue. Also, 28(37%) and 20(27%) respondents strongly agree and agree with the fact that entrepreneurship development significantly impacted on the growth of small business enterprises. Furthermore, 15(20%) and 3(4%) respondents disagree and strongly disagree with this. We can, therefore, conclude that entrepreneurship development could significantly impact on the growth of micro, small and medium business enterprises in Nigeria.

4.3 Tests of Hypotheses

The hypotheses for the study are tested using Chi-Square analysis.

Hypothesis One:

H_0: Entrepreneurship development does not have a significant impact on the growth of small enterprises.

H_1: Entrepreneurship development has a significant impact on the growth of small enterprises.

Table 2. Entrepreneurship Development and the Growth of MSMEs

Code	Options	No of Responses (O)	Expected Value (E)	O - E	$(O – E)^2$	$\sum \frac{(O – E)^2}{E}$
5	Strongly Agree	28	15	13	169	11. 267
4	Agree	20	15	5	25	1. 667
3	Indifferent	9	15	-6	36	2. 400
2	Disagree	15	15	0	1	0
1	Strongly Disagree	3	15	-12	144	9. 600
Total		75	75			24. 934

Source: Field survey 2010

From Table 2 above, the calculated Chi-square (X^2) is 24. 9, whereas the tabulated X^2 with (n-1) = 5-1 = 4 degree of freedom, at a 5% level of significance gives:

$$X^2_{n-1} = 9.49$$

The calculated χ^2 value lies outside the acceptance region since $\chi^2 > \chi^2_{n-1}$. Hence we reject H_0 and conclude that entrepreneurship development has a significant impact on the growth of micro, small and medium scale business enterprises.

Hypothesis Two

H_0: Lack of finance and poor infrastructure do not serve as an impediment to the success of entrepreneurs.

H_1: Lack of finance and poor infrastructure serve as impediments to the success of entrepreneurs.

Table 3. Finance, Infrastructure and the Growth of MSMEs

Code	Options	No of Responses (O)	Expected Value (E)	O – E	$(O – E)^2$	$\sum \frac{(O – E)^2}{E}$
5	Strongly Agree	**12**	15	-3	9	0. 600
4	Agree	**27**	15	12	144	9.600
3	Indifferent	**13**	15	-2	4	0.267
2	Disagree	**17**	15	2	4	0.267
1	Strongly Disagree	**6**	15	-9	81	5.063
Total		**75**	75			**15. 797**

Source: Field survey 2010

From Table 3, the calculated Chi-square (χ^2) is 15. 8 and the tabulated χ^2 (with n-1 degree of freedom is 5-1 = 4), at a 5% level of significance gives $\chi^2 n\text{-}1 = 9. 49$. The calculated χ^2 value lies outside the acceptance region since $\chi^2 > \chi^2$ n-1. Hence, we reject H_0 and concluded that the lack of finance and poor infrastructure serve as impediments to the growth of entrepreneurs.

5. Conclusion and Policy Implications

This study investigates entrepreneurship development and the growth of micro, small and medium enterprises (MSMEs). Entrepreneurship development was found to have a significant impact on the growth of MSMEs. Also, training and re-training of existing and intending entrepreneurs and adequate government support in the form of institutional and infrastructural support to new and existing entrepreneurs aid the growth of MSMEs. In addition to the availability of a dependable information system, the study revealed that there is available financial support for potential entrepreneurs. However, access to resources was hampered by poor policy implementation. Also, unavailability of energy, cultural differences, political unrest, macroeconomic instability, high inflation rates and depreciating domestic currency impede entrepreneurship development**.** Therefore, if Nigeria hopes to achieve sustainable economic growth and development, the government should promote and support MSMEs. Also, stakeholders in the entrepreneurship development such as the government, private sector, and banking system, should cooperate to ensure that MSMEs are given the necessary impetus to function efficiently. Entrepreneurs should also cultivate the right attitude that would engender partnerships and pooling of resources. Finally, the entrepreneurship programmes (EDPs), should not be left to the public sector, professionals in other sectors of the economy should seize the enormous potentials in these programmes.

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Panel Cointegration and Granger Causality Approach to Foreign Direct Investment and Economic Growth in South Asian Countries

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Abstract: The aim of this study is to examine the long run equilibrium relationship between FDI, growth rate and economic growth in the developing countries of South Asia. Data was collected from the United Nations Conference on Trade and Development and World Bank Development Indicator from 1990 to 2017. However, Johansen Fisher Panel Cointegration and Pairwise Dumitrescu Hurlin Panel Causality Tests were utilized to address the objective of this paper. Consequently, it was discovered that a long run equilibrium relationship exists between FDI, growth rate of economy and economic growth in the developing countries of South Asia within the period under consideration. Moreover, there is an existence of unidirectional causality running from both growth rate and economic growth to FDI inflows in these countries. This implies that whenever the target of the policy makers in these economies is to facilitate the sporadic inflows of foreign capital, expanding the market size and manipulating the rate of economic growth would induce an increase in FDI inflows in the long run. Finally, the important findings that emerged in this work made this paper to recommend the following vital policy for the policy makers, investors, financial institutions regulators and future researchers. Therefore, the policy makers in the developing countries of South Asia should come up with the strategic policy measure that will expand the market size and ensure a sustainable growth rate in this sub region.

Keywords: FDI; Market Size; Growth Rate; Cointegration; Granger Causality and South Asia

JEL Classification: F21; F23; F36

1. Introduction

The sporadic inflows of foreign direct investment in the developing countries of Asian continent has been a subject of interest among scholars in the last decade. The stock of FDI inflows has risen by 25% from 2008 to 2017 in this region of the world.

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(UNCTAD, 2018). It is worth of note that the developing economies of the South and Southeast Asia have been declared as the highest recipients of global FDI inflows among comity of developing countries. (UCTAD, 2016, UNCTAD, 2018).

However, in the South Asia sub region, the inflows of FDI have been observed to be consistent in the last decade. The global investment report of UNCTAD shows that some countries like India, Bangladesh, Iran, Pakistan and Sri Lanka in this region have registered exceptional performance in attracting cross border investment. The statistics from this report indicates that from 2010 to 2017, these countries have improved their FDI inflows by 45.5%, 135.6%, 37.5%, 38.8%, and 187.8% respectively.

Consequently, it is undeniable fact that investment is one of the principal variables that derives economic growth. Robert Solow underscored this argument by enunciating that capital is a necessary condition for economic growth. It has been established in the literature that FDI inflows has the propensity to propel the productive capacity of the host economy through the technology transfer, market competition, acquisition of skills, employment generation and inducing living standard. Meanwhile, the rate of economic growth in South Asia has been impressive in the recent time. The average growth rate of majority of the countries in this region has been observed to surpass the developed economies in the last decade.

However, despite the fact that the developing countries of Asia have been a focal point of research in the last couple of years, but South Asian sub region is yet to get enough research attention about FDI among scholars relative to other developing regions in the globe. (Bimal, 2017). In the same vein, it has been observed that the bulk of recent FDI research in this region focuses on the determinants of this cross border investment. See Tiwari and Mutasque (2011), Azam (2010), Sahoo (2006), Minhas and Ahsan (2015), and Mottaleb and Kalirajan (2010). Having identified this gap in the literature, there is a compelling need to examine and validate the nature of relationship that exists between FDI and economic growth in South Asia. In order to contribute to the exiting literature, this study would move the frontiers of knowledge by examining the nexus between FDI inflows and economic growth in 5 major countries of South Asia, namely India, Bangladesh, Iran, Pakistan and Sri Lanka.

2. Empirical Literature Review

The literature on FDI in developing countries, emerging countries and developed countries are presented in this section of the paper as follows.

Wei (2005) critically investigated the variables that propel FDI inflows in China and India. The author concluded that the factors that derive FDI inflows in India are lower country risk, cheaper cost of labor, geographic closeness to OECD countries,

and cultural similarity. The study also established that what caused the wide gap between FDI inflows in China and India was the China had the capacity to attract much higher FDI from OECD countries because the country has larger market size and higher external trade relation with OECD countries. In another perspective, Carcovic and Levin (2000) utilized Ordinary Least Square model in estimating the relationship between FDI and economic growth in 72 developing economies from 1960 and 1995. The results from the study concluded that FDI and economic growth did not have a significant relationship in the countries under study. While examining a comparative analysis of FDI inflows performances in BRICS countries and other two emerging countries in Asian continent from 1990 to 2017, Aderemi et al (2018:1) applied Ordinary Least Square model to validate that the key determining variables of FDI inflows in Chinese economy are growth rate, GDP per capita growth and large market size. Meanwhile, in countries like Brazil, India, South Africa, Singapore and Hong Kong, market size has been identified as the major factor that derived inflows of FDI in these economies. Also, GDP per capita growth in both Russia and South Africa has been concluded to be an insignificant factor that caused inflows of FDI inflows

However, Agrawal et al. (2011) used modified growth model and Ordinary Least Square model to analysis how FDI and economic growth are related in China and India from 1993 to 2009. The authors established that the larger market size of the Chinese economy is the major reason why the foreign investors have more interest in china than India. In another study, Frenkel et al (2004) adopted gravity model and panel data analysis to estimate FDI inflow between major developed countries and twenty-two emerging nations. It was concluded from the paper that the principal variable that derives how FDI flows within these countries are the distance and characteristics of both home and host economies. While examining factors that propel FDI inflows in Indonesia, India and Pakistan from 1971 to 2005, Azam (2010) used OLS and Log Linear Regression Models to establish that external debt, market size, domestic investment, trade openness and physical infrastructure are the principal determinants of FDI inflows in these countries. It was noticed from the reported results that Pakistan and India are similar, when trade openness and government consumption are put in isolation but the results from Indonesia was not correlated with the reported variables that propel FDI India and Pakistan.

Consequently, Falki, (2009) examined the relationship between FDI and economic growth in Pakistan between 1980 and 2006 with the aid of Ordinary Least Square. The result that emanated from the paper submitted that there is an insignificant inverse relationship between FDI and GDP of the country. In another perspective, Aderemi et al (2018:2) critically analyzed the determining factors of FDI inflows in China and the US from 2002 and 2017 with the aid of OLS modeling. It was discovered from the study that FDI inflows is principally driven by the market size of the US economy but GDP per capita growth was the major variable that derived

China FDI inflows on the other hand. Atique et al, (2004) applied Eangle Granger and Hansen models to posit that the contribution of FDI inflows to the economy is more than exports. Similarly, Zhang (2001) analyzed FDI inflows and economic growth in 11 high-income and low-income developing economies in East Asia and Latin America with the adoption of Johansen cointegration test, the error-correlation model and the Granger causality test. The author submitted that the effect of FDI in the host economies is country-specific. The paper also confirmed that the inflows of FDI have propensity to propel the growth of East Asian economies if these economies are opened via external trade, development of human capital and education improvement. When using panel data analysis, Hudea and Stancu (2012) estimated the link that exists between technology transfer, foreign direct investments and economic growth in seven East European countries from 1993 to 2009. The researchers established that in both short run and long run FDI and economic growth have a positive relationship in those European nations.

Moreover, Kim and Seo (2003) examined the linked between FDI and economic growth and domestic investment in Korea economy from 1959 to 1999 with the application of vector auto regression model. It was discovered from the study that the relationship between FDI and economic growth is positive and significant. It was also concluded that domestic investment did not crowd out by the inflows of FDI as well. Mallick and Moore (2008) analyzed a panel data of 60 developing countries between the periods of 1970 and 2003. It was discovered from the study that the inflows of FDI has a significant positive impact on economic growth in all high income groups. However, the opposite was the result of lower income group. In the same vein, Chang (2007) concluded that there was no causal relationship between inflows of FDI and economic growth in Taiwan when estimating the Johansen cointegration test, the multivariate error correction model, and the Granger causality to assert that no causal relationship existed between FDI inflows and economic growth in Taiwan. Tiwari and Mutasque (2011) investigated how FDI and economic growth are related in Asian countries from 1986 to 2008 with the panel data analysis. The author submitted that the principal variables that propel economic growth in these countries are FDI, Labor, capital and exports.

However, the reviewed of the empirical literature so far established that the researches on FDI inflows and economic growth are ongoing especially in the emerging countries of Asia, and the literature is yet to reach a consensus about the nature of the relationship that exists between these variables. Hence, the relevance of this study.

2.1. An Overview of South Asian Countries

Table I. Annual GDP Growth Rate between 1990 and 2017

Year/Country	Bangladesh	India	Sri Lanka	Pakistan	Iran
2007	4.8	9.8	6.8	4.8	8.2
2008	1.7	3.7	6	1.7	0.3
2009	2.8	8.5	3.5	2.8	1
2010	1.6	10.3	8	1.6	5.8
2011	2.7	6.6	8.4	2.7	2.6
2012	3.5	5.5	9.1	3.5	-7.4
2013	4.4	6.4	3.4	4.4	-0.2
2014	4.7	7.4	5	4.7	4.6
2015	4.7	8.2	5	4.7	-1.3
2016	5.5	7.1	4.5	5.5	13.4
2017	5.7	6.6	3.1	5.7	4.3
Average	3.8	7.3	5.7	3.8	2.1

Source: WDI, 2018

In the last decade, the average growth rates in India and Sri Lanka have been observed to be higher than those of the developed economies. Indian economy has the highest growth rate among the selected countries, followed by Sri Lanka. The economic growth rate in Bangladesh and Pakistan have a similar indicator. Meanwhile, the Iran came last among the selected countries.

Table II. Percent of FDI inflows Increment in the Last Decade

Year/Country	Bangladesh	India	Sri Lanka	Pakistan	Iran
2007-2017	135.6%	45.5%	187.8%	38.8%	37.5%

Source: UNCTADstat, 2018

The rate at which the inflows of cross border investment has risen in the respective countries under investigation has been presented in the table above. It could be pinpointed that Sri Lanka`s FDI inflows have risen by the highest percentage in the last decade, followed by Bangladesh, India and Pakistan respectively. Iran registered the least percentage increment among the selected countries.

It is worth of note that, Sri Lanka was the first economy in the South Asian sub region to liberalize its national economy to the global community in 1977. This liberalization made the country to adopt a series of policy measures such as the rationalization of public expenditure, export promotion, liberalization of trade policy and exchange rate system, and incentives to investment. It has been observed that from the advent economic liberalization till now, Sri Lanka has remained one of the most outward oriented economies in the sub region. This has been one of the critical factors that has contributed to FDI inflows in the country. Similarly, in the early 80s,

India commenced reforming the structure of its economy. In 1991, aggressive privatization and liberalization policies began in the country due to the balance of payment and foreign exchange liquidity problem disrupted the economy in that year. Subsequently, a number of policies has been introduced in the country to ensure the integration of the economy with the rest of the world. In the same vein, in 2002, India embarked on the second phase of economy reforms tagged second generation reforms with a view to reducing the fiscal deficit, reforming labor laws and invigorating the states involvement in the active economy management and improving infrastructural facilities.

Moreover, the country of Bangladesh was not left behind when it comes to economic reformation. The country embarked on the landmark economic reforms in the 1980s and early 90s. The initial reform took place in Bangladesh through the advent of the structural adjustment programme which was sponsored by the World Bank and the IMF. The World Bank structural and sectoral adjustment loans (SALs and SECLs) was introduced in the country. Later, a three-year IMF sponsored structural adjustment facility (SAF) was equally implemented in 1986. However, this policy measure sparked off the advent of various policy initiatives in 1990s, such as agricultural policy, privatization and public enterprise reforms, trade and industrial policy fiscal policy reform and financial sector reform.

Furthermore, Pakistan took its first step to liberalize its investment policies in 1984. The country made an industrial policy statement that ensures an equal opportunity to the public and private sectors in the country. Therefore, the introduction of foreign private investment, joint equity participation of foreign and local investors in the areas of managerial and technical skills, marketing expertise and advanced technology was incorporated in the country to boost participation of foreign investors in the country. In order to facilitate sporadic inflows of cross border investment in this country, a new industrial policy package came on board in 1989 with a mandate to recognize crucial impact of the private sector in propelling investment in the country. As a result of this, a series of regulatory measures were put in place to generally improve the business environment so that FDI could be attracted in the country. Within the period, the Board of Investment (BOI) was set up in conjunction with the PM's secretariat, with a mandate to create platforms that will serve as attraction to foreign investors in the economy. Within the period Pakistan had signed bilateral agreements on the promotion and protection of investment with 46 countries which later caused sporadic inflows of FDI in the country.

Moreover, in 2000s, Iran liberalized its investment regulation. As a result of this, FDI inflows in this economy has been moving in towards few strategic industries of the economy such as vehicle manufacturing industries, oil and gas industries, petrochemical and pharmaceutical industries and copper and mining industries.

Between 1992 and 2009, approximated 485 projects with values of US$34.6 billion of cross border investment has been received by the Iranian economy.

In conclusion, in the past few decades, the developing countries of South Asia have been liberalizing their economies on a continuous basis with aggressive policy changes in their macroeconomic variables, competitive FDI and trade policies so that a friendly investment climate that would catalyze the emergency of foreign investors in the country could be created.

3. Methodology

This paper makes use of secondary data from 1990 to 2017. Data on FDI were got from UNCTAD investment report of the World Bank. Meanwhile, data on other macroeconomic variables such as GDP and growth rate of the economy were extracted from World Bank Development Indicator.

3.1. Estimation Techniques

This study employs the Augmented Dickey Fuller (ADF) and Philips-Perron (PP) unit root tests, Johansen co-integration test and panel granger causality. All these estimation techniques were used to examine the nature of relationship that exists between FDI and economic growth in the selected countries. Consequently, the stationary of a variables is a crucial factor to consider in analysis of the variables because it can influence their performance in such a way that a spurious result can emanate from the study. However, if the time series variables possess unit roots, this means that the variables might drift away in the short run and converge in the long run if they are cointegrated. This is the idea behind the cointegration technique put forward by Johansen and Juselius (1990). Moreover, attempt to examine the feedback effect among the variables of interest led to the estimation of the causal relationship between the variables with the adoption of a recently-developed panel causality test, known as Dumitrescu and Hurlin (2012) causality test. The linear panel causality model can demonstrated as follows:

$$GDP_{it} = \alpha_0 + \sum_{i=0}^{p} \alpha_1 FDI_{it-1} + \sum_{i=0}^{p} \alpha_2 GRT_{it-1} + \sum_{i=0}^{p} \alpha_3 GDP_{it-1} + U_{1it} \text{ - - - - - - - (I)}$$

$$GRT_{it} = \gamma_0 + \sum_{i=0}^{p} \gamma_1 FDI_{it-1} + \sum_{i=0}^{p} \gamma_2 GRT_{it-1} + \sum_{i=0}^{p} \gamma_3 GDP_{it-1} + U_{2it} \text{ - - - - - - - - (II)}$$

$$FDI_{it} = \beta_0 + \sum_{i=0}^{p} \beta_1 FDI_{it-1} + \sum_{i=0}^{p} \beta_2 GRT_{it-1} + \sum_{i=0}^{p} \beta_3 GDP_{it-1} + U_{3it} \text{ - - - -- - - - (III)}$$

Where

GDP is used to proxy economic growth.

GRT denotes growth rate of economy.

FDI is used to represent the inflows of foreign direct investment in the selected countries.

U_{1it}, U_{2it} and U_{3it} connote error terms, p is the lag length and t = 1990……..2107. While i =1….5.

The countries selected for this study are Sri Lanka, India, Bangladesh, Islamic Republic of Iran and Pakistan. The availability of the relevant data for this study motivated the choice of these countries among other countries in the South Asia sub region.

3.2. Result and Discussion

Table III. Panel Unit Root Test

Variables	Panel ADF Test			Panel PP Test		
	Level	First Difference	Remarks	Level	First Difference	Remarks
RGDP	0.00499 (1.0000)	3.04145 (0.9804)	I (2)	9.2E-05 (1.0000)	4.60724 (0.9158)	I (2)
GRT Rate	28.1301 (0.0017)	-------	I (0)	33.3979 (0.0002)	---------	I (0)
FDI	0.00378 (1.0000)	27.9792 (0.0018)	I (1)	4.2E-06 (1.0000)	48.6062 (0.0000)	I (1)

Source: Authors' Computation, 2018. ( ) Figures in parentheses represent P-values

Table III presents the outcomes of unit root tests of GDP, growth rate and FDI with the application of both Panel Augmented Dickey-Fuller (ADF) and Phillips-Perron (PP) tests. The reported results from the above tables indicate that growth rare, FDI and real GDP are I(0), I(1) and I(2) variables concurrently. In another words, variables FDI and real GDP possess a unit root, and consequently stationary after first differencing and second differencing simultaneously. However, in an attempt to examine a long run equilibrium relationship among these variables, this study employed Johansen Fisher Panel Cointegration Test.

Table IV. Johansen Fisher Panel Cointegration Test

Trend assumption: Linear deterministic trend
Lags interval (in first differences): 1 1

Unrestricted Cointegration Rank Test (Trace and Maximum Eigenvalue)

Hypothesized	Fisher Stat.*	Fisher Stat.*

No. of CE(s)	(from trace test)	Prob.	(from max-eigen test)	Prob.
None	21.72	0.0166	26.28	0.0034
At most 1	4.631	0.9145	5.857	0.8271
At most 2	3.069	0.9798	3.069	0.9798

* Probabilities are computed using asymptotic Chi-square distribution.

Individual cross section results

Cross Section	Trace Test Statistics	Prob.**	Max-Eign Test Statistics	Prob.**
Hypothesis of no cointegration				
1	26.5205	0.1139	19.9611	0.0722
2	26.5205	0.1139	19.9611	0.0722
3	26.5205	0.1139	19.9611	0.0722
4	26.5205	0.1139	19.9611	0.0722
5	26.5205	0.1139	19.9611	0.0722
Hypothesis of at most 1 cointegration relationship				
1	6.5594	0.6294	6.4455	0.5567
2	6.5594	0.6294	6.4455	0.5567
3	6.5594	0.6294	6.4455	0.5567
4	6.5594	0.6294	6.4455	0.5567
5	6.5594	0.6294	6.4455	0.5567
Hypothesis of at most 2 cointegration relationship				
1	0.1139	0.7357	0.1139	0.7357
2	0.1139	0.7357	0.1139	0.7357
3	0.1139	0.7357	0.1139	0.7357
4	0.1139	0.7357	0.1139	0.7357
5	0.1139	0.7357	0.1139	0.7357

**MacKinnon-Haug-Michelis (1999) p-values

Source: Authors` Computation, (2018)

Johansen Fisher Panel Cointegration Test was estimated and its results were presented in the table above. The reported results show that we have the presence of two cointegrating vectors in the systems. Taken a critical look at both the trace statistics and the maximal eigenvalue statistics one could establish that the system possesses two cointegrating vectors in the model (at a lag interval of 1 to 1. This implies that the variables of interest namely, FDI, growth rate and economic growth in the South Asian economies possess a long run equilibrium relationship with one

another, though the variables might adjust to short run disequilibrium via the same model. This finding supports the conclusion from the works of Zhang (2001) and Mutasque (2011).

Table V. Pairwise Dumitrescu Hurlin Panel Causality Tests

Sample: 1990 2017

Lags: 4

Null Hypothesis:	W-Stat.	Zbar-Stat.	Prob.
FDI does not homogeneously cause GRT	3.46518	-0.63393	0.5261
GRT does not homogeneously cause FDI	1.00795	-1.98821	0.0468
RGDP does not homogeneously cause GRT	6.72328	1.16175	0.2453
GRT does not homogeneously cause RGDP	5.75341	0.62722	0.5305
RGDP does not homogeneously cause FDI	1.41927	-1.76151	0.0582
FDI does not homogeneously cause RGDP	7.39708	1.53311	0.1252

Source: Authors` Computation (2018)

The table above shows that estimated results from the panel Granger causality test. This test was carried out to establish the nature of feedback effect that exists among the variables of interest in this study. Consequently, it could be validated that there is unidirectional causality which runs from growth rate to FDI inflow in the South Asian sub region. Similarly, the study also confirms that a unidirectional feedback effect exists from economic growth to FDI inflow in the selected countries. This confirmed the submission of Chakraborty and Basu (2002) and contradicted the finding of Chang (2007) who discovered a contradictory result among developing economies. However, there is no granger causality between economic growth and growth rate in the studied economies. The implication of these results is that the market size and the growth rate of these countries are important variables that propel the inflows of cross border investment in this sub region.

4. Conclusion and Recommendation

In this study, we examined a long run equilibrium relationship that exists between FDI, growth rate and economic growth in the developing countries of South Asia

from 1990 to 2017 with the application of Johansen Fisher Panel Cointegration and Pairwise Dumitrescu Hurlin Panel Causality Tests. Consequently, the results that originated from this paper could be summarized as follows: there is an existence of a long run equilibrium relationship between these important economic variables FDI, growth rate of economy and economic growth in the developing countries of South Asia within the period under consideration. The economic implication of this finding is that FDI, growth rate and economic growth possess a great tendency to converge in the long run in these countries. However, the market size and the growth rate of the sub regional economies are the major variables among others that causing the inflows of cross border investment in these countries. It is important to state that as market size expands in this sub region, the growth rate rises and consequently brings about further inflows of FDI to the sub regional economies in the long run. Moreover, there is an existence of unidirectional causality running from both growth rate and economic growth to FDI. This implies that whenever the target of the policy makers in these economies is to facilitate the sporadic inflows of foreign capital, expanding the market size and manipulating the rate of economic growth would induce an increase in FDI inflows in the long run. Finally, the important findings that emerged in this work made this paper to recommend the following vital policy for policy makers, investors, financial institutions regulators and future researchers. Therefore, the policy makers in the developing countries of South Asia should come up with the strategic policy measure that will expand the market size and ensure a sustainable growth rate in this sub region.

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Effect of Social Capital Endowment
on the Welfare of Farming Households in Kwara State, Nigeria

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Abstract: This study examines the effect of social on welfare of farming households in Kwara state, Nigeria. It focused on household food security status and nutritional status of under-five children as measure of household welfare. A three stage random sampling was employed to collect primary data from 160 farming households in Kwara State. The data was analysed using descriptive statistics, ordinary least square regression (OLS) and probit regression analyses. The regression analysis result shows that educational level, household size, household monthly income, dependency ratio and social capital index were significant in explaining variation in household food security status and in addition, number of friends of household head and status of household members in social groups are also significant in explaining nutrition status of under-five children in the households. The study showed that household's per capital calories intake increases with increase decision making index and heterogeneity index. Children nutrition status increase as density of membership and heterogeneity indices increase. The study concludes that social capital has a positive effect on household food security and children nutrition status thereby improving household welfare. The study therefore recommended that farmer should be encouraged to join social group so as to increase their social capital endowment. Also, social groups need to be strengthened and supported to improve household social network so as to improve household welfare.

Keywords: Food security; Social Capital; Welfare; Farming Households; Nigeria

JEL Classification: I31

1. Introduction

The linkage between social capital and welfare is particularly relevant in many rural communities throughout sub-Sahara Africa, where households suffer from pervasive to extreme poverty with Nigeria inclusive. In Nigeria poverty is said to be acute and

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has been on the increase since 1980 as reported by United Nations Development in its annual report published in 2015. The National Bureau of Statistics (NBS, 2010) also shows that the incidence of poverty was raised from 54. 7% in 2004 to 60. 9% in 2010. The level of poverty in a household is widely recognized as an important indicator of the well-being of the household and this is reflected in the central role that the concept of poverty plays in the analysis of social protection policy. According to Oluwatayo (2004), poverty exists when an individual or group of individuals fail to attain a level of well-being, usually material. Poverty reduction has been receiving increasing global attention more importantly in the developing countries where majority of the people are considered poor. The need to reduce poverty to the minimum has been the aim of Nigeria government, international developing agencies and the civil society which devotes considerable resources towards achieving poverty reduction by funding programmes such as "Community Action Programme for Poverty Alleviation" (CAPPA), Family Economic Advancement Programme (FEAP), Community-based Poverty Reduction Project (CPRP), National Fadama Development Project and Local Empowerment and Environmental Management Project (LEEMP). The Nigeria government, has always spear-headed this campaigns with a view of achieving poverty reduction.

Arising from the foregoing, this study seeks to provide answers to the following research questions: What is the effect of social capital endowment on food consumption expenditure of farming households in Kwara state? What is the effect of social capital on food security status of farming households in Kwara state? What is the effect of social capital on nutritional status of under-five children among farming households in Kwara state? Specifically the objective of the Study are to: examine the effect of social capital endowment on welfare of farming households in kwara state; examine the relationship between social capital and food security of farming households in kwara state; and examine the effect of social capital on nutritional status of under-five children among farming households in kwara state.

2. Theoretical Framework

Social capitals consists of aspects of social structure, obligations and expectations, information channels, and a set of norms and effective sanctions that constrains and/or encourage certain kind of behaviour (Coleman, 1988). The concept of social capital is relatively new in economic analysis. According to Fukuyama (2002), the concept re-entered the social science lexicon in the 1980s. The concept of social capital believed that people could invest in themselves to enhance their level physically and financially. Social capital shares several attributes with other forms of capital. Thus, the concept of social capital rests heavily on trust, social norms, networks and trustworthiness required within groups and communities which helps to "facilitate exchanges, lower transaction costs, reduce the cost of information,

permit trade in the absence of contracts and the collective management of resources" (Fukuyama, 2002).
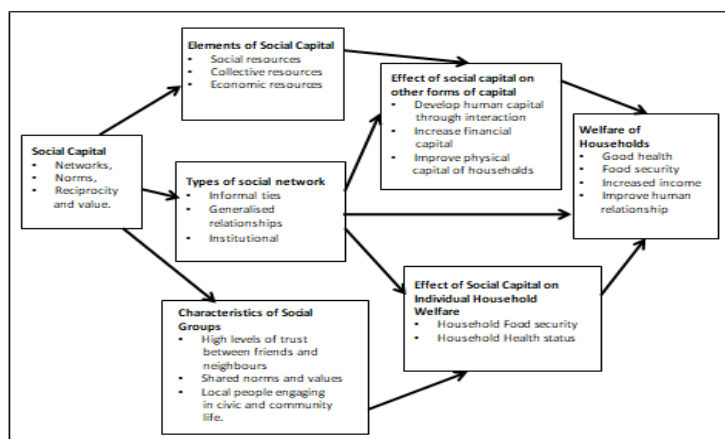
Figure 1. Conceptual Framework of Effect Social Capital on Welfare of Farming Households

Source: Adapted from Coleman (1988)

3. Research Methodology

The study was conducted in Kwara State whose capital is Ilorin. Kwara State of Nigeria was created on the 27th of May, 1967 along with 11 other states of the federation. The state was originally called west central state, having been carved out of the defunct northern Nigeria. At the time of creation, the state had a landmass of $60,380 km^2$ but this has reduced to $34,804.72 km^2$ following the boundary adjustments that accompanied excision of a segment of its eastern part to Benue State in 1976 and 6 local government areas to the present Kogi State and Niger State in 1991. However, recent survey shows that the state has a total land area of about $32,500 km^2$, which is about 3.5% of the total land area of the country, which is put at $923,768 km^2$ (KWSG, 2006). Considering the geographical location, Kwara State occupies a vantage position on the map of Nigeria. Situated between latitudes $7^0 45'N$ and $9^0 30'N$ of the equator and longitudes $2^0 30'E$ and $6^0 25'E$ of the equator, it lies midway between the Northern and Southern parts of Nigeria. Kwara State shares boundaries with Osun, Oyo, Ondo, Kogi, Niger and Ekiti States as well as an international boundary with the Republic of Benin in the West.

The estimated population of the state is about 2.37 million people (NPC, 2008) out of which farmers account for about 70%. The average population density of the state as at 2006 was about 73 people per square kilometre. An analysis of the gender

distribution reveals that about 49. 6% of the total population of the state is male while the female is about 50. 4% and age distribution reveals that Kwarans below the age of 18years make up about 48% of the total population while the Adult population is about 52%. Approximately 25% of the land area of kwara state is use for farming. The farming system in the state is characterized by low quality but surplus land, low population density and cereal–based cropping pattern. The cultural, religious and ethnic mix of the state is very unique. The religious mix of the state is a combination of Islam and Christianity and to some extent traditional worshippers. The state is made up of 16 local government areas (LGA) namely, Asa, Baruten, Edu, Ekiti, Ifelodun, Ilorin–East, Ilorin–West, Ilorin–South, Irepodun, Isin, Kaima, Moro, Offa, Oke–Ero, Oyun and Pategi. The dominant ethnic groups in the state are "Yoruba", "Hausa," "Fulani" and "Nupe". There are a total of 1,258 rural communities in Kwara State (NPC, 2008). Based on agro–ecological and cultural characteristics, the state is divided in to four agricultural zones – zones A, B, C and D, by the Kwara State Agricultural Development Project (KWADP).

3.1. Sources of Data and Sampling Techniques

The data for this study was obtained mainly from two sources primary and secondary data. Data on household level was collected for the study. The primary data was collected with the aid of questionnaire administered to households. Supporting literatures was also collected from books, journals, articles, term papers, internet browsing and other documented reports. The state is divided into sixteen LGAs, out of which 4 LGAs which are Asa, Moro, Ekiti, and Oyun was randomly selected from which, 5 communities were also randomly selected to give 20 communities. Finally, 8 respondents were selected per community to make a total of 160 respondents.

Figure 2. Map of Nigeria Showing Kwara State

3.2. Analytical techniques

The study used different analytical tools based on the objectives of the study and this includes descriptive and inferential statistics, such as ordinary least square (OLS). The descriptive statistics used include tables, percentages, and all forms of indices to categorise the welfare status of the respondents.

Model Specification

The regression model of household per capita calories intake is specified as follows:

$Z_i = bX_i + U$ …………………. 1

$Z = f(X_1, X_2, X_3, X_4, X_5, X_6, X_7, X_8,……U)$

Where Z= per capita calories intake of household in (Kcal/AE/day)

The explanatory variables included in the model of per capital calories intake of farming households are:

X_1 = Age of household Head (Years)

X_2 = years of schooling (years)

X_3 = Farm size (Hectares)

X_4 = Household size (Adult male Equivalent)

X_5 = Gender of Household (Male=1, 0 otherwise)

X_6 = Monthly income (Naira)

X_7 = Dependency ratio

X_8 = Status in group

X_9 = No of friends

X_{10} = Social capital index

X_9 = Density of membership index

X_{11} = Decision making index

X_{12} = Heterogeneity index

U= Error term

The Probit estimation of the determinants of under-five children nutritional status is given as:

$Y_i = bX_i + U$

Y= f (1 if not nutrient deficient and 0 if nutrient deficient)

$$y_i = \begin{cases} 0, & \text{if } \lambda_i > \xi_i \\ 1, & \text{if } \lambda_i \leq \xi \end{cases}$$ Y= f (X_1, X_2, X_3, X_4, X_5, X_6, X_7, X_8, ...U)

The explanatory variables included in the model of nutritional status of children age under five years among farming households are:

X_1 = Age of Household Head (years)

X_2 = years of schooling (years)

X_3 = Farm size (Hectares)

X_4 = Household size (Adult male Equivalent)

X_5 = Gender of Household (Male=1, 0 otherwise)

X_6 = Monthly per capita income (Naira)

X_7 = Dependency ratio

X_8 = Status in group

X_9 = No of friends

X_{10} =Social capital index

X_9 = Density of membership index

X_{11} = Decision making index

X_{12} = Heterogeneity index

U= Error term

4. Results and Discussion

4.1. Socio-Economic Characteristics of Sample Farming Households

The Table 1 shows the distribution of respondents according to social economic characteristics and its gives the report of descriptive statistics by respondents' showing social capital endowments of the farming households. The gender distribution of the respondents shows that 96. 7% of the respondents were male while 3. 3% were Female, this implies that majority of household heads in the study area were Male. This may be as a result of the facts that they engage in farming activities than woman because sex of household head affects the type farming activities done on the farm and it also affects type associations' household belongs to as well as their social capital endowments. Also, the distribution of the age of respondents

given was observed that only 21. 3% of the respondents were less than or equal to 40years of age, majority 46. 0% were between the ages of 41-50years, 21. 3% were 51-60years while 10% were above60 year of age. This is an indication that most of the household heads were within the active age. It also indicates that fewer youth are participating in farming activities which may affect social capital of households.

The educational level of the respondents in table shows that 17. 3% of the respondents do not have any form of formal education, while majority 38. 8% had primary or secondary education 4. 0% had adult education and finally 27% had Tertiary education. Education gives room for self-development and exposes farmers to greater opportunity. Only a small proportion of the farming household heads had no formal education. Years of schooling acts as a proxy for the level of knowledge and understanding of household members confirmed by Ayanlere, (2016) where they found out that household members benefit from the abilities of a literate person in the household regardless of the year of schooling and level of education. The marital status in table 2 revealed that majority 88% of the respondents were married while only 12% in total belong to other groups, single; divorce/separated widow/widower. This implies that household heads in the study area were majorly married people. Years of farming experience from table 2 shows that majority of the respondents 34% had between 11-20years of farming experience. While 29% had less than or equals to 20 years of farming experience, majority 63. 3% had 21-40years of farming experience, 5. 3% had between 41-55 years of farming experience and 2% had above 55 years of farming experience. Farm size from table 2 shows that majority 66. 0% of the respondent have 1. 1- 6. 3 farm size per hectare while 6. 7% had between 6. 4-11. 5 farm sized per hectare and 0. 7% above 11 hectares. The table shows that 73% of the households had monthly income of between 30000-70000. Total value of asset from table 2 shows that 1. 3% of the respondents have an asset value <300000, 63. 3% value asset between 300000-930000, 24% have value asset between 940000-1800000, 9. 3% values asset between 1840000-2730000 and finally 2% have value asset above 2730000 Naira.

Table 1. Socioeconomic Characteristics of Farming Households

Characteristics	Frequency	Percentage
Gender		
Male	145	96. 7
Female	5	3. 3
Total	150	100
Age in years		
<40	32	21. 3
41-50	69	46. 0
51-60	34	22. 7
>60	15	10. 0
Total	150	100
Adjusted household size		
<3	4	2. 7

4-10	99	66. 0
11-20	25	16. 7
>20	22	17. 7
Total	150	100
Marital status		
Single	8	5. 3
Married	132	88. 0
Widow(er)	7	4. 7
Devoiced	3	2. 0
Total	150	100
Level of Education		
No formal education	26	17. 3
Adult education	6	4. 0
Primary	57	38. 8
Secondary	57	38. 8
Tertiary	4	2. 7
Total	150	100
Primary occupation		
Farming	120	80
Artisan	22	14
Others	8	5. 3
Total	150	100
Farm size in Ha		
<1. 0	40	26. 7
1. 1-6. 3	99	66. 0
6. 4-11. 5	10	6. 7
>11. 5	1	. 7
Total	150	100
Years of farming		
<5	9	6. 0
6-18	35	23. 3
19-30	45	30. 0
31-40	50	33. 3
41-55	8	5. 3
>55	3	2. 0
Total	150	100
Food expenditure(Naira/month)		
<10000	8	5. 3
10001-23000	77	51. 3
23001-37000	33	22. 0
37001-50000	31	20. 7
>50000	1	0. 7
Total	150	100
Total household expenditure(Naira/Month)		
<15000	4	2. 7
15000-35000	125	83. 3
>35000	21	14
Total	150	100
Value of household assets in (Naira)		
<300000	2	1. 3
300001-930000	95	63. 3

930001-1830000	36	24. 0
1830001-2730000	14	9. 3
>2730000	3	2. 0
Total	150	100
Household monthly income		
<30000	2	1. 3
30001-70000	110	73. 3
70001-120000	32	21. 3
120001-170000	5	3. 3
>170000	1	0. 7
Total	150	100

Source: Survey Data, 2017; Number of observation=150

4.2. Effect of Social Capital Endowment On Household Food Consumption Expenditure

The result of the OLS regression is presented in table 2. The table shows five (5) out of ten (10) variables and the constant are statistically significant. Education level of household is positively significant this shows that education has a direct relationship with household food consumption expenditure. Household size is also positively related to household food expenditure this implies that the higher the household size the higher the food consumption expenditure. Monthly income of household is also positively related to food consumption expenditure therefore the higher the household income the higher their food consumption expenditure. The dependency ration is also positively significant and this implies the higher the dependency ratio the higher the food consumption expenditure, while the aggregate social capital index is negatively significant, this implies that there is an inverse relationship between social capital and household food consumption expenditure that is, the higher the level of social capital the lower the household food consumption expenditure. Educational level and dependency ratio are positively significant at 10% degree of error. Household size and monthly income are also positively significant at 1% degree of error. Aggregate social capital index is negatively significant at 10%. The model posted an R^2 of 0. 535 this implies that 57. 1 % of the dependent variable is explained by the independent variable.

Table 2. Regression Estimate of Determinants of Farming Households' Food Consumption Expenditure

Variables	Coefficient	Standard error	p-value
Constant	15581. 320**	6620. 948	0. 021
Age (years)	-48. 511	87. 288	0. 580
Education (years)	1511. 308*	817. 277	0. 067
Farm size (Ha)	-306. 982	399. 579	0. 444
Household size (AE)	1535. 397***	186. 414	0. 000
Gender (Male=1)	-4243. 447	4897. 145	0. 388

Monthly income (₦)	0. 352***	0. 061	0. 000
Dependency ratio	11412. 435*	6198. 196	0. 069
Status in group	3190. 619	2267. 522	0. 163
Number of friends	153. 622	5666. 225	0. 787
Social capital index	-4624. 114*	2447. 809	0. 062
R^2	0. 535		
F-Value	0. 000***		

Source Survey Data, 2017; Number of observation =150

*Indicate significant at 10%, **Indicate significant at 5%, ***Indicate significant at 1%

4.3. Effect of Social Capital Indices On Household Food Consumption Expenditure

The social capital indices used in the study are density of membership index, decision making index and heterogeneity index. The result of the regression in table 3 shows that the constant and density of membership are positively significant this means that the number of groups household members belong to has a direct effect on their food consumption expenditure. Decision making index and heterogeneity are negatively significant this implies that whether household members participate in decision making in their groups has an indirect effect on the amount the pay for food in their households. Households' group diversity is also important to household food consumption expenditure because it also has an indirect relationship with household food consumption expenditure that is, it can increase or reduce household food consumption expenditure. The result hereby shows that show capital has both direct and indirect effect on food consumption expenditure of farming households in the study area

Table 3. Regression estimates of Effect of Social Capital Indices on Food Consumption Expenditure

Variables	Coefficient	Standard error	p-value
Constant	24124. 957***	5119. 277	0. 000
Density of membership index	139. 369***	38. 996	0. 001
Decision making index	-387. 912***	125. 299	0. 003
Heterogeneity index	-113. 128*	64. 356	0. 082
R	0. 436		
R^2	0. 190		
F- Value	0. 000***		

Source Survey Data, 2017; Number of observation=150

*Indicate significant at 10%, **Indicate significant at 5%, ***Indicate significant at 1%

4.4. Household Food Security Status

Table 4 shows the statistics of household food security in the study area measured by the households' per capita calorie intake. The table shows that 61. 8 % of the sampled household are food secured at 2200 kcal per day calorie requirement while 38. 2 are not food secure.

Table 4. Household Food Security Status Measure by Per Capita Calorie Intake

Characteristics	Frequency	Percentage
Food secure	95	63. 7
Non-food secure	55	36. 3
Total	150	100

Source Survey Data, 2017; Number of observation=150

4.5. Anthropometry Analysis

The anthropometry characteristics of children under the age of five such as height, weight and age where used to generate indices such as height- for- age which was used to measure stunting, weight –for-age which was used to measure underweight and weight – for- height which was used to measure wasting all Z-scores obtained where compared with the standard value of the National centre for Health Statistics (NCHS) Z-score to infer the nutritional status of the children.

Table 5. Summary of Anthropometry Statistics of Children Under-Five Years

Characteristics	Minimum	Maximum	Mean	Standard deviation
Stunting prevalence*	0	1	0. 23	0. 420
Wasting prevalence*	0	1	0. 19	0. 391
Underweight prevalence*	0	1	0. 23	0. 420
Height for age Z- score	0. 1270	0. 3810	0. 2070	0. 044
Weight for height Z-score	15. 740	39. 370	26. 2305	4. 246
Weight for age Z- score	3. 000	13. 000	5. 4053	1. 4131

Source Survey Data, 2017; Number of observation=150

The (*) indicates characteristics with binary response which are assigned 0 and 1.

The total number of households was 102 for all the characteristics. The average value for Height for age Z- score, Weight for height Z-score and Weight for age Z- score were estimated at 0. 2070, 26. 27 and 5. 4053 respectively. The malnutrition indices; stunting, wasting and underweight were measured such that a stunted child is scored 1 while a child otherwise is scored 0. The mean stunted value of the respondent was estimated at 0. 23 thereby justifying the fact that only 23% of the respondents are stunted. The mean value for wasting was estimated at 0. 19 showing that only 19% of the respondents are wasted and the mean value for underweight was estimated at

0. 23 showing that 23% of the respondents were underweight. The result shows that most of the respondents were found not to be wasted, stunted or underweight.

4.6. Effect of Social Capital Endowment on Nutritional Status of Under-Five Children

The result of the probit regression in table 6 shows that eight (8) out of nine (9) variables and the constant are significant. Farm size, household size, monthly income, dependency ratio, status in group, number of friends and aggregate social capital are negatively significant this means they are inversely related to nutritional status of children under five. This means the higher the level of social capital the lower the level of stunting, underweight and wasting.

Table 6. Regression Estimates of Determinants of Nutritional Status of Under-Five Children

Variables	Stunting	Underweight	Wasting
Constant	11. 0826**	11. 0826**	12. 4709**
	(5. 1948)	(5. 1948)	(5. 4914)
Age (years)	0. 0077	0. 0077	0. 0195
	(0. 3479)	(0. 3479)	(0. 2835)
Education (years)	0. 9184 **	0. 9184**	0. 3902*
	(0. 4523)	(0. 4523)	(0. 2789)
Farm size(Ha)	-0. 2748*	-0. 2748*	-0. 0221*
	(0. 1469)	(0. 1469)	(0. 1183)
Household size (AE)	-0. 3232***	-0. 3232***	-0. 2418***
	(0. 0923)	(0. 0923)	(0. 0732)
Monthly income (₦)	-0. 0422-E*	-0. 0422-E*	0. 0212-E*
	(0. 0266-E)	(0. 0266-E)	(0. 0173-E)
Dependency ratio	-2. 2903*	-2. 2903*	-0. 0946*
	(2. 9783)	(2. 9783)	(2. 4292)
Status in group	-0. 0312 **	-0. 0312 **	-1. 5079 **
	(1. 0602)	(1. 0602)	(0. 7488)
Number of friends	-0. 1162*	-0. 1162*	-0. 1450*
	(0. 0860)	(0. 0860)	(0. 0846)
Social capital index	-0. 0374**	-0. 0374**	-0. 1038*
	(0. 0165)	(0. 0165)	(0. 0533)
Log likelihood	-14. 837	-14. 837	-19. 600
LR chi^2 (9)	76. 69	76. 69	61. 38
Pseudo R^2	0. 7210	0. 7210	0. 6456

Source Survey Data, 2017; Number of observation=150

* Indicate significant at 10%, ** Indicate significant at 5%, *** Indicate significant at 1%

Figures in parenthesis are standard errors

5. Conclusion

Social group have impact on different aspect of human living and it can also be infer from this study that social capital has an important role to play in improving the welfare of farming household in Kwara state. The study analysed the effect of social capital on welfare of households measured by their food security and result shows that household level of social network has a positive effect on welfare of farming households in the study area. This implies that the higher the level of social capital of farming households the better the household welfare.

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Financing Role in Structural
Transformation in Nigeria

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Abstract: In this paper, the authors examined the role of financing in structural transformation in Nigeria. The key sectors that are investigated in the transformation are the agricultural and industrial sectors. Previous studies on the Nigerian economy scarcely examined both sectors comparatively, a gap which this present study sought to fill. The Autoregressive Distributed Lag (ARDL) analysis was carried out. The result shows a long run relationship between financing and agricultural output as well as between financing and industrial output. However, at a glance, bank financing is more concentrated on the industrial sector than the agricultural sector. There have been increased output in the industrial sector due to increase in money supply while the Agricultural Credit Guarantee Scheme has promoted increase in the agricultural sector's output. Although policies should be geared towards enabling development of the industrial sector, it is also vital to consciously drive the agricultural sector in order to increase its output production. The agricultural sector, if well-funded, has the capacity to bloom and form a strong linkage with the industrial sector. It is essential that future studies on the Nigerian economy include the service sector in the structural transformation analysis.

Keywords: sector financing; structural changes, autoregressive distributed lag

JEL Classifications: G32; O11; C32

1. Introduction

Although Nigeria is the 39th largest economy in the world and largest in Africa (African Development Bank, 2018; International Monetary Fund, 2019; World Bank, 2018), the country is bedeviled with increasing poverty, low Human Development Index, rising unemployment and rising inflation amongst other macroeconomic issues.[3] In tackling some of these economic issues, structural transformation has been advocated by some scholars (Dauda, 2016; Naiya & Manap,

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[3] See (Ajakaiye et al., 2014; Ariyo & Olaniyan, 2014; Dimova & Pela, 2018; Dauda, 2016; PriceWaterhouseCoopers, 2018; United Nations Development Report, 2013).

2013; Willem te Velde et al. , 2016). Thus, while it is paramount to tackle these challenges and achieve high economic growth, transforming the sectors of the economy should also take a centre stage.

As economic growth occurs, the structure of the economy is expected to change as well (Sanusi, 2010). Although Nigeria recorded high rate of economic growth coupled with significant capital inflows prior to its recession in 2016, its economy still suffers from structural and institutional lapses which have hindered economic growth from having a trickle-down effect (Hansen, 2013; Naiya & Manap, 2013; Oyelaran-Oyeyinka & Ola-David, 2017). The reason for this is not far-fetched. Naiya & Manap (2013) and Sanusi (2010) asserted that economic growth dynamics in Nigeria has been characterized by natural resource exploitation and dominance of primary products. The dependence on oil after its discovery led to the neglect of the agricultural sector which has crippled the growth of the agricultural sector down the years. Moreover, the agricultural sector has not been rigorously modernized and subsistence farming is still massive. Therefore, Nigeria has failed to achieve the plan of sufficiently feeding the nation.

However, focus is beginning to shift again towards revitalizing the agricultural sector to ensure sustainable growth in the economy since a shift to the oil industry has not yielded desired economic growth at the linkage with the industrial sector, the agricultural sector has also failed to provide needed raw materials while still failing in contributing largely to foreign exchange through exports (Sanusi, 2010). Countries that have succeeded in structural transformation in the past successfully upgraded from agrarian economies to "manufacturing powerhouses" (Lin & Wang, 2014). This shows how the agricultural sector has played a key role in the industrialization of advanced economies such as Europe, Asia and America (Lopes, 2015).

Structural transformation is an important factor that is critically needed for less developed countries to develop. Syrquin (1994) and Lin & Wang (2014) confirmed that there exists a strong relationship between economic growth and structural transformation. Although the United Nations Conference on Trade and Development (UNCTAD) (2012) noted that many African countries have gone through the process of structural transformation over the past thirty years; Oyelaran-Oyeyinka & Ola-David (2017) put forward an argument that structural transformation that is valid should cut across all sectors proceeding in such a way that the social welfare of the citizens is improved especially in the area of inclusive growth which engenders increase in employment and reduction in poverty. This of course is lacking in many developing economies. Thus, agriculture is yet to be a strong tool in the structural transformation of Africa (Lopes, 2015). Again, African Development Bank (2013) noted that structural transformation in the Nigerian economy is deficient in comparison with other developing and advanced countries as Nigeria has not learnt

lessons from similar countries that have successfully undergone structural transformation.

In order to achieve successful structural transformation, the role of financing cannot be overemphasized. It is necessary to have key investments in the agricultural sector in developing countries if structural transformation is to be seen as successful (Kuznets, 1955; Timmer, 2005; Timmer, 2009). Moreover, low profitability in the agricultural sector hinders structural transformation (Timmer, 2016). The agricultural sector is a key sector in many developing countries of the world, thus, Timmer's submission. As noted earlier, much focus has been placed on the oil sector after the oil boom in Nigeria, diversification into the agricultural and other non-oil sectors of the economy is of recent being welcomed (Evbuomwan 2016; Onodugo et al. , 2015; Orji, 2018; Uzonwanne, 2015). Meanwhile, Adediran & Obasan, (2010) have found that the manufacturing sector is a major driving force in the structural transformation of any economy.

A steady and well-organized financial sector is vital for sustaining growth and structural transformation in an economy (Department for International Development (DFID), 2004; Onodugo et al. , 2015; Paun et al. , 2019; Wampah, 2013). Naquib (2015) affirmed that financial structures of countries develop as their income and wealth grow. Olokyo (2011) also noted that sectors and sub-sectors of the economy having access to bank credit will further enhance their productivity. However, many developing economies experience bottlenecks in accessing funding within the system. Studies have shown that different sectors of the economy do not have a hitch-free access to finance to implement their economic growth plans. Oputu (2010); Akpansung & Babalola (2012) and Ume et al. (2017) observed the bottlenecks created by banks and private lending firms in giving out funds to manufacturing firms. It was advised that in giving credit, banks needed to give attention to the manufacturing sector as it is the engine of growth of any economy. Again, Adeola & Ikpesu (2016) and Ogbuabor & Nwosu (2017) observed that the agricultural sector has problems accessing loans from banks due to high interest rate and impracticable policies. In the same vein, Awotide et al. (2015) observed selection bias in accessing credit by the Nigerian agricultural sector. Ironically, Nnana (2004) mentioned that the contribution of commercial banks to the socio-economic development of Nigeria is wrapped up in the implementation of the national development plans and credit facilities given to the leading sectors of the economy. The position of Tesfachew (2016) thus seems to be true in the Nigerian situation. He opined that in many of the less developed countries, inability to access finance in commercial banks show the underdeveloped nature of the financial system operating in such countries coupled with a high-risk aversion in the system. This leads to greater investment in assets that are safer such as government securities.

In the light of the above, this paper seeks to examine the impact of funding on the

structural transformation of the Nigerian economy. Specifically, focus is on the agricultural and industrial sectors. These sectors have been so selected because according to Sanusi (2010), Ajakaiye and Tella (2013), they are the priority sectors of the economy since their robust development will enable a healthy service sector to emerge. Also, it has been observed that many papers have examined the impact of funding on these sectors of the economy independently without a parallel comparison at a given period (Awotide et al. , 2015; Ume et al. , 2017; Uzochukwu et al., 2015).

The remaining sections in this paper are as follows: Section 2 focuses on the review of relevant literature; section 3 explains the methodology adopted, section 4 presents the findings while section 5 concludes with appropriate recommendations.

2. Literature Review

Structural transformation can be seen as reallocating material and immaterial resources to sectors that are more productive in the economy (Lin & Wang, 2014; Wampah, 2013; Yilmaz & Oskenbayev, 2015). In the long run, the result is an economy that will put resources in many hands, contribute to further progress and the funding of social amenities through enhanced taxation and consumption of goods and services. On the other hand, financing can be understood as the extension of credit to needing sectors of the economy through legal and regulatory institutions. Innovative financing gears towards achievement of development in an economy. Finance mechanisms proposed by the United Nations include: additional mechanisms and centralization of resources, improving the quality of institutions, adopting a gradual approach by learning from systems that have worked in other countries, capacity-building of states in that area, domestic resources' collection optimization and development of local financial markets. If all these are taken into consideration, the economy is expected to be on the path of proper structural transformation. The Central Bank of Nigeria (2017) rightly asserted that the financial system provides a platform where economic growth and development, increased productivity, effective financial intermediation, capital formation and efficient management of payments system are attained.

Oyelaran-Oyeyinka (2017) adopted a descriptive and shift share analysis on structural transformation in Nigeria. The findings showed that Nigeria is going through a unique structural transformation. Between 1980 and 2010, industrial contribution to GDP declined while agriculture and services increased over the same period. On the other hand, although the number of those employed in the agricultural and industrial sectors has reduced in recent years, the service sector has employed more people. Also, growth in labour productivity with respect to structural change has increased probably due to changes within the service sector between 2005 and

2009. Moreover, the Nigerian industry got the largest share of FDI over the years under study but has declined in the past ten years while FDI to the service sector has been increasing. The findings by Oyelaran-Oyeyinka (2017) can be compared to that of Lin & Wang (2014) and Lopes (2015). Lin & Wang (2014) noted that China's investment (in terms of medical teams, agricultural experts, teachers, scholarships for African students, etcetera) in low-income African countries has led to structural transformation in such countries; while Lopes (2015) asserted that a driving force for structural transformation in Africa was agricultural development. Contrary to the opinions of Lin & Wang (2014) and Oyelaran-Oyeyinka (2017), Gries & Naude (2010) asserted that it is entrepreneurial start-up firms that aid structural transformation in an economy. New firms created out of the households provide intermediate inputs to final-good producing firms which will eventually increase productivity and employment in traditional and advanced sectors.

Meanwhile, the study by Bustos et al (2017) found that growth in agricultural productivity can cause structural transformation by impacting capital accumulation. Also, it was observed that more financially integrated regions with the soy boom area experienced faster structural transformation. Similarly, the paper by Nnamocha & Eke (2015) found that industrial output affected agricultural productivity positively in the short and long run in Nigeria.

Using ARDL bound testing technique, the study by Naiya & Manap (2013) investigated the interrelationship among key variables such as structural transformation, growth, inequality and poverty in Nigeria. Interestingly, it was observed that even though there exist slow structural transformation in Nigeria, there is a potential for long-run relationship amongst the variables used.

However, the study by Uzochukwu et al (2015) shows that although there are various sources of finance available to the health sector as one service sector, successful financing of the sector has remained a challenge. Identifying human capital development as a key in structural transformation. Sackey (2003)'s work observed that accessibility to education in Sub-Saharan Africa was regressive with high rate of school enrolment at the other extreme. Household income and other factors contributed to educational achievement in the region while availability of credit and educational status of workers served as driving force for training workers who work in firms. It is a well-known fact that banks serve as a major financing agent in any economy. Adolphus & Peterside (2014) found that the agricultural sector was not well funded in Nigeria as both merchant and commercial banks' funding had a negative effect on agricultural output. However, there was a positive relationship between merchant bank lending and manufacturing output, while an inverse relationship existed between commercial bank funding and manufacturing output. This could be as a result of lack of adequate access to commercial banks' loan. This again emphasizes the need to encourage the agricultural sector by sufficiently

funding it. Similar to these findings, Gaaitzen et al. (2015) noted that savings and investments were important factors in the structural transformation of African countries. The study focused on 11 sub-African countries (Nigeria inclusive) from 1960-2010 and used trends and decomposition analysis.

In sum, most of the studies have failed to examine the role of finance in structural transformation of the Nigerian economy. The study by Oyelaran-Oyeyinka & Ola-David (2017) is close to examining financing on structural transformation, however, foreign direct investment cannot be relied upon as an appropriate proxy for funding structural transformation. This calls for further studies on the subject matter.

3. Theoretical Framework and Methodology

This paper takes a clue from the finance-led growth theory by Levine (2004). This theory identified five channels through which financial development aids economic growth: capital allocation, exercising corporate governance on firms, risk management improvement, savings polling and enhancing goods and services exchange. These channels will impact investment decision making and in the long run, affect economic growth. The impact of financial development on economic growth can be felt endogenously when sectors within the economy are adequately financed. Interestingly, the relationship between financial development and economic growth can be bi-directional if there exist a strong linkage in the economy. Financial development increases economic growth when more credit is given to sectors that are more productive (Bencivenga et al. , 1995; McKinnon, 1973; Saquib, 2015; Shaw, 1973).

Annual time series on the variables are collected from the Central Bank of Nigeria statistical bulletin over the period 1986-2016. During this period, Nigeria implemented various policies that geared towards structural transformation. Also, the scope covers the period of major banking reforms in Nigeria. It was not until 1980s that ownership and control of banks by both public and private sector increased (Obienusi & Obienusi, 2015).

The two major sectors at the centre of structural transformation are: the agricultural and industrial sectors (Afzal, 2007; Chenery & Syrquin, 1975; Kuznet, 1966; Timmer, 2016; Yilmaz & Oskenbayev, 2015). Acaravci et al (2009) and Fisman & Inessa (2003) noted that credit provided by private banking sector best measures the level of financial development in an economy because it measures quality and quantity of investment. This implies that the level of financial development and the structure of financial intermediaries' ownership are imperative. Interest rate and inflation rate are other factors that affect agricultural credit in Nigeria (Obansa & Maduekwe, 2013; Ogbonna & Osondu, 2015). Thus, for the purpose of this study, sources of finance for the agricultural sector that were used include: bank credit,

private sector credit, broad money (M_2), interest rate and inflation rate. These data have also been so selected due to their availability and conceptual consistency over the years. Factors that affect finance of the industrial sector are: bank credit, private sector credit, money supply, interest rate, inflation rate, exchange rate (Afolabi, 2013; Ogar et al. , 2014; Udoh & Ogbuagu, 2012)

In assessing the impact of finance on the agricultural sector as a ratio of GDP, this paper drew from the model of Bada (2017).

$$RAGDP = f(ACGSF, BCA, PSC, MS, INTR, INFR) \dots\dots\dots\dots (1)$$

Where, $RAGDP$ = Ratio of Agric to GDP; $ACGSF$ = Agricultural Guarantee Scheme Fund;

BCA = Bank Credit to Agricultural Sector; PSC = Private Sector Credit; M_2 = Broad Money; $INTR$= Interest Rate; and $INFR$= Inflation Rate

Equation (1) is expressed in an econometric form in equation (2) while applying logs to ACGSF, BCA, PSC and MS which are variables that are not in rates.

$$RAGDP = \beta_0 + \beta_1 logACGSF + \beta_2 logBCA + \beta_3 logPSC + \beta_4 logMS + \beta_5 INTR + \beta_6 INFR + \mu_t \tag{2}$$

Where β_0 is the constant, β_1, β_2, β_3, β_4, β_5 and β_6 are intercepts and μ_t is a white noise

Equation (3) which is on the nexus between financing and the industrial sector as a ratio of GDP drew from the studies by Bada (2017); Ebele & Iorember (2016); Siyakiya (2014) and Ume et al. (2017).

$$RIGDP = f(BCI, PSC, MS, INTR, INFR, EXCR) \tag{3}$$

Expressing equation (3) in an econometric form in equation (4) while applying logs to variables that are not in rates, we have

$$RIGDP = \beta_0 + \beta_1 logBCI + \beta_2 logPSC + \beta_3 logMS + \beta_4 INTR + \beta_5 INFR + \beta_6 EXCR + \mu_t \tag{4}$$

Where, $RIGDP$= Ratio of Industry to GDP; BCI= Bank Credit to Industry and $INFR$= Inflation Rate.

Equations (2) and (4) are re-written in a general ARDL form in equations (5) and (6), respectively. These equations involve lagged values of the explained variable as well as current and lagged values of one or more explanatory variables (X_s), among the regressors. Notice that lag stands for a chosen lagged value.

$$RAGDP = \beta_0 + \beta_1 lagRAGDP + \beta_s X_s + \beta_s lagX_s + \mu_t \tag{5}$$

$$RIGDP = \beta_0 + \beta_1 lagRIGDP + \beta_s X_s + \beta_s lagX_s + \mu_t \tag{6}$$

4. Empirical Result and Discussion

A preliminary check in Tables 1 and 2 on the variables show that none of the explanatory variables has perfect multicollinearity. However, private sector credit (PSC) strongly collinear with Agricultural Credit Guarantee Scheme Fund (ACGSF), bank credit to agricultural sector (BCA) and bank credit to industrial sector (BCI), therefore, PSC was dropped in the subsequent analysis. Although, there are some levels of high relationship between money supply (MS) and ACGSF in model 1 but this does not pose any threat to subsequent results as their coefficients were significant. The same applies to the relationship between MS and exchange rate in model 3.

Table 1. Multicollinearity Test on Model 1 (Agricultural Sector)

	ACGSF	BCA	MS	INFR	INTR	PSC
ACGSF	1. 0000	0. 6396	0. 8393	-0. 3957	-0. 5129	0. 8852
BCA	0. 6396	1. 0000	0. 6057	-0. 1974	-0. 1520	0. 8307
MS	0. 8393	0. 6057	1. 0000	-0. 2604	-0. 4470	0. 8739
INFR	-0. 3957	-0. 1974	-0. 2604	1. 0000	0. 3496	-0. 3173
INTR	-0. 5129	-0. 1520	-0. 4470	0. 3496	1. 0000	-0. 3993
PSC	0. 8852	0. 8307	0. 8739	-0. 3173	-0. 3993	1. 0000

Source: Authors' computation

Table 2. Multicollinearity Test on Model 3 (Industrial Sector)

	BCI	INFR	EXCR	MS	INTR	PSC
BCI	1. 0000	-0. 1863	0. 7794	0. 6245	-0. 1702	0. 8355
INFR	-0. 1863	1. 0000	-0. 4586	-0. 2604	0. 3496	-0. 3173
EXCR	0. 7794	-0. 4586	1. 0000	0. 8037	-0. 3408	0. 8387
MS	0. 6245	-0. 2604	0. 8037	1. 0000	-0. 4470	0. 8739
INTR	-0. 1702	0. 3496	-0. 3408	-0. 4470	1. 0000	-0. 3993
PSC	0. 8355	-0. 3173	0. 8387	0. 8739	-0. 3993	1. 0000

Source: Authors' computation

On Table 3 where we report the descriptive statistics, the average of the ACGSF as a major source of finance to the agricultural sector is the lowest with about N3. 47billion. The mean of the bank credit to the agricultural sector is considerably low (N241. 23 billion) compared to that of the industrial sector averaging N2360. 90 billion over the period. Minimum ACGSF was obtained in 1986 which was about N0. 07 billion and the highest amount was gotten in 2014 which was about N12. 46 billion. On the contrary, the industrial sector had a minimum of N4. 68 billion in 1986 and highest in 2016 which stood at N2,2801. 70 billion. In sum, N107. 69 billion was expended on ACGSF between 1986-2016 while N73,187. 83 billion was expended on the industrial sector over the years under review. This shows the wide

gap in financing these two major sectors of the economy. The Jarque-Bera test shows that the variables are normally distributed with the exception of BCI, BCA and inflation rate which are not normally distributed at 1% and 5% levels. This may be due to constant fluctuations in these variables which imply the presence of some outliers.

Table 3. Descriptive Statistics

	ACGSF	BCA	MS	INTR	INFR	BCI	EXCR
Mean	3. 4739	241. 225	14. 486	13. 758	20. 699	2360. 89	100. 324
Median	0. 729	48. 562	13. 064	13. 5	12. 169	277. 366	118. 566
Maximum	12. 456	1979. 84	21. 291	26	76. 759	22801. 7	305. 97
Minimum	0. 068	1. 83	9. 152	6	0. 224	4. 683	4. 017
Std. Dev.	4. 24582	534. 709	3. 9306	4. 02258	19. 4425	5433. 144	82. 416
Skewness	0. 76743	2. 64123	0. 5731	0. 69476	1. 57450	2. 82498	0. 710
Kurtosis	1. 93342	8. 30783	1. 8072	4. 473091	4. 24812	9. 77574	3. 2602
Jarque-Bera	4. 51235	72. 4335	3. 5349	5. 296875	14. 8207	100. 534	2. 6975
Prob.	0. 10475	0	0. 17076	0. 07076	0. 0006	0	0. 2595
Sum	107. 692	7478	449. 068	426. 5	641. 674	73187. 83	3110. 063
Sum Sq. Dev.	540. 811	8577415	463. 506	485. 435	11340. 4	8. 86E+08	203775. 1
Observations	31	31	31	31	31	31	31

Source: Authors' Computation

Unit Root Test

Table 4A. ADF and Phillips-Perron Unit Root Tests for the Agricultural Model

Variable	ADF T-Stat	ADF Critical value @5%	Order of integration	PP T-Stat	PP Critical value @5%	Order of integration
RAGDP	-5. 9131	-2. 9719	I(1)	-5. 6245	-2. 9678	I(1)
LOGAGCSF	-5. 1717	-2. 9678	I(1)	-5. 1717	. 2. 9678	I(1)
LOGBCA	-6. 0952	-2. 9678	I(1)	-6. 0952	-2. 9678	I(1)
LOGMS	-4. 9477	-2. 9678	I(1)	-5. 1087	-2. 9678	I(1)
INT	-3. 0425	-2. 9639	I(1)	-3. 0990	-2. 9640	I(1)
INF	-4. 6667	-2. 9810	I(0)	-6. 4221	-29678	I(0)

Source: Authors' computation

Table 4B. ADF and Phillips-Perron Unit Root Tests for the Industrial Model

Variable	ADF T-Stat	ADF Critical value @5%	Order of integration	PP T-Stat	PP Critical value @5%	Order of integration
RIGDP	-3. 8951	-2. 9678	I(1)	-3. 8532	-2. 9678	I(1)
LOGBCI	-5. 0766	-2. 9678	I(1)	-5. 3035	-2. 9678	I(1)
LOGMS	-4. 9477	-2. 9678	I(1)	-5. 1087	-2. 9678	I(1)
INT	-3. 0425	-2. 9639	I(1)	-3. 0990	-2. 9640	I(1)
INF	-4. 6667	-2. 9810	I(0)	-6. 4221	-29678	I(0)
EXCR	-3. 4425	2. 9719	I(1)	-3. 4169	-2. 9719	I(1)

Source: Authors' computation

The Augmented Dickey Fuller (ADF) and Phillips-Perron (PP) tests in Tables 4A and 4B show that based on 5% level of significance, the variables are stationary at first difference except INF which is stationary at level. Therefore, an autoregressive distributed lag (ARDL) is appropriate for analysis of the models.

Autoregressive Distributed Lag Model

Table 5. Estimates of the ARDL for the Agricultural Model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RAGDP(-1)	1. 255627	0. 100074	12. 54701	0. 0001
RAGDP(-2)	-0. 913093	0. 122931	-7. 427699	0. 0007
RAGDP(-3)	0. 524246	0. 143988	3. 640914	0. 0149
LOGMS	-0. 076646	0. 062424	-1. 227819	0. 2742
LOGMS(-1)	0. 875192	0. 07125	12. 28342	0. 0001
LOGMS(-2)	-0. 569568	0. 104038	-5. 474631	0. 0028
LOGMS(-3)	-0. 321079	0. 097537	-3. 291885	0. 0217
LOGBCA	-0. 01721	0. 017502	-0. 983308	0. 3706
LOGBCA(-1)	0. 012273	0. 014468	0. 84827	0. 435
LOGBCA(-2)	-0. 034458	0. 012272	-2. 807864	0. 0376
LOGBCA(-3)	0. 045783	0. 026516	1. 726596	0. 1448
LOGACGSF	0. 078173	0. 017224	4. 538557	0. 0062
LOGACGSF(-1)	0. 034669	0. 018154	1. 909747	0. 1144
LOGACGSF(-2)	0. 035481	0. 017594	2. 016617	0. 0998
LOGACGSF(-3)	-0. 06149	0. 01387	-4. 433297	0. 0068
INTR	0. 01265	0. 001005	12. 58442	0. 0001
INTR(-1)	0. 002858	0. 001354	2. 111432	0. 0885
INTR(-2)	-0. 002375	0. 000633	-3. 751973	0. 0133

INFR	-0. 000138	0. 000247	-0. 557738	0. 6011
INFR(-1)	0. 000616	0. 000341	1. 807602	0. 1305
INFR(-2)	0. 001682	0. 000309	5. 442665	0. 0028
INFR(-3)	0. 001798	0. 00037	4. 865693	0. 0046
C	-0. 153031	0. 124784	-1. 226367	0. 2747
R-squared	0. 995013	Mean dependent var		0. 251214
Adjusted R-squared	0. 973068	S. D. dependent var		0. 042801
S. E. of regression	0. 007024	Akaike info criterion		-7. 158841
Sum squared resid	0. 000247	Schwarz criterion		-6. 06453
Log likelihood	123. 2238	Hannan-Quinn criter.		-6. 824299
F-statistic	45. 34181	Durbin-Watson stat		2. 609252
Prob(F-statistic)	0. 00024			

Source: Authors' computation

Table 6. Estimates of the ARDL for the Industrial Model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RIGDP(-1)	0. 624212	0. 101472	6. 151576	0
LOGBCI	-0. 016801	0. 013207	-1. 272108	0. 2166
LOGMS	0. 227412	0. 069447	3. 274625	0. 0035
LOGMS(-1)	-0. 122113	0. 07314	-1. 669568	0. 1092
INTR	0. 000103	0. 000957	0. 107273	0. 9155
INFR	-0. 000342	0. 000195	-1. 754048	0. 0933
EXCR	0. 000268	0. 000132	2. 035768	0. 054
C	0. 015208	0. 05766	0. 263747	0. 7944
R-squared	0. 91894	Mean dependent var		0. 317667
Adjusted R-squared	0. 893148	S. D. dependent var		0. 048981
S. E. of regression	0. 016011	Akaike info criterion		-5. 207905
Sum squared resid	0. 00564	Schwarz criterion		-4. 834253
Log likelihood	86. 11858	Hannan-Quinn criter.		-5. 088371
F-statistic	35. 62905	Durbin-Watson stat		1. 895842
Prob(F-statistic)	0			

Source: Authors' computation

Based on the long-run results in Table 5, the relationship among the first, second and third lags of ratios of agricultural output to GDP with its current values are significant at 5% level but negative in the second lag and positive in the third and first lags. By implication, previous values of agricultural output affect the current value of the sector. Money supply shows a significant relationship in the past one to three years. The relationship is only positive in the immediate last year but negative in the past two-three years. This shows that although money supply negatively impacted the agricultural sector output in past two-three years, its impact in the immediate past year is positive. This underscores the fact that monetary policy is less effective in the long-run. Bank credit to the agricultural sector is negative in the past two years and this relationship is significant. This is rather alarming as the relationship is expected to be positive. This same trend was observed for money supply. This suggests there might be misappropriation of funds in the period. Coincidentally, for instance, agricultural output dropped from 0. 210% in 2013 to 0. 202% in 2014. Positive relationships were observed in lags one and three but these relationships were not significant. Agricultural Guarantee Scheme Fund had a

positive relationship with agricultural output in the past one-two and current years but negative in the past three years. This relationship is significant at 10% level in the past two years and 5% level in the past three years and current year. This shows the importance of ACGSF to agricultural output in Nigeria when the funds are disbursed and used within two years. Interest rate impacts the agricultural output positively in the current and past one year but negatively in the past two years at 5%, 10% and 5% significance levels, respectively. The positive impact of the interest rate is not expected but in tandem with some previous studies such as Ezeanyeji (2014) and Onyishi et al (2015). This is nonetheless not in line with findings from Omojimite (2012) who found out that interest rate had a negative and insignificant relationship with agricultural output. Inflation exhibits an infinitesimal positive relationship with the agricultural sector in all periods with the exception of the current period. However, current period and past one-year relationships are not significant. This could be as a result of the fact high inflation is injurious to agricultural sector growth. This finding is consistent with the study by Bada (2017).

Based on results in Table 6, the industrial sector's output share in GDP in the previous year affected its current value positively at 5% level of significance. BCI negatively impacted RIGDP although not significant. This negative trend was also observed in the agricultural sector in regards to BCA. Money supply positively and significantly impacted RIGDP in the current year but negatively in the previous year, although not significant. Interest rate does not pose a significant impact on the industrial sector in the current year whereas inflation rate shows a negative impact on the sector at 10% level of significance. This is consistent with previous findings such as Ebele & Iorember (2016), Bada (2017), Ume et al (2017) and Siyakiya (2014). The depreciation of the exchange rate raises the industrial output which is in line with economic theory.

This analysis for the two models were conducted using 3 lags based on the Akaike information criterion. A parsimonious model that is devoid of autocorrelation was obtained for the industrial sector model. The adjusted R-squared for the two models show that the models have a good fit while the F-stat shows that the joint parameters as well as R-squared and the models are significant. Also, the Durbin-Watson values show that the models do not have the problem of serial correlation. The long run and bounds tests are further conducted to affirm the long run relationship of the variables.

Table 7. Long run Form and Bounds Test for the Agricultural Model

Dependent Variable: RAGDP			
	Max Lag	Lag Order	F Statistic
	2	(2, 2, 0, 0)	5. 4887 (k=5)
Significant level		Lower I(0) Bounds	Upper I(1) Bounds
1%		3. 06	4. 15
5%		2. 39	3. 38
10%		2. 08	3
Stability and diagnostic tests			
	T-Stats	**p-value**	
Ramsey Tests	1. 8073	0. 0939	
Normality Tests	1. 8722	0. 3922	
Heteroscedasticity	1. 0172	0. 4875	
Correlation Tests	0. 7071	0. 5125	

Source: Authors' computation

Table 8. ARDL Long Run Form and Bounds Test for the Industrial Model

Dependent Variable: RIGDP			
	Max Lag	Lag Order	F Statistic
	2	(2, 2, 0, 0)	4. 1234 (k=5)
Significant level		Lower I(0) Bounds	Upper I(1) Bounds
1%		3. 06	4. 15
5%		2. 39	3. 38
10%		2. 08	3. 0
Stability and diagnostic tests			
	t-Stats	**p-value**	
Ramsey Tests	0. 2042	0. 8402	
Heteroscedasticity	0. 7363	0. 6439	
Normality Tests	0. 5982	0. 7415	
Correlation Tests	0. 3685	0. 6964	

Source: Authors' computation

The results in Tables 7 and 8 confirm the long run relationship amongst the variables based on the F-statistics which are greater than the lower and upper bounds critical values at 5% level of significance for both models. The correlation tests are not statistically significant which further reveal the absence of serial correlation in the

models. Given the insignificance of the p-values of the heteroscedasticity tests, we reject the null hypotheses of heteroscedasticity against the alternative hypotheses. The Ramsey tests generally tested whether there are neglected nonlinearities in the models. Since the p-values of the Ramsey tests are insignificant, we fail to reject the null hypothesis of correct specification which indicates that the functional forms are correct. Finally, the normality tests show that the two models are normally distributed since the p-values are not statistically significant.

Since both models show that the variables have long run relationships, the error correction mechanism is conducted for both models.

Table 9. ECM Result for the Agricultural Model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(RAGDP(-1))	0. 388846	0. 044958	8. 649148	0. 0003
D(RAGDP(-2))	-0. 524246	0. 042019	-12. 47645	0. 0001
D(LOGMS)	-0. 076646	0. 02649	-2. 893347	0. 0341
D(LOGMS(-1))	0. 890647	0. 037439	23. 78906	0
D(LOGMS(-2))	0. 321079	0. 053758	5. 972663	0. 0019
D(LOGBCA)	-0. 01721	0. 005735	-3. 000855	0. 0301
D(LOGBCA(-1))	-0. 011325	0. 005271	-2. 148344	0. 0844
D(LOGBCA(-2))	-0. 045783	0. 005764	-7. 943341	0. 0005
D(LOGACGSF)	0. 078173	0. 006559	11. 91913	0. 0001
D(LOGACGSF(-1))	0. 026009	0. 006576	3. 955058	0. 0108
D(LOGACGSF(-2))	0. 06149	0. 007642	8. 046604	0. 0005
D(INTR)	0. 01265	0. 000549	23. 05148	0
D(INTR(-1))	0. 002375	0. 000359	6. 609224	0. 0012
D(INFR)	-0. 000138	0. 000113	-1. 225109	0. 2751
D(INFR(-1))	-0. 00348	0. 000162	-21. 43271	0
D(INFR(-2))	-0. 001798	0. 000217	-8. 279629	0. 0004
CointEq(-1)*	-0. 133219	0. 007229	-18. 42963	0

Source: Authors' computation

Table 10. Parsimonious ECM Result for the Industrial Sector

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(LOGMS)	0. 227412	0. 051539	4. 412386	0. 0002
CointEq(-1)*	-0. 375788	0. 053937	-6. 967157	0

Source: Authors' computation

Tables 9 and 10 show the ECM results. The ECM computes the speed of adjustment of the variables towards their long-run equilibrium. They both carry negative signs which is according to theoretical expectations. Deviations from equilibrium level in

the current year would be corrected by 13. 3% and 37. 6% in subsequent years for the agricultural and industrial sectors, respectively. This implies that it would take about one and half years to return to long run equilibrium should a shock in the explanatory variable occurs in the agricultural sector and close to 4 years in the industrial sector should the same condition hold.

5. Conclusion and Recommendations

In this paper, the authors have examined the relationship between financing and structural transformation in the Nigerian economy. They have contributed to the literature by doing a cross examination of the impact of finance on the two major sectors of the economy. It is interesting to note that there exists a long run relationship between financing and agricultural output as well as between financing and industrial output. However, the industrial sector in Nigeria is more concentrated than the agricultural sector in terms of bank financing. This is necessary for growing the economy because the country stands to earn higher foreign exchange when it exports industrial outputs. Also, the different forms of finance affect the agricultural and industrial sectors in varying forms. It is therefore important to understand factors that positively affect the sectors and critically address issues surrounding factors that negatively impact them.

The agricultural sector needs not to be underfunded. The increased output that was recorded in the industrial sector especially with respect to money supply and rising output in the agricultural sector credited to Agricultural Guarantee Scheme imply that more credits should be allocated to these sectors while the Central Bank of Nigeria ensures a low-level inflation rate. However, bank credit to both sectors showed a negative relationship with their outputs which might be due to funds misappropriation; thus, output in both sectors could have been greater provided bank credit was allotted adequately and utilized appropriately. Therefore, the study recommends that while policies should be geared towards enabling the further development of the industrial sector, it is also important to consciously drive the agricultural sector to increase production. This is because of its role in a developing economy. The agricultural sector if well-funded, has the capacity to bloom and form a strong linkage with the industrial sector. Nigeria can adopt China's policy of setting up agricultural technical demonstration centres. Moreover, a form of partnership can be established with China in the provision of training and scholarships to potential agriculturalist. This way, output of the agricultural sector would increase and this would aid provision of raw materials for the industrial sector. The agricultural sector needs to be functional for the industrial sector to be functional and even the service sector to also be functional and sustainable. Future research can extend this study to include the service sector.

Many young graduates prefer to take up jobs in the industrial sector and those in the agricultural sector practice subsistence farming. It is high time Nigeria encourage its youths to get skilled in practicing mechanized farming by providing appealing platforms. Higher institutions geared at training people on mechanized farming can be set up and graduates are provided with incentives to start up their own farming on a large-scale basis. This will lead to increased output in the sector which will further encourage banks to channel more loans to the sector for its further development, thus resulting to a positive vicious cycle.

Bottlenecks to assessing credit such as complex proposals, godfatherism, high collateral should be eliminated. It is also important to drive up the Agricultural Credit Guarantee Scheme Fund as its impact on the agricultural sector cannot be over-emphasized. However, in allocating bank credit, all intricacies should be examined and funds must not be diverted into other purposes. Lastly, high inflation is injurious to structural transformation of the Nigerian economy and should be discouraged.

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Foreign Direct Investment Plans of Multinational Enterprises Currently Operating in South Africa

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Abstract: The objective of this study was to examine factors in the South African business environment that influence the foreign direct investment decision-making plans of multinational enterprises in the country. Although studies on foreign direct investment do exist, they have focused primarily on the determinants of foreign direct investment. Relatively little is known about the dynamics of foreign direct investment plans of multinationals already operating in the country. An internet survey was conducted with 76 senior executives from South African multinational enterprises. The findings demonstrate that macroeconomic, political, government policy, labour issues, bureaucracy, red tape, corruption and crime all influence the investment plans of these enterprises. However, despite this evidence, the multinationals do not intend to close down some or all operations in the country within the short term (next 1-3 years). This study expands the body of knowledge on foreign direct investment and multinational enterprises, shedding light on their operations and investment plans in African countries. This research will be useful for policymakers in South Africa as to decision-making by multinationals on foreign direct investment in the country. The study is also a starting point for future research on the dynamics behind foreign direct investment decision-making.

Keywords: Foreign direct investment; multinational enterprises; exploratory factor analysis; South Africa

JEL Classification: F21; F23; F43; O44

1. Introduction

Foreign direct investment (FDI) is defined as "an internationalisation strategy by which the firm establishes a physical presence" in a foreign country through control and ownership of property, human resources, monetary assets, machinery, equipment and technology (Cavusgil, Knight & Riesenberger, 2017, p. 410). Multinational enterprises (hereafter referred to as MNEs) engage in FDI when they expand their business operations in host countries. Although FDI results in increased profits, sales and market share for MNEs, it also involves uncertainty, increased costs

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and the risks of doing business in a host country (Doh et al. , 2003). Williams (2017) observes that governments and non-governmental organisations in many countries have begun to pay closer attention to the potential economic benefits of attracting large inflows of FDI.

FDI is mainly positive for a host country because it creates jobs (Jadhav, 2012), transfers technology to local firms, promotes local competition, furthers human capital development and generates revenue through corporate taxation (Ucal, 2014). Several studies have also found that FDI contributes to eradicating poverty in developing countries (Fowowe & Shuaibu, 2014; Ucal, 2014; Soumare, 2015). Previous studies on the link between FDI and growth in South Africa (Fedderke & Romm, 2006; Moolman, Roos, Le Roux & Du Toit, 2006; Masipa, 2018) have found that FDI is an important contributor to economic growth and development in the country.

Since the fall of apartheid and the advent of democracy in South Africa in 1994, the African National Congress (ANC) government introduced a variety of laws, regulations, policies and plans to promote growth and development, restructure and transform the country and ensure its successful participation in the international economy (Magombeyi & Odhiambo, 2018). The ANC-led government identified FDI as an instrument that could stimulate economic growth and prosperity in the country (National Planning Commission, 2011).

However, South Africa has underperformed in comparison to other BRICS (Brazil, Russia, India, China and South Africa) countries in attracting FDI. For example, the *2017 World Investment Report* indicates that FDI inflow to BRICS countries was as follows: Brazil – US$ 45 billion, Russia – US$ 38 billion, India – US$ 44 billion, China – US$ 108 billion and South Africa – US$ 2. 3 billion (UNCTAD, 2017). The *2018 A. T. Kearney FDI Confidence Index* indicates that South Africa does not appear on the list of 25 countries identified as being attractive FDI locations (Global Business Policy Council, 2018).

Additionally, due to a weak economic environment and an uncertain political and policy environment, domestic investment by the private sector has been declining since 2015 (National Treasury, 2018). This is concerning because when domestic private sector investment starts falling, it indicates a lack of confidence in the country's business environment. Consequently, MNEs in South Africa will also start contemplating whether they should close (disinvest) or expand (invest) business operations in the country. The National Treasury (2018) indicates that this is worrying as the country relies heavily on FDI because domestic savings are inadequate.

Although studies on FDI in South Africa do exist, they have focused chiefly on the determinants of FDI in South Africa (Fedderke & Romm, 2006; Gray, 2011; Mabule, 2012). Relatively little is known about the FDI decision-making plans of MNEs

already operating in the country. For instance, there is scant information on factors which influence MNEs' decisions to either expand or close business operations in South Africa. The research questions addressed in this study are:

RQ1.   What factors influence the plans of MNEs presently operating in South Africa in relation to them expanding business operations in the country?

RQ2.   What factors influence the plans of MNEs presently operating in South Africa with regards to them closing down business operations in the country?

RQ3.   Do MNEs currently operating in South Africa have plans to close down or expand existing business operations within the next 1-3 years?

The contribution of this study is threefold:

1) This research expands the body of knowledge on FDI and MNEs. The study sheds light on MNEs' operations and decision-making in African countries, with specific focus on factors influencing their plans to expand or close down operations. To the best of our knowledge, this is the first study that provides a uniquely South African perspective on FDI decision-making by senior executives of MNEs doing business in the country.

2) This study provides insight to South African policymakers on the decision-making of MNEs regarding FDI in South Africa.

3) This study is a starting point for future research on the dynamics behind FDI decision-making in Africa. It also provides a basis for other international studies to compare their findings against an emerging market.

This paper is divided into five sections. In section one, the introduction is presented. Section two outlines the literature in the study and this includes the business environment in post-apartheid South Africa, and theoretical and empirical reviews. Section three describes the methodology used in the study while section four presents and summarises the results. The paper concludes with an overview of the implications and suggestions for future research.

2. Literature Review

2.1. Business Environment in Post-Apartheid South Africa

In 1994, when South Africa became a democracy, the African National Congress (ANC) was voted into power. The party continues to govern the country to this day under the leadership of the current president, Cyril Ramaphosa. When the ANC initially came to power, it was very popular, especially among the rural masses. It was regarded as the party that spearheaded the country's liberation (Market Line,

2017). Nelson Mandela became the first head of state of the new democratic South Africa.

The OECD (2017) and the IMF (2018) state that under the ANC government the country has made much progress in improving economic growth and development. Over the last 20 years, access to education, health, housing, sewage and electricity has vastly improved. From 1980 to 1993, gross domestic product (GDP) growth averaged 1. 4% per annum, increasing to 3. 3% per annum from 1994 to 2012 (IDC, 2013).

On the positive side, the country has a first-class banking system and financial sector (Market Line, 2017), electricity supply has improved and the national minimum wage will bring down inequality (OECD, 2017). The country has ample natural resources, the biggest stock exchange in Africa and other economic sectors that are well-established, notably, energy, communications, law and transport (Heritage Foundation, 2018).

However, economic growth slowed down substantially during the Jacob Zuma presidency (May 2009 to February 2018) due to political instability and uncertainty regarding policy (Best, 2018), increased labour strikes, poor electricity supply and a loss of confidence by business (Market Line, 2017). From 2012 onwards, GDP growth decelerated and by 2017, it had plummeted to 1. 1% (Market Line, 2017). The IMF (2018) points out that falling growth has undone the gains achieved in the social and economic spheres since 1994. As reported by PwC (2018), before 2013 South Africa was regarded by investors as having the lowest political risk of all the BRICS countries. However, since 2013 the country has been re-classified as an emerging market economy with high economic and political risk and medium risk in the financial market, according to *Best's 2018 Country Risk Report* for South Africa (Best, 2018).

Under the Zuma administration, the country became a kleptocracy, characterised by widespread and extensive public sector corruption, state capture, theft and mismanagement of public funds. This has had devastating consequences on the country's economy, fiscal situation and service delivery. Mbeki *et al.* (2018) indicate that under the Zuma presidency last year, the country went into an economic recession and the government deficit ballooned. Additionally, due to increased political instability, in 2017 the country's credit rating slipped to junk status (Heritage Foundation, 2018). In 2017, business confidence was the lowest that it had been for 16 years (Jonas, 2018). Jonas (2018) states that in 2013, South Africa was regarded as the second most attractive FDI location in Africa for MNEs, however, by 2016 it had fallen to sixth position. This clearly indicates that MNEs have become discouraged as to the attractiveness of the country as an investment destination.

In 2017, the country's unemployment rate spiralled to 27. 7% (National Treasury, 2018). Over 50% of South Africans live in poverty (UNDP, 2018) and the country

"has developed into one of the most unequal societies in the world" (National Planning Commission, 2011, p. 110). For example, the World Bank (2018) points out that 1% of the country's population owns almost 71% of its wealth. Openness to inward FDI in the country is poor (Heritage Foundation, 2018).

On the political front, the environment has been riddled with factionalism (Market Line, 2017), policy uncertainty and power struggles. As claimed by Market Line (2017), the ANC government has become increasingly unpopular due to worsening unemployment, inequality and poverty, corruption and the inefficient use of resources, increased labour strikes and poor progress in land reform. As a consequence of this deteriorating business environment, it has become more challenging for businesses to operate in the country and this has led to a loss of business confidence since 2013 (PwC, 2018).

Cyril Ramaphosa became President of South Africa in February 2018 after former President Jacob Zuma's resignation. This change in leadership has created renewed optimism in the country (World Bank, 2018). President Ramaphosa has indicated that he wants to put the country on a path to economic growth and prosperity. He has introduced an economic reform programme called a "New Deal for South Africa" which focuses on attracting MNEs and FDI to the country (PwC, 2018).

Dassah (2018) asserts that since the beginning of Jacob Zuma's presidency, state capture and corruption in government increased substantially. The Gupta family, who are originally from India, came to the country in the early 1990s and established several businesses. They developed a close friendship with the then President Zuma and his family, government ministers and other influential politicians in the ANC (Dassah, 2018). The family was consequently awarded lucrative government tenders and contracts valued at hundreds of millions of dollars by the South African government and state-owned enterprises. Many of these tenders awarded to the Guptas resulted in lack of service and goods delivery. Consequently, an investigation into the nature and extent of state capture is being undertaken in the country. Jonas (2016) maintains that this capture of the state has severely weakened South Africa's status as a developmental state and undermined its influence.

Doh *et al.* (2003) emphasise that public sector corruption has an adverse effect on firms because it raises the costs of doing business. The indirect costs of public sector corruption in South Africa have been associated with decreasing FDI and domestic investment, macroeconomic imbalances, increased unemployment, inequality and poverty, inadequate infrastructure and reduced public expenditure (Doh et al. , 2003). Furthermore, the level of crime and the nature of violent crime in the country is escalating (De Wet et al. , 2018). For instance, there has been a 439% increase in criminals sentenced to 20 or more years and a 413% increase in life sentences (Thobane & Prinsloo, 2018).

High levels of government corruption in the country are increasing the costs of MNEs doing business in the country (Doh et al. , 2003). Added to this are regulatory barriers, red tape, complicated and expensive customs procedures and weak and inadequate infrastructure (OECD, 2017). According to the World Bank (2018), in the last three years, there have been very few reforms introduced to ease the regulatory environment for business. Instead, more regulation has been implemented in the form of fee increases that have to be paid by businesses (World Bank, 2018). Encouragingly, South Africa does not have sector-specific FDI restrictions, which is positive for MNEs (PwC, 2018). However, there are many labour regulations that are regarded as being too restrictive in terms of the hiring and firing of workers (IMF, 2018).

2.2. Theoretical Review – Eclectic Paradigm Theory

The most comprehensive and frequently used theory to explain why firms undertake foreign direct investment is that developed by the late Professor Dunning. Known as the Eclectic Paradigm Theory (Cavusgil et al. , 2017), this perspective combines key ideas from several foreign direct investment theories such as the Monopolistic Advantage Theory constructed by Hymer in 1976 and the Internalisation Theory proposed by Buckley and Casson in 1976 (Moosa, 2002). Peng and Beamish (2008) explain that according to the Eclectic Paradigm Theory, a firm will invest overseas for the following reasons: ownership (O), location (L) and internalisation (L).

(O) Ownership refers to specific advantages that a firm holds over its rivals in a marketplace (Dunning, 1979). When firms possess such advantages, they are able to compete more effectively in international markets (Dunning, 1980). Examples of ownership-specific advantages include technological know-how, well-recognised and famous brands, abundant resources, intellectual capital, skills and managerial competencies and effective distribution channels (Dunning, 1979; 1980).

(L) Location refers to the comparative advantages that certain countries possess over other countries, which are attractive to firms (Cavusgil et al. , 2017). For instance, some countries have rich natural resources, an abundant supply of skilled, low-priced labour, modern and reliable infrastructure, easily accessible low-cost capital and a range of government incentives offered to foreign firms (Dunning, 1979; 1980; Peng & Beamish, 2008). According to Sitkin and Bowen (2010), a country should possess some comparative advantages for it to be considered a suitable location for foreign direct investment by international firms.

(I) Internalisation refers to a firm's internal advantages which motivate it to expand and undertake foreign direct investment (Peng & Beamish, 2008). This means that a foreign firm will locate itself in a foreign country and create its own value chain activities such as manufacturing, marketing, research and development in another

country (Buckley & Casson, 1976; 2011). Examples of internalisation are when a multinational enterprise builds its own factories, plants, manufacturing capabilities and subsidiaries in a foreign country. Internalisation advantages of a firm include retaining control of its own operations and value-chain activities, as opposed to outsourcing them to another firm, decreased transaction costs and communication and transport costs (Dunning, 1979).

Andersen (1997) argues that a key strength of the Eclectic Paradigm Theory is that it encompasses several FDI theories. Cantwell and Narula (2003) add that this theory is still widely used when discussing MNEs' foreign investment activities. However, Moosa (2002) cautions that a drawback of the Eclectic Paradigm Theory is that it is too broad and does not take into consideration that every country has a different investment environment and unique circumstances.

2.3. Empirical Review

The determinants of FDI is a topic that has been exhaustively researched (Rachdi, Brahim & Guesmi, 2016). Due to the vast amounts of literature on this subject, this section focuses on studies specifically related to South Africa.

Table 1. Determinants of Foreign Direct Investment in South Africa

Year	Author/s	Title of study	Determinants of FDI
2000	Schoeman, Clausen, Robinson & De Wet	Foreign direct investment flows and fiscal discipline in South Africa	Fiscal discipline, increased domestic savings, low corporate tax and a reduced government deficit.
2005	Ahmed, Arezki & Funke	The composition of capital flows: Is South Africa different?	Trade and capital liberalisation, infrastructure, stable exchange rates.
2006	Fedderke & Romm	Growth impact and determinants of foreign direct investment into South Africa, 1956-2003	Low wage costs, an open economy, high levels of exports, property rights, political stability and economic integration.
2006	Moolman, Roos, Le Roux & Du Toit	Foreign direct investment: South Africa's elixir of life?	Market size, infrastructure, an open economy and a strong currency.
2010	Dlamini & Fraser	Foreign direct investment in the agriculture sector of South Africa	High levels of productivity in the agricultural sector in South Africa.
2011	Smit & Ngam	Foreign direct investment of Chinese-owned small	Access to local markets, and the size of the market in South Africa.

		and medium enterprises: Motives for choosing South Africa	
2018	Masipa	The relationship between foreign direct investment and economic growth in South Africa: Vector error correction analysis	High labour costs, corruption and crime.
2018	Dondashe & Phiri	Determinants of FDI in South Africa: Do macroeconomic variables matter?	Rate of inflation, size of government, interest rates, GDP and trade terms.

3. Methodology

This study is based on a quantitative research approach.

3.1. Population and Sampling

The population included all senior executives employed at MNEs in the country. The sample consisted of 400 senior executives currently employed at MNEs in South Africa, representing various economic sectors. The names and contact information of the 400 senior executives were obtained from a database called "Multinational Companies in South Africa" developed by Business Monitor International.

3.2. Data Collection and Analysis

In order to obtain data on the three research questions in this study, an Internet-based survey was carried out. A survey allows the researcher to investigate the views, attitudes and opinions of a particular sample (Edmonds & Kennedy, 2013). An Internet-based survey was deemed best-suited for the purposes of this study for the following reasons: i) Zikmund *et al.* (2013) state that Internet-based surveys are attractive as they allows for data to be collected swiftly and inexpensively; ii), the sample in this study had access to the Internet as well as the technical knowledge to use the Internet (Sue & Ritter, 2012); and iii) Internet-based surveys cover a broad geographical area and are inexpensive to follow up (Blair et al., 2014). The survey questionnaire included a cover letter explaining the purpose of the research as well as a consent form which indicated that anonymity and confidentiality would be maintained. A hyperlink was provided which respondents were requested to click to access the survey on the Internet. A total of eleven questions formed part of the survey. Five questions obtained biographical information about the respondents while the remaining questions contained a sub-group of closed questions to elicit

respondents' opinions on their MNE's business operations in South Africa. The survey questions were close-ended and a five-point Likert scale was used, ranging from 1 = strongly influential to 5 = no influence at all. During the data collection period, the researchers sent out three emails to respondents which included follow-up emails. After the third email was sent, a total of 76 respondents answered the biographical questions on the survey. However, only 62 respondents answered the questions on the MNEs' FDI plans. The survey data was analysis using SPSS 22. 0 software. Data analysis involved performing exploratory factor analysis. Descriptive statistics were employed to describe the sample in this study. Exploratory factor analysis was used to determine the impact of business environment factors on MNEs' FDI decision-making. Furthermore, exploratory factor analysis was used to investigate whether MNEs in the country planned to expand or close business operations within the next 1-3 years.

4. Results and Discussion

4.1. Profile of the Respondents

Of the 400 senior executives who were contacted and requested to complete the survey, 76 responded. However, a few of the 76 respondents failed to answer all the biographical questions. The following is a description of the sample:

Economic sector represented: Seventy-four respondents answered this question. In terms of the economic sectors represented by the respondents, the majority was from banking and finance (23%), manufacturing (15%), services (15%) and mining (12%). Other respondents were from sectors such as pharmaceuticals, food and consumer packaged goods, electronics, clothing and textiles, energy, agriculture and retail.

Job titles of respondents: This question was answered by 74 respondents. Almost one third (24%) indicated that they were CEOs or managing directors, 28% were executives, 36% were directors, 4% were CFOs and the rest classified themselves as 'other'.

Number of employees: Seventy-five respondents answered this question. In terms of the number of employees that the respondents MNEs employ, the overwhelming majority of respondents (81%) answered that their MNE employed more than 300 workers. The rest of respondents said that their MNE employed up to 300 workers.

Number of years in South Africa: Seventy-six respondents answered this question, with 85% reporting that their MNE had been operating in South Africa for over 25 years. The rest of the respondents said that their MNE had been conducting business in the country for less than 25 years.

Annual turnover: This question was answered by 76 respondents. In terms of the annual turnover in South Africa, the vast majority – or 79% of respondents – replied that their MNE had an annual turnover in excess of R500 million. The rest said that their MNE's annual turnover was up to R500 million.

4.2. Factor Analysis: Factors Influencing MNES' Decisions to Expand Their Business Operations in South Africa

The findings regarding the exploratory factor analysis in this paper are presented according to the format used by Kruger *et al.* (2012). The purpose of this question was to obtain the views of the sample on the factors that influence the decision of whether or not the MNE will expand its business operations in South Africa. Sixty-two respondents answered this question. Bartlett's tests of sphericity and KMO measurement were undertaken to determine the appropriateness of the data before undertaking factor analysis (Pallant, 2013). The KMO value was . 806, indicating that factor analysis could be performed. Bartlett's test of sphericity confirmed statistical significance (see Table 2). Principal axis factoring (PAF) was conducted on the question items. When deciding on the number of factors to be extracted, factors that had eigenvalues of 1. 0 or more were considered. PAF showed that there were two factors with eigenvalues greater than 1 (4. 74 and 1. 47).

Table 2. KMO and Bartlett's test

Kaiser-Meyer-Olkin measure of sampling adequacy		. 806
Bartlett's test of sphericity	Approx. chi square	293. 832
	Df	45
	Sig.	. 000

The factor matrix was rotated using Varimax rotation with Kaiser normalisation (see Table 3). The factor loadings regarding the issues influencing MNEs expanding their business operations in South Africa are shown in Table II. PAF revealed two components that had eigenvalues explaining 30. 75% and 22. 18% of the variance, respectively. The two factors comprised 52. 93% of the total variance. Both factors had somewhat high reliability coefficients with Cronbach's alpha at 0. 87 and 0. 78, indicating good support for internal consistency for these factors. The mean inter-item correlation values for the two factors indicated an acceptable level of internal consistency. Two factors were identified.

Table 3. Varimax Rotated Factor Loadings of the Issues Influencing MNEs Expanding their Business Operations in South Africa

Factors and items	Factor loading	Mean value (N)	Reliability coefficient	Mean inter-item correlation
Factor 1: Macroeconomic, political environment and government policies in South Africa		**1. 984 N=62**	**0. 872**	**0. 586**
1. The unstable political environment in South Africa	0. 792			
2. The high level of corruption in South Africa	0. 790 0. 732 0. 698	**2. 406 N=65**	**0. 787**	**0. 430**
3. The unstable economic environment in South Africa	0. 657			
4. The high crime rate in South Africa	0. 727 0. 695			
5. The poor government policies to support businesses in South Africa	0. 641 0. 527 0. 478 **52. 93%**			
Factor 2: Red tape, bureaucracy and labour issues in South Africa				
1. The high cost of labour in South Africa				
2. The inflexibility of labour laws in South Africa				
3. The lack of skilled workers in South Africa				
4. The high amount of red tape and bureaucracy in South Africa				
5. The low cost of labour in neighbouring countries				
Total variance explained				

Factor analysis revealed that there were two components with eigenvalues greater than 1, explaining 30. 75% and 22. 18% of the variance. Factor one explained 30. 75% of the total variance and consisted of five items related to this factor. Factor one measured the influence of the macroeconomic, political environment and government policies on MNEs' business expansion plans in the country. Factor two accounted for 22. 18% of the total variance and consisted of five items that reflected

the respondents' views on red tape, bureaucracy and labour issues in South Africa. The findings provide evidence of a link between the quality of the economic and political environment, bureaucracy, expensive labour, rigid labour laws, crime and corruption in South Africa and MNEs' expansion plans in the country.

4.3. Factor Analysis: Factors Influencing MNES' Decisions to Close Business Operations in South Africa

This question examined the factors that influence MNEs' plans to close down operations in South Africa. Sixty respondents answered this question. Prior to performing PAF, it was first determined whether the data was suitable to perform factor analysis. The KMO and Bartlett's test of sphericity were undertaken on the items (see Table 4).

Table 4. KMO and Bartlett's Test

Kaiser-Meyer-Olkin measure of sampling adequacy		. 909
Bartlett's test of sphericity	Approx. chi square	649. 153
	Df	55
	Sig.	. 000

The KMO value was 0. 909, which is very positive and means that factor analysis could be carried out. This was enhanced by Bartlett's test of sphericity where p<001. Kaiser's criterion was used in order to calculate eigenvalues so as to decide on the number of factors to extract. PAF revealed that there was a single factor that had an eigenvalue greater than 1 (7. 52), which accounted for 65. 50 percent of the total variance. Therefore, only one factor was extracted and the solution could not be rotated (see Table 5).

Factor one was labelled in terms of similar issues and interpreted the total variance of 65. 50%. There were 11 items that were grouped together for this factor. The one factor had a reliability coefficient with Cronbach's alpha of 0. 953. This was regarded as very strong internal consistency. The mean inter-item correlation for the 11 items was 0. 647, denoting an acceptable degree of internal consistency. Eleven items were connected to the factor that related to the negative factors that influence MNEs to disinvest (close business operations) in South Africa.

Table 5. Factors that Influence MNEs Closing Business Operations in South Africa

Factor and items	Factor loading	Mean value (N=60)	Reliability coefficient	Mean inter-item correlation
Factor 1: Negative factors that influence multinational enterprises to disinvest (close business operations) in South Africa		2.675	0.953	0.647
1. The unstable economic environment in South Africa	0.900			
2. The poor government policies to support businesses in South Africa	0.870			
3. The high amount of red tape and bureaucracy in South Africa	0.863			
4. The unstable political environment in South Africa	0.848			
5. The high crime rate in South Africa	0.848			
6. The high cost of labour in South Africa	0.840			
7. The lack of skilled workers in South Africa	0.816			
8. The inflexibility of labour laws in South Africa	0.816			
9. The high degree of corruption in South Africa	0.808			
10. The low cost of labour outside of South Africa	0.651			
11. The many corporate social responsibilities that firms are faced with when operating in South Africa	0.586			
Total variance explained	65.50%			

The findings provide convincing evidence that negative factors such as an unstable economic and political environment, together with a lack of government policies that are supportive and consistent with supporting businesses, influence MNEs' plans to close business operations in the country. Other factors that have an influence on MNEs' plans to close down some or all business operations in South Africa include the high levels of red tape and bureaucracy that exist in the country, which make it difficult to do business. Additionally, a high crime rate, expensive labour costs, a lack of skilled workers, rigid labour laws and rampant corruption also discourage MNEs' operations and shape their plans regarding the closing down of business operations in the country.

4.4. Factor Analysis: MNEs' Plans to Expand or Close Business Operations in South Africa

This question sought to determine whether MNEs planned to expand or close business operations in South Africa within the next 1-3 years. Sixty-two respondents answered this question. Before performing PAF, it was first determined whether the data was suitable to perform factor analysis. The KMO and Bartlett's test of sphericity were undertaken on five items in the group (see Table 6).

Table 6. KMO and Bartlett's test

Kaiser-Meyer-Olkin measure of sampling adequacy		. 642
Bartlett's test of sphericity	Approx. chi square	32. 910
	Df	3
	Sig.	. 000

This was confirmed by Bartlett's sphericity test where p<001. Eigenvalues were calculated using Kaiser's criterion in order to find out the number of factors to extract. PAF showed that only one factor had an eigenvalue greater than 1 (91. 87), which explained 45. 57% of the total variance. Only one factor was extracted and the solution could not be rotated (see Table 7).

Table 7. MNEs plans to Expand or Close Business Operations in South Africa

Factor and items	Factor loading	Mean value (N=62)	Reliability coefficient	Mean inter-item correlation
Factor 1: Multinational enterprises' plans to extend or close business operations in South Africa		**4. 263**	**0. 676**	**0. 434**
1. My firm plans to close some of its business operations in South Africa in the next 1-3 years	0. 825			
2. My firm plans to close all of its operations in South Africa in the next 1-3 years	0. 636			
3. My firm plans to expand its operations in South Africa in the next 1-3 years	-0. 532			
Total variance explained	**45. 57%**			

The factor extracted was labelled according to related issues. The reliability coefficient for this factor had a Cronbach's alpha of 0. 676. Factor one had three items. When there are less than ten items on a scale, the reliability coefficient is small (Pallant, 2013). The mean inter-item correlation was 0. 434 which points to an acceptable degree of internal consistency. The mean value was 4. 263. The finding here is that although there is a link between the factors that influence the FDI plans of MNEs currently operating in South Africa, respondents indicated that their MNE did not intend to close down some or all of its business operations in the country within the next 1-3 years. This was an interesting finding given that MNEs were influenced by factors in the South African business environment. One needs to remember though that FDI is the riskiest and most costly foreign market entry

strategy. Therefore, if MNEs in the country close down some or all business operations in the short term, this could result in negative financial implications.

5. Conclusion

This paper investigated the factors that influence the FDI plans of MNEs currently operating in the country. The study also examined whether MNEs in the country had plans to close down some or all of their business operations or to expand their value chain activities in the country within the next 1-3 years. The findings demonstrate that macroeconomic, political, government policy, labour issues, bureaucracy, red tape, corruption and crime all influence MNEs currently operating in South Africa. However, despite evidence of this link, MNEs do not intend to close down some or all operations in the country within the short term (next 1-3 years).

The implications for policy makers are that they need to be aware of the factors identified in this study, which do influence MNEs' FDI plans in South Africa. The South African government should work towards creating a more conducive business environment in the country. The commercial impact on MNEs of operating in a high-risk business environment is that it could result in increased costs of conducting business in the country and subsequently, disinvestment. This study is a starting point for further research on the dynamics behind FDI decision-making in Africa. The research also provides a basis for other international studies to compare their findings against an emerging market.

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Factors that Influence MSME Performance Improvement
(Study on MSMEs of Women Entrepreneurs in Banyumas Regency)

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Abstract: The aim of this study is analysing factors influencing on the MSMEs Performance Improvement of the Female Entrepreneurship in Banyumas Regency. This study use quantitative method with regression model. Samples consist of 75 persons of MSMEs with the owner or manager as respondents, data gathered by using questionnaire instrument. Base on regression analysis, showed that funding, financial literation and business scale are significantly influence to increasing MSMEs performance, of the Female Entrepreneur in Banyumas Regency. Three other variables, namely: HR competence, entrepreneurial orientation and cost control do not affect the increase in MSME performance. MSME performance can be improved by staying focused on the financial aspects: funding, financial literacy and business size. Other business improvement can be pursued by enhancing HR competencies through training programs and applying entrepreneurial orientation in their business. Female entrepreneurs as owners and MSME entrepreneurs are also very important to control costs as an internal factor that can be controlled.

Keywords: Funding; HR competency; entrepreneurship orientation; finance literation; cost control; business scale; increasing MSMEs performance

JEL Classification: L31

Introduction

During this time the development of entrepreneurship in Indonesia continues to improve. Based on August 2016 Sakernas data, the number of women working as entrepreneurs is 14. 3 million. The number has increased by 1. 6 million compared to 2015, with only 12. 7 million people. "This means that more and more entrepreneurs, including women entrepreneurs, are growing. This shows that women

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have increasingly expanded their role in the e economy" (Kompas. com, 2017). Undeniably, women entrepreneurs still face various challenges in developing their businesses, especially in the socio-economic aspects of gender equality (gender gap). One an example is the participation of women as entrepreneurs and the access of women entrepreneurs to venture capital is still relatively low (Kartini, co. id).

Some of the problems faced in the development of UMKM include, low quality human resources, product competitiveness, access to capital and a network of cooperation that has not been optimal (Braman, 2008). Many MSMEs have limited knowledge, so they are not long-term oriented. Efforts to improve performance tend to be conventional due to lack of business management knowledge. Other problems that are often faced by MSMEs include limited funding, human resource competence, orientation towards entrepreneurship and financial literacy. These problems will have an impact on MSME performance if not handled properly.

The large potential of MSMEs is still constrained by funding problems. Micro businesses are generally their own businesses and do not have much capital. SMEs are still having difficulty developing business performance. They have alternatives in adding sources of funds, one of which is by borrowing funds from banks. The government makes it easy for MSMEs to get funds is the People's Business Credit (KUR). The purpose of the KUR is to be an effective capital financing solution for MSMEs. So far, many MSMEs are constrained by access to banks to get funding, because banks are very careful in providing credit.

There are several studies that discuss the effect of funding on business performance, namely Utari et al. (2014) and Wahba (2018) who said funding significantly affected business performance based on profitability. Research conducted by Af'ida (2017) which obtained funding results did not significantly influence the performance of MSMEs.

HR competency is one of the factors that also affects the performance of MSMEs. MSMEs have constraints lacking in competency in human resources (HR). The quality of human resources as measured by HR competencies such as knowledge, skills, and abilities in entrepreneurship (Ardiana et al. , 2010). Based on research conducted by Wahyudiati (2017) and Widjaja et al. (2018) note that human resource competency has a significant positive effect on the performance of MSMEs. In contrast to Af'ida (2017) who found that human resource competence had a significant positive effect on MSME performance.

The application of entrepreneurial orientation can be one of the advantages to make MSMEs more professional in business competition. Increasingly competitive competition is not uncommon to be one of the triggers for bankruptcy of small-scale businesses. To face this competition, MSMEs are required to be able to develop a planned business strategy. Entrepreneurial orientation is seen as having the ability to improve the performance of a company.

Research by Witjaksono (2014), Mustikowati et al. (2014), and Sari (2016) showed that the results of entrepreneurial orientation had a significant positive effect on the performance of MSMEs. However, the study of Suparlinah et al. (2018) found that the results of entrepreneurship orientation had no significant effect on the performance of the women's MSME community in Banyumas Regency.

Many MSMEs in Indonesia have low knowledge in business management, especially in the financial aspects. This is due to the characteristics of MSMEs that generally do not have information about financial conditions, market share and the management's track record in an organized manner. Financial literacy is the ability to understand how to manage finances better (Financial Service Authority, 2017). MSMEs that have good financial management skills can develop their business performance rapidly and be able to compete with larger competitors. Several studies on the effect of financial literacy on business performance, namely research Aribawa (2016), Kimunduu (2016), Ningsih (2018) and Mutiso et al. (2018) which obtained the result that financial literacy had a significant effect on the performance of MSMEs.

This study seeks to identify and analyze the factors that influence the increase in the performance of micro and small businesses in Banyumas.

Literature Review

Funding

UKM Center FEB UI states that the majority of MSME loans are given by state banks with the majority of loans used for working capital. The BPS Micro and Small Industry Survey (SIMK) in 2010 reported that only 17. 36% of small businesses and 3. 25% of micro businesses received funding from banks. As for MSMEs, the majority who have received banking funding are medium-sized businesses, which according to Law No. 20/2008 are businesses with an asset scale of Rp 500 million to Rp 10 billion and annual turnover of more than Rp 2. 5 billion to Rp 50 billion .

Pecking order theory (pecking order theory) is one of the many theories relating to funding (the company's capital structure). The pecking order theory was invented by Donaldson in 1984 which was later refined by Myers and Majluf. The pecking order theory states that companies tend to look for sources of funding that have minimal risk. The company will choose funding based on order preference. Starting from prioritizing funding that is not at risk, minimal risk to high risk.

Human Resource Competence

Competence is a term derived from English, namely Competence which if interpreted directly into Indonesian is Skill, ability and authority. If applied to Management, especially HR Management, Competence can be interpreted as a

combination of knowledge, skills and personality that can improve employee performance so that it can contribute to the success of the organization.

The term Competency was first introduced by David McClelland in 1973 in his article entitled "Testing for competence rather than for intelligence" or "Testing Competence rather than Intelligence". In 1982, Boyatzis collected comprehensive data using the McBer & Company method "Job Competence Assessment" in the United States. Since then, competence has become an important factor in the practice of developing Human Resources.

Entrepreneurial Orientation

Entrepreneurial Orientation Entrepreneurship has the essence of referring to the nature, character, and characteristics inherent in someone who has the willingness to work hard to realize innovative ideas in the real business world and can develop them tough (Sopiah, 2008) Porter defines entrepreneurial orientation as a strategy to be able compete more effectively in the same market place (Andwiani, 2013).

To measure the entrepreneurial orientation (entrepreneurial orientation) indicators are used which were developed from Lee and Tsang's research. This variable is measured by 4 dimensions, namely: Need for Achievement, Internal Locus of Control, Self Reliance, and Extroversion. Entrepreneurial orientation plays an important role in improving business performance and becomes an acceptable meaning to explain business performance.

The entrepreneurial orientation dimension has been taken from Covin and Slevin (1989) and the following improvements made by other researchers (Sexton, 1997), so that the conceptualization of entrepreneurial orientation has an innovation dimension, (2) proactive, aggressive tendencies to take advantage of environmental opportunities; and (3) a willingness to take risks and manage or manage; risk. Miles, et. al (2003).

Financial Literacy

The Indonesian National Financial Literacy Strategy (2013, p. 18) presents the Definition of financial literacy according to the Indonesian National Financial Strategy is a series of processes or activities to increase the knowledge, confidence and skills of consumers and the wider community so that they are able to manage finances that are better. The definition of financial literacy according to the OJK is knowledge, skills and beliefs that influence attitudes and behaviors to improve the quality of decision making and financial management in order to prosper. (Financial Services Authority, 2014)

OJK (2014) explains that there are levels of a person's financial literacy which are classified into several types of levels, including: (1) Well Literate; At this stage, someone who has knowledge and beliefs about financial services institutions and

also financial products or services, including features, benefits and risks, rights and obligations related to financial products and services and also has skills in using financial products and services. (2) Suff Literate; At this stage, a person has knowledge and beliefs about financial service institutions as well as financial products and services including features, benefits and risks, rights and obligations related to financial products and services. (3) Less Literate; At this stage, a person only has knowledge about financial service institutions, financial products and services. (4) Not Literate; At this stage, a person does not have knowledge and beliefs about financial services institutions and also financial products and services, and does not have the skills in using financial products and services.

Cost control

According to Siegel and Shim in Trisnawati (2006) are as follows: "Cost control is a step taken by management to ensure that the cost objectives made at the planning stage can be achieved, and to ensure that all segments of the organization's functions in their behavior are consistent with policies. for cost effective supervision". While the definition of cost control according to Simamora (1999) is as follows: "Cost control is a comparison of actual performance with standard performance, analyzing the differences arising in order to identify the causes that can be controlled and taking action to be able to fix or adjust planning and control in future".

Performance is the best example of a type of control, and this performance is referred to as "result control" because it involves reward and punishment, both with individuals and groups. Rewards in the form of monetary compensation, job security, promotion, autonomy, and recognition will be given to those who can produce good results for the company. Instead punishment is given for those who produce poor results for the company. Thus it appears that there are links or relationships that affect each other between control and performance

Businnes Scale

The size of the company is basically a grouping of companies into several groups, including large, medium and small companies. Company scale is a measure used to reflect the size of the company based on total company assets (Suwito & Herawaty, 2005). Company size is the scale of the company as seen from the total assets of the company at the end of the year. Total sales can also be used to measure the size of the company. Because costs that follow sales tend to be greater, companies with high levels of sales tend to choose accounting policies that reduce profits (Sidharta, 2000).

Company size research can use asset benchmarks. Because the total assets of the company are of great value then this can be simplified by transforming into natural logarithms (Ghozali, 2006); so the size of the company can also be calculated by: Size = Ln Total AssetsThe size of the company describes the size of the company. The size of the business in terms of the field of business that is run. Determination

of the size of the company can be determined based on total sales, total assets, average sales level (Seftianne, 2011).

UMKM Performance

According to Moerdiyanti (2010), revealed that the company's performance is the result of a series of business processes in which the sacrifice of various kinds of resources that can be human resources and also corporate finance. If the company's performance increases, it can be seen from the incessant activities of the company in order to generate maximum profits. The profits or profits that are generated will certainly differ depending on the size of the moving company. Based on the process of increasing earnings or profit income, Nakamura (2011, p. 102) states that companies that have a large size have greater potential to invest their resources.

According to Madura (2001) explains that business performance is seen from the point of view of business owners who invest their capital in a company focusing on two criteria to measure company performance: 1) return on investment and 2) risk from their investment. Because the business strategy that must be implemented by managers must be aimed at satisfying business owners. Managers must determine how various business strategies will affect the returns on company investment and the risks. Performance measurements can use: 1). Sales growth, 2). Capital growth 3). Adding manpower every year, 4) market growth and marketing and 5) profit/operating profit.

Research Methods

Population and Sample

This research population includes all female entrepreneurs at MSMEs in the Banyumas district who are still active in their businesses. Data from the Cooperative Office shows that there are 4,234 Business Units that are scattered in the Banyumas Regency. The sample of this study was taken by using the Non probability Sampling technique that is purposive by selecting MSMEs which are determined as follows: a. MSMEs are managed by female entrepreneurs, (b) SMEs that have been operating for at least 2 (two) years and (c). have the data needed for research. The amount of research samples obtained were 75 MSMEs in Banyumas district.

Research variable

The variables of this study consisted of independent variables: funding (X_1), human resource competency (X_2), financial literacy (X_3), Entrepreneurial Orientation (X_4), cost control (X_5) and business size (X_6) and the dependent variable namely increasing MSME performance (Y).

The data used in this study are primary data taken through surveys with a questionnaire instrument designed based on indicators of each variable by first testing the validity and reliability, while statistical analysis is performed using SPSS version 24 software including Regression Analysis used to determine the causal relationship (Causal), and the F Test was conducted to test the feasibility of the model formed, Adjusted R^2 was seen to determine the ability of the independent variables to explain the improvement in MSME performance and t-test was used to test the hypotheses that were formulated in this study.

Research Results and Discussion

Descriptive Analysis Results

Table 1. Profile of entrepreneur samples in Banyumas Regency

1. Education of Selected Respondents			
No.	**Educational Level**	**Frequency**	**Percentage**
1.	SD	3	5
2.	SMP/SMA	55	73
3.	D3/S1	17	22
4.	S2	0	-
Total		75	100
2. Age of selected respondents			
No.	**Age Range**	**Frequency**	**Percentage**
1.	19-25	1	1
2.	26-35	23	31
3.	36-45	39	52
4.	≥ 46	12	16
Total		75	100
3. Training that has been followed			
No.	**Business training**	**Frequency**	**Percentage**
1.	0	57	76
2.	1	15	20
3.	2	1	1
4.	3	2	3
Total		75	100

Descriptive analysis is carried out to determine the condition of MSME consisting of entrepreneur background and MSME profile as well as various variables in supporting the improvement of their business performance. Based on the level of education, entrepreneur respondents are dominated by junior-high school graduates as many as 55 people (73 percent), followed by 27-degree Diploma education (26 percent). Most entrepreneurs aged between 35-45 years old as many as 49 people (49 percent); the next aged 26-35 years as many as 33 people. Most (84 percent) entrepreneurs have never attended training related to their business.

When viewed from the operations of MSMEs, most MSMEs are less than 10 years old (62 percent); while those whose business is 11-20 years old are 36 percent. For capital, most MSMEs (60 percent) have used external capital in the form of debt in addition to their own capital.

Table 2. MSME Business Profile from a Sample of Entrepreneurs in Banyumas Regency

1. MSME Age			
No.	**Age range**	**Frequency**	**Percentage**
1.	0-10	43	57
2.	11-20	29	39
3.	21-30	2	3
4.	30-40	1	1
Total		75	100
2. MSME capital			
No.	**Capital source**	**Frequency**	**Percentage**
1.	Internal	32	43
2.	Internal and external	43	57
	Total	75	100

Description of Factors Affecting MSME Performance

Table 3. Descriptive Statistics of Factors Influencing the Increase in MSME Performance

No.	Information	Maximum	Average	Minimum	Standard deviation
1	Fund	4. 80	3. 85	2. 80	0. 54
2	HR competetion	5. 00	4. 26	3. 80	0. 24
3	Entrepreneurship orientation	5. 00	4,23	3. 60	0. 23
4	Finace Literacy	5. 00	3. 99	3. 00	0. 36
5	Cost control	5. 00	4. 13	3. 00	0. 33
6	Increasing MSME performance	0. 20	0. 05	0. 00	0. 048

Based on observations, interviews and questionnaires by 75 entrepreneur respondents obtained a description of the condition of the factors that influence the increase in MSME performance. With a Likert scale measurement the average score approaching 4 illustrates good conditions of the variables Funding, HR Competence, Entrepreneurial Orientation, Financial Literacy and Cost Control as well as, the size of MSMEs. An increase in MSME performance by an average of 0. 05 or 5 percent.

Regression Analysis

Regression analysis is used to determine the effect of the independent variable or X on the dependent variable (Y). In this study the regression analysis used is multiple regression.

Table 4. Summary of Regression Analysis Results

No	Variable	Regression Coef.	Sign	Information
1	Funding	- 0,313	0,022	sign
2	HR Competetion	0,042	0,701	No sign
3	Entrepreneurship orientation	0,131	0,265	No sign
4	Financial Literacy	0,375	0,006	sign
5	Cost control	-0,163	0,218	No sign
6	Business scale	0,366	0,001	sign
7	R	0,529		
8	R^2	0,280		
9	Adjusted R^2	0,216		
10	F	4,397		Fit model
11	Sign.		0,01	

The results of multiple regression analysis of the magnitude of the effect of the entrepreneurial orientation and business scale strategy variables on the performance of MSMEs can be formulated in the standardized regression equation as follows:

$$Y = -0,0313\ X_1 + 0,042\ X_2 + 0,131\ X_3 + 0,375\ X_4 - 0,163\ X_5 + 0,366\ X_6$$

With the F value of 4. 397 and a significance of 0. 01 indicates that the regression model is feasible. The model formed in the MSME sample of female entrepreneurs in Banyumas district shows that the increase in performance at MSME is influenced jointly by an increase in HR competencies, financial literacy, entrepreneurial orientation and company size as well as decreased funding and cost control.

Analysis of the Coefficient of Determination

Table 4 shows that the value of R (Multiple Correlation) of 0. 529 means that between the variables of Funding, HR Competence, Entrepreneurial Orientation, Financial Literacy and Cost Control and, the size of MSMEs together have a close relationship with the increase in MSME performance. The adjusted R2 of 0. 206 indicates that only 20. 6 percent of the selected variables influenced the increase in MSME performance while 79. 4 was influenced by other variables not examined.

Hypothesis Testing

To test the model in this study, it has been shown by the value of the F-test, as can be seen in table 4 that the Funding Variables, HR Competencies, Entrepreneurial Orientation, Financial Literacy and Cost Control and, MSME size simultaneously

116

have a significant effect on the performance of MSMEs. This can be seen from the F test value of 4. 397 with a significance value of 0. 01 which is smaller than the alpha value of 0. 05, this means that the model is feasible to be interpreted. However, only partially three variables have a significant effect.

The first hypothesis shows that funding has a significant effect on increasing the performance of MSMEs received because the significance value of 0. 022 indicates a value smaller than the alpha value of 0. 05. The fourth hypothesis states that financial literacy has a significant effect on company performance also accepted because the significance value of 0. 006 is smaller than the alpha value of 0. 05. The sixth hypothesis which states that business size has a significant effect on company performance is also accepted because the significance value of 0. 001 is smaller than the alpha value of 0. 05.

The second hypothesis states that HR competencies influence the increase in MSME performance. The third hypothesis is that entrepreneurial orientation influences the increase in MSME performance. The fifth hypothesis is that cost control affects the increase in MSME performance. The second, third and fifth hypotheses were rejected because all three had significance above alpha 0. 05.

Discussion

The Effect of Funding on MSME Performance Improvement

The results showed that funding had a significant effect on increasing MSME performance (sign 0. 022). Based on the regression coefficient (- 0. 313) shows a negative effect, meaning that a decrease in funding will increase the performance of MSMEs. MSMEs have limitations in running their businesses because one of the factors is the limited funds of women entrepreneurs. MSME entrepreneurs who generally run their businesses only use personal funding sources. So any decrease in internal funding (personal) by adding external funding will increase the performance of MSMEs

The right capital structure can affect a company's financial performance (Brigham & Houston, 2011). The pecking order theory states that companies tend to look for sources of funding with minimal risk (Donaldson, 1984). In pecking order theory, companies will choose funding based on preferences Starting from prioritizing funding that is not at risk, minimal risk to high risk, if funding that is not at risk cannot be obtained (internal), the company will choose funding with small risks starting from debt, then investment.

The results of this study are supported by research by Utari et al. (2014) and Wahba (2018) which stated that funding had a significant effect on improving business

performance. The results of the study are different from the Af'ida research (2017) which produces no significant effect on the performance of MSMEs.

The Effect of Financial Literacy on the Improvement of MSME Performance

Financial literacy is proven to have a significant effect on the increase in MSME performance. The results of this study indicate that the higher financial literacy has an impact on increasing MSME performance. The regression coefficient of 0. 375 shows the effect of the positive variable financial literacy on the increase in MSME performance. The application of financial literacy is intended so that the income received by MSMEs is not only used for consumptive matters, but for productive activities, such as investment for the long term. The financial literacy of MSMEs can be seen from the indicators of implementation: (1) general knowledge about finance, (2) knowledge about savings and (3) knowledge about loans and (4) knowledge about investment.

Financial literacy is the ability to understand how to manage finances better (Financial Service Authority, 2017). MSMEs that have good financial management skills can develop their business performance rapidly and be able to compete with larger competitors. Research Aribawa (2016), Kimunduu (2016), Ningsih (2018) and Mutiso et al. (2018) supports the results of this study which results that financial literacy has a significant effect on the performance of MSMEs.

Business Scale towards Increasing MSME Performance

In this study, business size has been proven to have a significant effect on the increase in MSME performance. Business size is proxied by assets owned by MSMEs; an increase in the value of MSME assets (b = 0. 366) results in an increase in MSME performance. In general, SMEs with small size (micro businesses) are very risky for changes in economic conditions and tend to be less profitable compared to larger sized businesses (small businesses or medium-sized businesses). Large MSMEs tend to have more stable conditions, due to larger businesses has a lot of resources to fund its operational activities and have an impact on improving MSME performance.

Business scale is a measure used to reflect the size of the company based on total company assets (Suwito & Herawaty, 2005). The results of this study support the results of Suparlinah's research, (2018); partially, business size has a positive effect on the performance of MSMEs.

Conclusions and Suggestions

The MSME conditions in which female entrepreneurs are performing show good conditions in terms of funding variables, HR competencies, entrepreneurial orientation, financial literacy and cost control as well as business size. An increase

in the performance of MSMEs on average by 5 percent. The results showed that the variable funding, financial literacy and business size significantly influenced the increase in MSME performance. Three other variables, namely: HR competence, entrepreneurial orientation and cost control do not affect the increase in MSME performance.

A large proportion of MSMEs are in the micro business group. MSME performance can be improved by staying focused on the financial aspects: funding, financial literacy and business size. Other businesses that can be pursued by enhancing HR competencies through training programs and applying entrepreneurial orientation in their business. Female entrepreneurs as owners and MSME entrepreneurs are also very important to control costs as an internal factor that can be controlled.

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Assessment of Cultural Influences on Entrepreneurial Activities of Small Manufacturing Firms in Nnewi, Nigeria

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Abstract: This study examined the assessment of cultural influences on entrepreneurial activities of small manufacturing firms in Nigeria. The study adopted the survey method with emphasis on small manufacturing firms in Nnewi. 98 manufacturing firms were sampled. The study results agreed that cultural influences affect SME's/entrepreneur's ability to succeed and survive. There is need to emphasis the educational and leadership factors by encouraging the age-long individuality of igbo man. Generally, just as other cited authors have sounded a note of warning, the significance of the relationship between factors of entrepreneurial success and the cultural environment should be applied with caution.

Keywords: Contextual; Cultural Influences; Entrepreneurial; SMEs; Education; Prior Knowledge; Leadership Factor; Nature; Communication; Afia Olu; Ikwu Aru; Nnewi; Nigeria

JEL Classification: L32

Background to the Study

It is common knowledge amongst scholars and policy makers that SMEs are vital components of the drive toward attaining sustainable growth and development for any country. In western economies a large proportion of income and outputs are the consequence of the existence and survival of small and medium enterprises (SMEs). More recently they have come to realize also that these SMEs are setup, grown and sustained by entrepreneurs who are the driving force behind the SMEs development, survival and dynamism. In line with this, countries such as United States of America, United Kingdom, Malaysia, India, China, Singapore, Thailand, Vietnam, Sweden, Brazil and a host of others have continued to emphasize the importance of

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entrepreneurship development (Lucky & Olusegun, 2012; Nwite, 2014; Okwu, Obiakor & Obiwuru, 2013) The emphasis now is on measures that will encourage the emergence of entrepreneurs who provide, grow and sustain SMEs in the country.

Idemobi (2005) has cited various authors who have called for research works in the area of Nigerian management system, like Damachi (1978); Andah (1982) Ejiofor (1984); and Akpala (1984); whose calls, he said, though answered by Iyanda (1985), was insufficient and which was a call to action which was also reechoed by Ewurum (1991) some years later. Since then other studies have been conducted that gave useful materials especially in the present area of interest like that of Mazonde and Carmichael (2016); Lucky and Olusegun (2012); Gómez-Araujo and Bayon (2017); Okwu, Obiakor and Obiwuru , (2013) in the area of cultural influence in respect of entrepreneurship, some which have already been cited above. In addition, some of these studies have been conducted on cross cultural basis which have provided reinforcement for the contextual theory and its applicability in all areas of management both within and outside the country.

In areas of management education, like entrepreneurship, possible explanation and solution have been proposed. Greenberg, Mckone-Sweet, and Wilson (2011) have observed that even to a large extent in developed countries as is dominant in yet to be developed countries like Nigeria, the lack of indebt knowledge and understanding of social context and perspective, have caused management education to primarily focus on the maximization of profit. They have, therefore, proposed that what is required is focusing education and research on understanding self- and social contexts and more importantly encourage the application of same in local environments, encouraging actions to be guided by this paradigm shift. The word `entrepreneur', according to Sonowal, (2008) for instance, has not been generally used in the study of tribal and peasant societies, mainly because the concept itself arose in the context of western, capitalist and industrialized economy. Nigerian scholars have come to realize this and have devoted studies in this direction.

To this end, the work of Madichie, Nkamnebe and Idemobi (2008) comes easily and timely into focus. The study focused on the neglected African indigenous cultures in order to investigate and establish the nature of cultural determinants of entrepreneurial emergence in Africa. This study had emphasis on Sub-Sahara Africa and narrowing down on our area of interest, which is Nnewi. Some variables have been identified by them as being responsible for the entrepreneurial emergence in this area. This present work therefore is an attempt to apply identified variables to investigate this phenomenon in light of the strong positive relationship entrepreneurial activities have with SMEs.

Statement of the Problem

In Nigeria today with the unfriendly, erratic and frustrating business environment that exists, SMEs are finding it difficult to start, survive or grow. In different parts of the country the average rate of failure is very high. Yet evidence from previous studies have pointed out that in spite of this unrelenting environment, the SMEs in Nnewi are painting, albeit, a different and opposite picture of successes. In fact, these SMEs are emerging and surviving, even one would be tempted to say, flourishing. This sustainability of the SMEs has been ascribed majorly to the entrepreneurial environment of Nnewi and its people, amongst other things. The possible variables that have determined or have been responsible for this entrepreneurial spirit, transformed into success, have been recognized by previous studies. In other studies, outside our area of focus, four of these variables have been applied in a study by Debanjan and Niladri (2015) that is in the Indian cultural context. These variables include education, prior knowledge, communication and leadership. Presently there arises the need for an investigation into the nature of cultural influences on these four factors which have come to play on entrepreneurial activities of SMEs with special focus on small manufacturing firms in the Nigerian context. The basic concern for this present work is to find constructs or model(s) that link these culturally influenced variables to the small manufacturing firm's entrepreneurial activities that in turn affect the rate of success, survival and existence that have engendered this "Nnewi phenomenon" in Anambra State Nigeria.

Objectives of the Study

The major aim of this study is to assess the nature of the cultural influences on the entrepreneurial activities of Small and Medium Manufacturing Enterprises (SMMEs) in Nnewi. The specific objectives are;

1.   To ascertain the nature of the relationship between the Afia Olu, Ikwu Aru, other festivals of Nnewi and the education factor of entrepreneurs of SMEs.

2.   To examine the nature of the relationship between the Afia Olu, Ikwu Aru, other festivals of Nnewi and prior knowledge of the entrepreneur,

3.   To ascertain the nature of the relationship between the Afia Olu, Ikwu Aru, other festivals of Nnewi and the entrepreneur's communication factor in Nnewi.

4.   Examine the nature of the relationship between the Afia Olu, Ikwu Aru, other festivals of Nnewi and entrepreneur's leadership factor.

5.   To construct a model to link cultural influences and the entrepreneurial activities of small and medium manufacturing enterprises in Nnewi.

6. To recommend the best cultural practices for the promotion of small and medium manufacturing enterprises in Nnewi.

Research Hypotheses

The following hypotheses were formulated to address the research questions;

Ho_1 There is no significant relationship between the Afia Olu, Ikwu Aru, other festival of Nnewi and the education factor of entrepreneurs of SMEs

Ho_2 There is no significant relationship between the Afia Olu, Ikwu Aru, other festival of Nnewi and prior knowledge of the entrepreneur,

Ho_3 There is no significant relationship between the Afia Olu, Ikwu Aru, other festival of Nnewi and communication factor of the SMEs entrepreneurs in Nnewi.

Ho_4 There is no significant relationship between the Afia Olu, Ikwu Aru, other festival of Nnewi and leadership factor of SMEs entrepreneurs is not significant.

Ho_5 It is not possible to construct a model to link cultural influences and the entrepreneurial activities of small and medium manufacturing enterprises in Nnewi

Ho_6 There is no significant recommendation on the best cultural practices for the promotion of small and medium enterprises in Nnewi.

The Significance of the Study

The findings of this study will be of importance in academics because it will further advance knowledge in the area of entrepreneurial development in Nigeria in general and the Nnewi town in particular. It will open opportunities for studies of contextual application of entrepreneurial concepts, theories and assist in the development of principles in the long run in the area of entrepreneurial activities in none western cultures of the world in general and the African setting in particular. The model developed will assist in the understanding the linkage between cultural and entrepreneurial development so urgently needed by the society.

Scope of the Study

The study is an attempt to investigate the nature of relationship between the influence of culture and the activities of the small manufacturers in Nnewi Town with focus on Nnewi North Local Government Area of Anambra State. Nnewi North as a local government comprises of four autonomous communities: Otolo, Uruagu, Umudim and Nnewi-Ichi. The local government is located east of Niger River, and about 22

kilometers south east of Onitsha in Anambra State. The study will also focus on the effects of Afia Olu and Ikwu Aru festival of Nnewi on the success of small and medium enterprise in Nnewi North LGA. (Afia-Olu, also known as Ifejioku) is the new yam festival which revolves around drama and rituals especially religious ones. These entrepreneurs influenced by the culture have been identified as the catalyst that lead ultimately to the dynamism observed and the propagating of sustainable SMEs sector in general and small manufacturing firms in particular in Nnewi, Anambra State Nigeria.

Review of Related Literature

From economic theory it has been established that, for any country to grow and develop all the four factors of production would have to be employed in such a way that optimal result would be achieved. This employment of the resources would have to be initiated by entrepreneurs being the forth factor who is also the manager and employer of the other resources. According to Tachibana (2014) in market economies, entrepreneurs are primary driving force of economic growth as they find and realize new businesses. From theories of development and for economic development to be attained, all sectors of the economy must be active, productive and part of the process of growth and change. In their own course of development, the developed and emerging countries have found a trend that highlights the crucial role that the Small and Medium Enterprises (SMEs) have and must continue to play. SMEs are defined differently in different countries but the bases for categorization are size of workforce, capital base and turnover. In Malaysia, Libya, UK, Australia the number of employees range from 5 to 50 for small, up to 250 for medium scale enterprises (Lucky & Olusegun, 2012). The money equivalent differs because of their being categorized in local national currencies but this can be overcome by conversion into a common denomination like Dollars. In Nigeria as compiled by Lucky and Olusegun (2012) the employee ranges from 5 and up to 50 workers, with minimum capital outlay of ₦5000. 00 and not exceeding ₦5,000,000. 00 and whose turnover not exceeding ₦ 25,000,000. 00 annually.

These SMEs have been emerging because of people now are recognized as "entrepreneurs". These types of people have the goal of setting up new businesses from the need gaps they identified in the market. They strive to fill the gaps with products from their organization. In this way new SMEs are born. They go further to ensure that the new businesses stay afloat by being creative and innovative over time. Therefore, the interest of any developing nation today is surely to maximize entrepreneurship among its people (Bula, 2012). In Nigeria, it has always been recognized that economic development requires growth with structural and technological change (Ajakaiye, 2002). These structural changes would have been accompanied by increased activities in the manufacturing sector of the economy. It

was also recognized that this change came to developed countries through the encouragement of small and medium scale businesses as it will be evident shortly.

According to Bennett (2015) culture is a concept rooted in anthropology and sociology, where it is a key term in explaining the existence and nature of social order. Selamat (2011) stated that socio-cultural environment refers to rules, shared values, beliefs, norms and code of conduct that is culturally rooted. Aluko (2003) goes further to state that ample evidence suggests that Nigerian culture in general, emphasizes low individualism and high collectivism, but specifically Igbo culture as a whole is receptive to change and is achievement oriented. In addition, the tendency towards individualism, the excessive self-seeking competition is balanced by a strong loyalty to the group. So, something(s) also are required to explain the dynamism of the Nnewi culture, that is part of the Igbo community, that may explain or would have encouraged the high entrepreneurial development rate in the area. This makes the review of relevant theoretical literature and results of empirical studies pertinent.

Theoretical Framework

Theory drives the evolution of scholarship in an academic discipline, shapes the academic discuss by delineating a field's boundaries, the core questions to be examined and preferred research methods (Zahra, 2007). According to Ejiofor (1981) there exists a gap between theory and practice in management and until this gap is addressed, management development programmes would continue to achieve only sub-optimal results. To solve problems generally, one must know the nature and what the causes of these problems are.

Lucky and Olusegun (2012) have noted that both entrepreneurship and small business have the same goals, and both have been noted for their contributions towards employment creation, economic growth, economic development and economic transformation. They have also cited numerous authors who support his assertion that factors such as: environment, culture, location, individual characteristics, firm characteristics etc all affect both SMEs and entrepreneurship development. So, a situation where the entrepreneur is an owner of a small business then one would be considering the same phenomenon. So not much marked distinct discussions of either will be embarked upon and note must be taken that the discussions that follow assume that the SMEs in this paper refer to a business owner who is engaged in both entrepreneurship and a small business.

In entrepreneurial studies two approaches have been used to carry out research. The first is the trait-based approach and the second is the Cognitive approach. Under the first approach, McClelland (1965) had laid the background works for the discussion on entrepreneurship traits. It was Brochhaus and Horitz (1986) that narrowed the

number of traits to four major personality traits that can be ascribable to an individual. Hossain (2006). further itemized and enlarged these four traits into more as follows:

1) Self-confidence; Confidence, independence, individuality, optimism.

2) Task-result oriented; Need for achievement, profit-oriented, persistance, perseverance, determination, hard work, drive, energy, and initiatives.

3) Risk-taker Risk-taking ability, likes challenges.

4) Leadership Leadership Behavior, Gets along with others, Responsive to suggestions, criticisms.

5) Originality Innovative, Creative, Flexible (openness of mind), Resourceful, Versatile, Knowledgeable.

6) Future-oriented Foresight, Perceptive

Singh and Rahman (2013) revealed that there is a significant relationship between successful entrepreneurs' score on trait variables and their level of success. However, warned that researchers have to be careful about making generalizations by taking of relationship between trait variables and success of entrepreneurs as linear. In an attempt to overcome the shortcomings of trait theories, the second theory has been put forward. According to Sánchez, Carballo and Gutiérrez (2011) the cognitive approach to entrepreneurship is a response to the limitations of the trait approach and it has as its objective to explain entrepreneurial behaviour through studies of cognitive elements such as scripts, self-efficacy, cognitive styles and heuristics. Having noted this but keeping in mind the approach used by most authors, this cognitive theory approach will not be applied.

Going forward, Ejiofor (1981) has offered a list of five factors which in isolation or in combination can cause a gap between theory and practice; the nature of the theories, nature of management process, the separation of the theory from the practitioner, the motives of the practitioner and the environmental constraints. The principles are either incomplete or are at cross purposes with each other and their limitations may not be clearly stated. Then there is the problem of time and human nature which at best pitches the manager into a situation where he or she has to deal with it in futuristic terms. The next problem would stem from the fact that both the theorists (academics) and the practitioners (manager) live and work in different settings. Then there come into focus the motives and the attitude of the practitioner which stem from personal objectives. Finally, and this is the one this study is strongly concerned with, is that even with the best of motives and the willingness to apply the theories, the environmental factors may still hinder the application or distort the outcome adversely. This brings us to the issue of contextual theories which advocate giving attention to the background and circumstances of the practitioner before

theories are applied or even postulated and made principles (not laws). In fact, Greenberg et al. (2011) have stated that the lack of deep understanding of social context and perspective is at the heart of recent criticisms of management education where economic and profit maximization take centre stage.

Abimbola, *et al* (2011) has stated that the argument in sociology that individuals affect and are affected by the social structure has been taken to bear on the study of entrepreneurship. Zahra, (2007) has postulated that theory-based research can contribute greatly to our understanding of complex entrepreneurial phenomena and the challenges that face entrepreneurs in their efforts to conceive develop and manage their new organizations. According to Mahmood, Basharat and Bashir (2012) leadership is a process in which one individual influence others toward the attainment of group/organizational goals. Mahmood, Basharat and Bashir (2012) have also differentiated management as a function (planning, organizing, controlling, directing, leading, monitoring, staffing, communicating and coordinating etc.) to carry out and leadership which is relationship (selecting talent, motivating, coaching and building trust etc.) between leader and followers. Furthermore, considering the theories connected with entrepreneurship, Greenberg, Mckone-Sweet, and Wilson (2011), have stated that at the heart of entrepreneurial leadership resides a person's deep understanding of him or herself, the context in which activities of that individual are undertaken as well as the network of relationships of that person. Zahra (2007) has pointed out that a mismatch of theory and context can result in false leads and inconclusive findings which may lead in turn to encourage authors to question the utility of their chosen theories, and lead to call for further studies and invite confusion about the relationships of interest.

Empirical Review

In terms of SMEs, according to QECD, (2000), they make-up the largest proportion of business and play tremendous roles in wealth creation, employment generation, provision of goods and services, creating a better standard of living in addition to contributing to a large extent to the Gross domestic products of countries that encourage them to start and grow. Specifically, in Ireland, Korea, Japan, USA, Germany, UK, France, Mexico, the percentage of all the enterprises that were SMEs ranged approximately between 80% for the US to 99% for UK and Mexico between the years 2004 to 2006 (Lunati, 2010). These countries mentioned here are either presently ranked developed or emerging countries. In Nigeria,

Djankov et al, (2007) have found that family characteristics have the strongest influence on becoming an entrepreneur. In contrast, success as an entrepreneur is primarily determined by the individual's smartness and higher education in the family. Entrepreneurs are not more self-confident than non-entrepreneurs; and

overconfidence is bad for business success. Michalewska- Pawlak (2010) carried out a unique study in none socialist Poland which restored private ownership and free market mechanism. This could be said to be a study of a 'virgin society' starting to learn from the scratch. This study explored social and cultural context of entrepreneurship development in polish rural areas, its system of values, morality, attitudes and social influence that can stimulate or limit rural entrepreneurship and observed that rural entrepreneurship in Poland is strongly supported by family and neighbourhood relationships and the peasant tradition of "working in private farm" learned from many years of ownership and farm management. Their finding supports the view that culture, in particular their communal ownership mentality has affected the rate of entrepreneurial development. Also, the results of the study by Okafor, and Mordi, (2010) show that entrepreneurial development can be linked with the psychological traits of an entrepreneur who is subject to environmental factors that affect the enterprise. Another relevant study by Forkuoh, Appienti, and Osei (2012), in the African context, that is, in Ghana went as far as identifying negative and positive cultural influences and recommending modernization of traditional cultural practices that have negative impact on businesses to meet the current trend in the international business communities, and also help document and improve those practices that have positive impact on small businesses.

However, from recent empirical studies, it has been observed by several academics that the environment that the entrepreneurial activity is to occur in none European environments has been assumed and treated in practice as those conditions found in developed European countries. This runs contrary to the warning given by Zahra (2007). That is why, according to Sonowal, (2008) the word `entrepreneur' has not been generally used in the study of tribal and peasant societies mainly because the concept itself arose in the context of western, capitalist and industrialized economy. This carried the implied "fact" that entrepreneurs never existed in cultures other than the developed European countries. So in the context of the African setting of this study's interest, Nnewi; Madichie, Nkamnebe and Idemobi (2008) have identified critical aspects of Nnewi cultural traits that propels *zeal and managerial performance*. These they have itemized as individualism, innovativeness, trust, intimacy and openness in the workplace, submissive apprenticeship as well perseverance. Also, they suggested that the industrious cultural attributes found in the Nnewi community amongst its people were directly ascribable to the town's two major festivals the "Afia Olu" and "Ikwu Aru" festivals. Djankov et al, (2007) have found that family characteristics have the strongest influence on becoming an entrepreneur. In contrast, success as an entrepreneur is primarily determined by the individual's smartness and higher education in the family. The study by Debanjan and Niladri (2015) aimed to measure micro entrepreneurial success in terms of socio-cultural and skill related factors of Indian micro entrepreneurs using a set of four determinants like- education, prior experience, communication and leadership skills

of micro-entrepreneurs The result of that study suggests that entrepreneurs having higher education, effective communication skill, and possessing leadership skill are likely to become more successful in running their enterprise. However, these four determinants have been found to have differing levels of influence on the entrepreneurial success. To proceed in this study and keeping in mind the importance of the four factors and the need to be able to apply these in the context of this present study we will deeply lean on the study of Debanjan and Niladri (2015). In line with this we review the four factors as defined by them.

Education: According to Debanjan and Niladri (2015) the education of an entrepreneur has been used in a number of previous studies as one of the key factors that affect firm's performance and success and furthermore that education helps entrepreneurs making good judgments, best use of information, exploit opportunities well; all contributing to firm growth, development and success.

Prior Working Experience: Experience gives specific knowledge and skills to entrepreneurs. Experience from past and present work can offer both general and specific knowledge and skills, including management, teamwork, sales, cooperation and industrialization. (Debanjan & Niladri, 2015)

Leadership Skill: Leadership is often defined as a process through which power is used to direct and coordinate the activities of group members to meet a goal (Yukl & Van, 1992; Yukl, 2006). Leadership essentially involves a relationship of mutual loyalty between a leader and a group of followers in reaching of a collective goal. (Debanjan & Niladri, 2015)

Communication Skill: according to Debanjan and Niladri (2015) communication is also viewed as an all-important skill of entrepreneurs. According to Montagno *et al.* (1986), suggested that communication concept must be regarded as a multidimensional which has some aspects that are regarded as important like an entrepreneur should be able to discuss, explain, market and sell their good or service. It is also important to be able to interact effectively.

The next task is to find a measure of success. Masuo et al. (2001) said that small business success is normally specified in terms of economic or financial measures which include return on assets, profits, sales, employees and survival rates; and no financial measures, such as customer satisfaction, personal development and personal realization. This study will use one of these measures of success which is survival rate.

In terms of SMEs, according to QECD, (2000), they make-up the largest proportion of business and play tremendous roles in wealth creation, employment generation, provision of goods and services, creating a better standard of living in addition to contributing to a large extent to the Gross domestic products of countries that encourage them to start and grow. Specifically, in Ireland, Korea, Japan, USA,

Germany, UK, France, Mexico, the percentage of all the enterprises that were SMEs ranged approximately between 80% for the US to 99% for UK and Mexico between the years 2004 to 2006 (Lunati, 2010). These countries mentioned here are either presently ranked developed or emerging countries. In Nigeria,

Conceptual Framework

Based on the foregoing the following diagram was developed in order to assist the researchers in getting a clear picture of the variables concerned and the actions required.
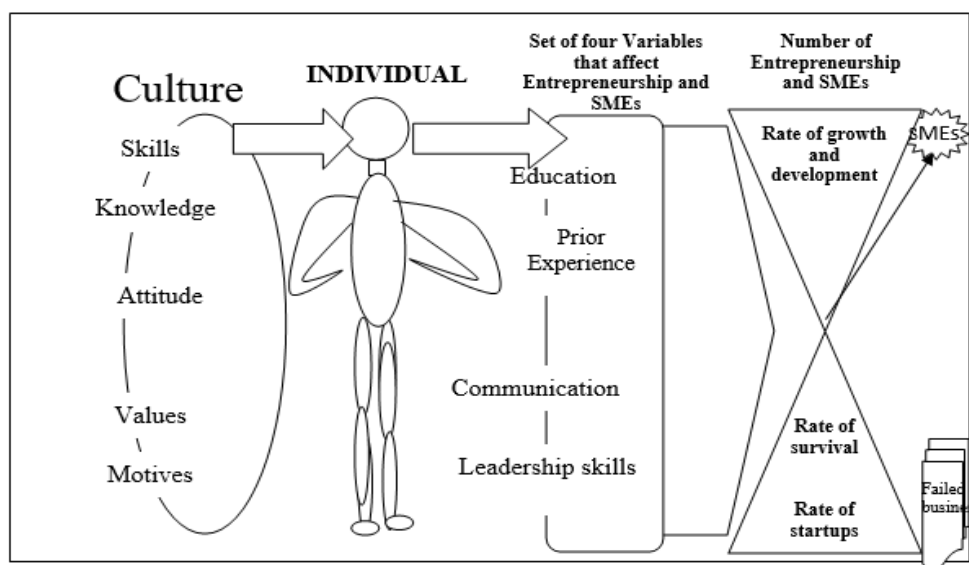

Figure 1. Model of cultural influences, the individual and the entrepreneurial/SMEs environment

Source: Adapted and modified using Aderonke, J. (2014) Culture determinants and family business succession in Jos metropolis, Plateau State Nigeria, Journal of Emerging Trends in Economics and Management Sciences (JETEMS) 5(5):379-390.

The figure depicts the flow of cultural influences that shape the entrepreneur and which in turn makes available the entrepreneurs education, prior experience, ability to communicate and the entrepreneurial leadership qualities that go to impact on SMEs. If the influences are conducive the SMEs will all things being equal increase and become sustainable, while if these influences are not conducive then business failures will tend to be the order of the day! The study can therefore proceed from here.

Methodology

Data and Methodology

The population for this study includes the SMEs registered within Nnewi North LGA and they number 130. The simple random sampling procedure was adopted to select the microenterprises for collecting. A sample size of 98 of the finite population of 130 microenterprises was computed at 5% confidence interval, allowing 95% level of precision with the use of Taro Yamane statistical method of sample size determination. A primary survey was conducted by administering a questionnaire to the owners of the sample enterprises 98 in Nnewi by randomly selecting them from the list of registered companies. The questionnaire was administered to them through face to-face interviews after initial visits and taking prior appointments for specific days and times. The researchers also witnessed the Afiolu festival of 2015 to aid understanding of the phenomenon first hand.

Survey Instrument

A questionnaire was constructed to meet the research objectives addressed in the study. The questionnaire contains 35 questions on demographic, socio-cultural and entrepreneurial trait related issues. A set of four dimensions, namely, education, prior experience, communication and leadership skills of an entrepreneur were identified from prior research works and preliminary interviews with experts these were made prominent features of the questionnaire. The response to each question was supposed to reflect the degree of cultural influence of a trait of an entrepreneur that lead to micro entrepreneurial success. The questions ranged from five response categories ranging from "very low" to "very high", and yes or no dichotomy type questions.

Validity was established using samples of the questionnaire developed after thorough literature review and same was issued to 8 academics from two Nigerian universities; so content validity was evaluated through qualitative judgment to ensure the validity of the developed instrument. Furthermore, the reliability of the developed questionnaire was tested by deploying the statistical test Alpha-Cronbach's coefficient to the responses received from 20 respondents selected randomly in a pilot study. The Cronbach's alpha coefficient was found to be 0. 877 (well over the. 70 minimum acceptable levels) which is considered as a good sign of reliability of the questionnaire as indicated by Santosh, (1999). The present study performs multiple regression analysis to examine the relationship between the factor's education, prior experience, communication and leadership skills and micro entrepreneurial success using specific sub variables for each of these four factors. For hypotheses HO1 to HO4 Pearsons Product Moment Correlation Coefficient was used to generate values and their significance. statistics and significance given, direction and significance level were used to determine whether a relationship exist, how significant it is and so on. SPSS was used to collate, synthesis, analysis and

interpret data generated. Test of significance at . 05 level using Pearson's values and significance were then applied to hypotheses Ho_1, Ho_2, Ho_3 and Ho_4.

The statistical tool used for the analysis in respect of Ho_5 was the conventional general linear model in the following general forms:

$Y = \alpha + \beta_1 x_1$ for simple regression case

Or

$Y = \alpha + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \ldots + \beta_n X_n + \varepsilon_1$ for the multiple regression type

The following regression model adopted from previous related studies (Forkuoh, Appienti & Osei, 2012; Okafor & Mordi, 2010; Aghajani, Shababi & Fattahi, 2012) was adapted for the purposes of this study:

$Y = \alpha + \beta_1 x_j$

Where x_j represents (Education, Prior experience; Communication and Leadership respectively)

For testing each of the Hypotheses Ho_1 through Ho4

To test Ho_5 the following model was adapted from the general form used by cited authors:

Entrepreneurial Success = $\alpha + \beta_1$ (Education) + β_2 (Prior experience) + β_3 (Communication) + β_4 (Leadership) + ε_1

Thus, the four factors - education, prior experience, communication and leadership skills are considered as independent variables and micro entrepreneurial success (measured as chance of success/survival of enterprises as dependent on a 5-point rating scale) as the dependent variable as used in a similar study by Debanjan and Niladri (2015) that is Very low(1), low(2), moderate(3), high(4), very high(5). These were used to test hypothesis Ho_5.

Presentation of Data and Analysis

Data collected in this section are presented in tables, these also formed the bases for the test of the hypotheses and discussions were then made possible. Descriptive statistics generated in the form of frequency and percentages tables in simple and cross tabulation forms, were used to analyze the quantitative information gathered from respondents for clarity and ease of use and interpretation of garnered information.

Questionnaire requested items from respondents	Responses	Frequency	percentage
Gender	Male Female	58 32	64. 4 35. 6
Educational qualification	No education WASC/Technical OND/Techinal Dip HND/BSc. or equivalent Post graduate degree	0 68 7 10 5	0 75. 6 7. 8 11. 1 5. 6
Apprenticeship undergone	Yes No	73. 3 26. 7	73. 3 26. 7
Description of business	Trading Manufacturing Construction Trading and Manufacturing	6 79 1 4	6. 7 87. 8 1. 1 4. 4
No of employee	1-5 persons Above 5 up to 10 Above 10 up to 20 Above 20 up to 50 Above 50 up to 250	68 4 1 16 1	75. 6 4. 4 1. 1 17. 8 1. 1
How many apprentices in firm	1-5 persons Above 5 to 10 Above 10 to 20 Above 20 None	54 1 29 5 1	60 1. 1 32. 2 5. 6 1. 1
Length of live of company	1-5years Above 5 up to 10 Above 10 up to 20 Above 20	32 18 28 12	35. 6 20 31. 1 13. 3
How long has entrepreneur been in business	1-5years Above 5 up to 10 Above 10 up to 20	44 12 28 6	48. 9 13. 3 31. 1 6. 7

	Above 20		
hether firm is inherited	Yes	20	22. 2
	No	70	77. 8
firm a family business	Yes	26	28. 9
	No	64	71. 1
Place of origin	Otolo	12	13. 3
	Uruagu	8	22. 2
	Umudim	42	46. 7
	Nnewi-ichi	14	15. 6
	None of the above	14	15. 6

Source: 2018 field survey

The number of questionnaires administered was 98 while 90 were recovered and accepted as valid. This represented a return rate of 92% high than the studies cited earlier and which is within acceptable rate of return. A majority were male, who were indigenes of the study area. A majority of the male were West African School certificate (WASC) holders. The females where generally more educated possessing in some instances Post graduate degrees. As can be seen below

Table 1.1. Cross Tabulation of Gender and Educational Qualification

		Educational qualification				
		WASC/Technical Certification	OND/Technical Diploma	HND/B. Sc. or Equivalent	Postgraduate degree	Total
Gender	Male	58	0	0	0	58
	Female	10	7	10	5	32
Total		68	7	10	5	90

Source: 2018 field survey

The females are more likely to be managers and entrepreneurs as the firms they own or work for are not new one and are unlikely to start new ones as can be seen from the table below

Table 1.2. Cross tabulation of gender and the age of the firm

		How long has your company been in existence?				
		1-5 years	Above 5 up to 10	Above 10 up to 20	Above 20	Total
Gender	Male	32	18	8	0	58
	Female	0	0	20	12	32
Total		32	18	28	12	90

Source: 2018 field survey

The table1. 3: below contains the data that were used for the test of hypotheses:

Table 1.3. Descriptive Data for Hypothesis Testing

Questionnaire requested items from respondents	Responses	Frequency	percentage
Nnewi culture ensures that a business leader has all the training that is required for success	Sd	10	11. 1
	D	8	8. 9
	U	15	16. 7
	A	41	45. 6
	SA	16	17. 8
Personal participation in Afiolu Festival	Sd	16	17. 8
	D	18	20
	U	11	12. 2
	A	25	27. 8
	SA	20	22. 2
Afiolu Festival plays a big role in my success as an SME owner	Sd	33	36. 7
	D	19	21. 1
	U	15	16. 7
	A	7	7. 8
	SA	16	17. 8
Nnewi culture ensures that an entrepreneur becomes a leader (leadership)	Sd	15	16. 7
	D	14	15. 6
	U	11	12. 2
	A	34	37. 8
	SA	16	17. 8
Communication of important theme is encouraged by	Sd	8	8. 9
	D	8	8. 9
	U	15	16. 7
	A	42	46. 7

137

Nnewi culture (communication)	SA	17	18. 9
Entrepreneurial activities are likely to be learned or educated through mentoring (Education)	Sd D U A SA	2 6 9 42 31	2. 2 10. 0 11. 1 32. 2 44. 4
The prior knowledge of and interaction with entrepreneurs in Nnewi contribute to success (prioir Knowledge)	Sd D U A SA	2 14 13 35 26	2. 2 15. 6 14. 4 38. 9 28. 9

Source: 2018 field survey

The independent variables that were previously obtained from empirical studies were leadership, communication, education, and prior knowledge; while the dependent variable entrepreneurial success was represented by the length of time the business had been in existence. These are contained in the table 1. 3 above These were used to run regression analysis with the aim of obtaining a linear model for all the variables with the aim of infusing all in one equation to determine the effects of combining all the independent variables on the dependent variable and also look at the effects of each factor on the success measure and establishing if there were relationships, the type, magnitude and direction of those relationships between the dependent variable and the four independent variables. Also, ANOVA was performed to further assist in verifying the results of the regression analysis. The tables below were obtained from the analysis:

Table 1.4. Cross tabulation of Participation in Festival and the Four Factors

Variables		Educational qualification	The prior knowledge	Communication	Leadership
I participate in or observe the Afiolu festival every year	Pearson Correlation	-. 735**	. 924**	. 910**	. 960**
	Sig. (2-tailed)	. 000	. 000	. 000	. 000
	N =90				

The analysed data in table 1. 4 enabled the Ho_1, Ho_2, Ho_3 and Ho_4 to be tested. The table is displaying the outcomes of the Pearson's Product Moment correlation and its coefficients and their significances. The R lies between -1: 0: 1. The further away

from zero the more correlated they are or the stronger the relationship. Negative or positive signs on the value would tell the direction of that relationship so.

Form the table 1. 4 Ho_1, e Value -. 735 indicates that there is a strong negative relationship between the variables and in this case the significance . 05 with the sig computed at . 000 (i. e > . 05) the relationship is significant. Therefore, we can safely say that there is s negative significant relationship between cultural influences on the education variable. We reject the null hypothesis and state that there is a significant relationship between the Afia Olu, Ikwu Aru, other festival of Nnewi and the education factor of entrepreneurs of SMEs. Next, we test Ho_1 and again form the table 1. 4, Value . 924 indicates that there is a strong positive relationship between the variables and in this case at the significance level of . 05 with the sig computed at . 000 (i. e > . 05 or considering that it was a two tailed test it is still significant) the relationship is significant. Therefore, we can safely say that there is positive significant relationship between cultural influences on the prior knowledge variable. We reject the null hypothesis and state that there is a significant relationship between the Afia Olu, Ikwu Aru, other festival of Nnewi and the prioir knowledge factor of entrepreneurs of SMEs. The value for the other two variable are the same as that of prior knowledge and we can state thus for each of the remaining hypotheses.

Ho_1 We reject the null hypothesis and state that there is a significant relationship between the Afia Olu, Ikwu Aru, other festival of Nnewi and the education factor of entrepreneurs of SMEs;

Ho_2 Reject the null hypothesis and state that there is a significant positive relationship between cultural influences and the prior knowledge of the entrepreneurs in SME in Nnewi;

Ho_3 Reject the null hypothesis and state that there is a significant positive relationship between cultural influences and the communication factor of the entrepreneurs in SME in Nnewi;

Ho_4 Reject the null hypothesis and state that there is a significant positive relationship between cultural influences and the leadership factor of the entrepreneurs in SME in Nnewi.

The next was to to test the fifth hypothesis Ho_5 and it was conducted as follows:

Testing of hypothesis: Ho_5. The following tables were used and were derived from data analysed from descriptive tables1. 0 and 1. 3 above, this resulted in the following tables1. 5, 1. 6 and 1. 7 below

Table 1. 5. ANOVAb Model and Variables F-vales and Significance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	80. 882	4	20. 220	115. 037	. 000[a]
	Residual	14. 941	85	. 176		
	Total	95. 822	89			

a.   Predictors: (constant), leadership, communication, education , prior knowledge

b.   Dependent variable: How long have been business been in existence?

Table 1. 6. Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.919[a]	.844	.837	.419	.844	115.037	4	85	.000	.400

a.   Predictors: (constant), leadership, communication, education, prior knowledge

b.   Dependent variable: How long have been business been in existence?

Table 1. 7. Coefficients First itireation

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	4.529	.220		20.630	.000	4.092	4.965		
	√Leadership	-.795	.119	-1.048	-6.679	.000	-1.031	-.558	.075	13.419
	√Communication	.268	.148	.299	1.803	.075	-.027	.563	.067	15.023
	√ Education	-.364	.131	-.336	-2.788	.007	-.623	-.104	.126	→7.928
	Prior knowledge	.138	.160	.146	.861	.392	-.181	.456	.063	x15.782

a. Dependent variable: How long has business been in existence?

The multiple R value was . 919 that is 91. 9%, furthermore F-value of 115. 037 with associated at significance level was . 000. This result was indicative of a good fit of the data into the linear regression model. The F- value was significant then it means that there is is a statistical linear relationship between the predictors and the dependent variable. From the table of coefficients the following linear model is represented thus

Entrepreneurial Success = 4. 529 + (-. 364) Education + . 138 (Prior experience) + . 268 (Communication) + (-795)(Leadership) + ε1equation 1

It is also worthy of note that all the B coefficients had negative values except communication. However, going forward with this equation would be misleading and misrepresentation of the true relationship because the VIF and the tolerance are important consideration in order to eliminate double counter and loading of factor in

other words to avoid multi-collinearity. The rule according to Burns and Burns (2002) states that a VIF of 10 and above is indicative of possible existence of multi-collinearity and looking at the table 4 above only one of the factors pass this test. The solution would be to go through a process of elimination of one of the variables and run the regression again until all factors have met this criterion. In this case from table 1. 7 the outgoing variable is prior knowledge with the highest VIF value. The following equations were the result of this iteration process and the final equation represents the nearest to meeting the criterion and therefore was adopted.

From Iteration number 2

Entrepreneurial Success = 4. 567 + (-. 736) Education + . . 280(Communication) + (-. 303)Education + ε ---equation 2

From Iteration number 3

Entrepreneurial Success = 4. 563 + (-. 589) leadership + (-. 172)Education + ε1 ----equation 3

The last equation and its analysis was a product of the following tables obtained from

Table 1.8. Model: Summary^b for 3rd Iteration

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics | | | | | Durbin-Watson |
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.914^a	.836	.832	.425	.836	221.903	2	87	.000	.287

Table 1.9. ANOVA^b for Final Iteration

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	80. 117	2	40. 058	221. 903	. 000^a
	Residual	15. 705	87	. 181		
	Total	95. 822	89			

Table 1.10. Coefficients for Last Iteration

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | 95% Confidence Interval for B | | Collinearity Statistics | |
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	4.563	.218		20.935	.000	4.129	4.996		
	Leadership	-.589	.061	-.777	-9.725	.000	-.710	-.469	.295	3.387
	Education	-.172	.086	-.159	-1.990	.050	-.344	.000	.295	3.387

a. Dependent Variable: How long have been in business?

Form table 1. 8 The multiple R value was . 914 that is 91. 4% of the changes in the dependent variable could be attributable to the two independent variables, not too

different from the first case, furthermore F-value of 221. 903 with associated significance at . 05 level was fsig . 000. This result was indicative of a good fit of the data also into the final linear regression model. The F- value was significant therefore it indicates that there exists a statistical linear relationship between the two predictors and the dependent variable. The coefficients were -. 589 and -172 for leadership and education respectively. The negative signs on both variables indicated negative relationships. Therefore we reject the null hypothesis that stated that it is not possible to construct a model to link cultural influences and the entrepreneurial activities of Small and Medium Manufacturing Enterprises in Nnewi and state that

Ho_5 That it is possible to construct a model to link cultural influences and the entrepreneurial activities of Small and Medium Manufacturing Enterprises in Nnewi

Though this model would in fact exclude two of the variables earlier included because of double counting that would occur if this were to be ignored. This led us to the next section which is the discussion of the findings.

Discussion

This section must be started by pointing out the revelations of the analysis of data and the test of hypothesis Ho_5. The first striking thing is that cultural influences are at work on the entrepreneur in Nnewi just as they are in other places, some positive and some negative. The result of this study are in conformity with the other studies like that of Aderonke (2014) in respect of culture determinants and family business succession, Okafor and Mordi, (2010) in Nigeria Djankov et al, (2007) quest for evidence in Brazil about what makes a Successful Entrepreneur, Michalewska-Pawlak (2012) in Poland, Forkuoh, Appienti, and Osei (2012) and their own quest in Ghana, The Hypothesis Ho_1 through Ho_4 had all shown that a positive or a negative relationship could exist. These go to support the studies like those of Madichie, Nkamnebe and Idemobi (2008) that have in our own context tried to establish that cultural environment and factors come to play in African context. This is not only to know that they are there but to also encourage elimination of "bad" cultural environments and factors but to take maximum advantage of the areas of the cultural influences that can yield positive results for the African countries, in general and Nigeria in particular.

However in the case of Nnewi and this is very interesting when the same variables were put together in order to obtain a predictive model using the general linear model and remodeling it to suit the context of the study, it became apparent with the use of methods of eliminating loading and double counting, that two of the four factors that were put forward as determinants before the model could be complete had to be removed using an iterative process as prescribed by Burns and Burns (2002). All the variables were significantly related to the dependent variable (success of the

entrepreneur) from the Pearson product method coefficients obtained. When the results so obtained are applied as a result of the strength of the relationships one would have ordinarily come to the conclusion that: that was that. However, when the multiple regression was used on the same data to test hypothesis Ho_5 it was found that strong negative correlations exists between all the variables, some in large magnitudes and others to lesser degrees. It was evident that VIF values obtained were well over the maximum of 10 except one of the variables. This gave some variables the potential of either boosting the ability of the influence of one of the other variables to be more negative, positive or altogether become insignificant. This points to the need for caution therefore at this stage of the development of entrepreneurship in Nigeria and the African continent and developing countries while trying to establish firm relationship(s) between cultural influences and the entrepreneur. Clearly in the context of Nnewi it could be said that two variables are affected by the Nnewi culture namely the leadership and education and are the most important, however the two factors that determine the success of the entrepreneur are negatively related to the cultural influences. At first sight this would seem bad but consider the data from the presentation in table 1. 1 Nnewi SMS's men surveyed on the average did not go beyond WASC levels (100% of those surveyed surprisingly! Contrast this with a more evenly skewed and spread distribution in terms of education and this might explain the negative relations that education and success have and consider the position of the same men to apprenticeship as a form of education. On the other hand, if the emphasis is on empowering the females the possibility is high that they will be more receptive to formal education and their dedicated linear model could as well post a positive and significant relationship in contrast to that of the men. If one takes a look at the removal of leadership from the equation one would be tempted to say that it is out of the norm, again the Nnewi people are after all Igbo people and the Igbos are known with adage, Igbo enwero eze- meaning that the Igbo-man has or recognizes no king, the Igbos are known to be individualistic in business and this removal could rightly be said to be in order! The Nnewi man is ready to do "boy" that is, go under tutelage but will take to freedom when enough knowledge is garnered at the slightest opportunity. That is why again the second excluded variable Prior Knowledge comes into play, this variable could in effect on the part of the Nnewi entrepreneur have been subsumed under apprenticeship and rightly so they value mentoring as the most preferred method and therefore prior knowledge would have been double counting for the Nnewi entrepreneur. Had it been that the level of education had been skewed like that of the women maybe prior knowledge might have been more important.

As a way of summary, this study has more than anything else pointed out the need for careful and systematic handling of issues relating to entrepreneurs and entrepreneurship in the Nigerian context. The context policies and principles are developed, and the context they are to be applied must be paramount in the minds of

whoever is thrust with such responsibility. The research also shows that what may have been conceived as a simple and clearly understood phenomenon may be more complex than what is outwardly expressed. All said and done this paper points to a model that put two important variables that can be influenced over time to increase and sustain the gains from the Nnewi culture.

Conclusion

This study set out to carry out an assessment of cultural influences on entrepreneurial activities of small manufacturing firms in Nnewi Anambra State of Nigeria, this was in the aim of throwing more light on the Nnewi phenomenon as it pertains to their success story in the small manufacturing enterprises in particular and small and medium enterprises in general. In the course of this study the following were found:

1. In general, cultural influences do have significant and great impact on the factors that determine the ability of entrepreneurs in Nnewi to be successful. However, taken one by one the effects can be positive and when taken together may all turn negative.

2. The negative nature of each relationship when taken together seems to be the catalyst that drives the Nnewi entrepreneurial spirit and should not be misconstrued as unconstructive.

3. There is need to emphasis the educational and leadership factors by encouraging the age long individuality of the Nnewi man who is primarily an igbo man who likes independence and deemphasises the leadership factor which seems to set them aside from other Nigerian entrepreneurs in manufacturing at the small and medium level. The 'Igbo ewero eze' concept should be encouraged amongst them however the apprenticeship system is the driving force for male entrepreneurs who do not go beyond WASC and technical certificate level. Refer to the study and recommendations of Aluko (2003) in this respect.

4. The females are not encouraged by the Nnewi culture in the SME business however they are succeeding just like their male counterparts. They on the average are more educated than their male counterparts because for them to succeed they need more than the men. At present majority do not go through mentoring and that is why they rely on formal education to be able to compete favourably with their male counterparts

5. All four factors that ensure success by the entrepreneur in Nnewi proved to have strong relationships to the Nnewi cultural influences. Using the Pearson's product moment correlation coefficient education as a factor with --. 735 and a significance of . 000 was found to be strongly and negatively related to the Nnewi cultural influences. The other factors were also strongly influenced by the Nnewi cultural factors but this time positively; these are Prior Knowledge (. 924, sig . 000),

Communication (. 910, sig . 000) and leadership (. 960, sig. 000). The situation is to be taken that the relationship is a complex one that still needs to be explored further possibly one factor at a time broken into more sub factors and re-examined. The present study and those cited are just surfing at the top. There needs to be a deepening of the efforts in the future.

6. Also, it was possible to build a general linear model with leadership and education as the independent variables, while entrepreneurial success measured by length of existence of the Manufacturing as the dependent variable.

Generally, just as other cited authors have sounded a note of warning, the significance of the relationship between factors of entrepreneurial success and the cultural environment should be applied with caution. The entrepreneurial research in Nigeria is still getting up to go and there is still a lot of work that need to be done to ensure that what is applied in our African context is suitable for that context.

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Public Debt Sustainability in Nigeria after the Exit from Paris Club: The Role of Structural Breaks

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Abstract: The aim of this paper is to provide new evidence on public debt sustainability in Nigeria after the exit from Paris Club. The study contributes to the vast amount of literature by accounting for the role of structural breaks in the series. Data between 1988 and 2016 were collected and the modified Augmented Dickey-Fuller unit root test was used to account for the effect of structural breaks in the series. In addition, the Autoregressive Distributed Lag (ARDL) fiscal reaction function Bounds Cointegration technique was used to estimate the short and long run function of public debt sustainability in Nigeria. The results obtained show that fiscal actions by the Nigerian government are not sustainable. While we observed that government revenue has been declining over the years, its fiscal spending keeps rising. Essentially, we find a wide gap between government revenue and its fiscal spending. As a result, government has not been able to meet up with its fiscal obligations over the years. Therefore, we recommend that government should reduce its overdependence on crude oil revenue, and harness other potential revenue generating commodities such as the agricultural sectors in order to reduce its debt burden.

Keywords: Fiscal Sustainability; Public Debt Sustainability; Structural Breaks

JEL Classification: H60; H62; H63

1. Introduction

The study of fiscal sustainability in Nigeria, has generated serious debate among intellectuals in the field of public sector economics[4]. While most of these studies argued that fiscal sustainability in Nigeria is unsustainable[5] some other studies believed that it is sustainable[6]. Although, quite a number of these studies have

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[4] See for example the relevant literatures in the last decade or so, (Folorunsho & Folade, 2013; Ayinde, 2014; Oyeleke & Ajilore, 2014; Akanbi, 2015; Jubrilla, 2015; Otonne & Oyenuga, 2019).
[5] See (Ayinde, 2014; Oyeleke & Ajilore, 2014; Akanbi, 2015; Jubrilla, 2015; Otonne & Oyenuga, 2019)
[6] See (Folorunsho & Folade, 2013).

examined the issue of fiscal sustainability before exit from Paris Club, only very few of them have explored fiscal sustainability after the exit from Paris Club. Another common limitation of these studies is that most of them ignored the role of structural breaks in fiscal sustainability. The only few exceptions on this regard are Jubrilla (2015); and Otonne and Oyenuga (2019).

In this paper, we advance the body of literature on public debt sustainability in Nigeria by offering the following contributions. First, we examined the debt sustainability in Nigeria after the exit from Paris Club which has been largely ignored in the Nigerian public sector economics literature. Most studies in the literature focused on debt sustainability before the Paris club and hence, the need to explore debt sustainability after the exit from Paris club in order to broaden the body of knowledge and literature on the subject as it concerns Nigeria. Second, we account for the role of structural breaks which has been neglected by past studies with the exception of Jubrilla (2015); and Otonne & Oyenuga, (2019) which investigated the debt threshold and sustainability of public debt in Nigeria. However, this study differs from the aforementioned studies in that we examined debt sustainability using the Bonn (2007) fiscal reaction function approach as against the unit root and co-integration approach predominantly used in the literature.

Before the exit of Nigeria from the Paris Club debt, some of the debt and fiscal sustainability indicators were not sustainable. This was because the indicators were far above the internationally accepted standard set by the International Monetary Fund (IMF) and the World Bank (Omotosho et al. , 2016). The implication of this, was that fiscal policy was unsustainable, and therefore, necessitated the filing for debt relief by the Nigerian government in 2005. Examining the trend of public debt in Nigeria, before the exit from the Paris Club, specifically in the 1970s, Onuoha (2008) found it to be generally insignificant and negligible. The gap between government revenue and fiscal expenditure was very narrow during the period. The oil boom of the 70s contributed to narrowing this gap and hence, the Nigerian government at that time had enough revenue to embark on reckless expenditure. In 1981, the oil export earnings crashed depleting the external reserve. However, government spending kept rising, and was largely financed by external borrowings. The interest payment on the borrowed funds kept rising geometrically and Nigeria was plunged into a severe debt crisis (Rieffel, 2005; Onouha, 2008; Otonne & Oyenuga, 2019). As a result of the accumulation of arrears, constant fall in oil revenue and rising public debt servicing, the Nigerian government approached the Paris Club for debt rescheduling on four different occasions; 1986, 1989, 1991 and 2000 (Rieffel, 2005; Onuoha, 2008). After the payment made to Paris Club in 1992, the subsequent payments declined drastically. By 2005, over 86% of the total external debt was owed to the Paris club, which comprises the debt; interest arrears on the debt; interest charged on the interest arrears; as well as the penalty charges on the debt, since no repayment was made since 1992. This implies that the debt owed

to Paris Club by the Nigerian government during the period was not as a result of new borrowings but was as a result of its inability to service its debt as and when due (Rieffel, 2005). As a result, the financial resources that were meant for developmental purposes, were channeled into servicing debt (Otonne & Oyenuga, 2019).

After the debt relief, with the third phase of the exit structure completed, both the external debt and public debt dropped drastically owing majorly to the fall in external debt observed and compelled by the Paris Club debts becoming zero (Otonne & Oyenuga, 2019). Moreover, the fall in the global crude oil price in late 2014 starved the Nigerian government the necessary funds to finance its budget. Therefore, borrowing funds from both the domestic and foreign markets was the best option to finance its growing (DMO, 2012; Omotosho et al. , 2016). The volatility in the oil price, as well as the foreign reserve depletion have raised a lot of questions on the ability of the Nigerian Government to finance its inter-temporal budget without external or internal borrowings. This necessitated the re-examination of fiscal sustainability issue in Nigeria.

Furthermore, studies in the past have shown that time series data on fiscal variables overtime exhibit structural breaks from time to time and therefore, the inclusion of structural breaks is very essential in this paper as this ma give us a better and consistent results (Tanner & Liu, 1994; Cuddington, 1996). For instance, Tanner and Liu (1994) revisited the work of Hakkio and Rush (1991) by adding level shift dummy variables for post 1982:1 to the co-integration relationship involving tax revenue and government expenditure (interest inclusive). They argued for the inclusion of dummy to account for structural breaks in fiscal variables in the United States (U. S.) during the period under review. According to Hakkio and Rush (1991) conclusion on the U. S. fiscal sustainability are misleading when structural breaks are not captured. This stress the importance of structural breaks in fiscal sustainability which should not be ignored. Therefore, this study will bridge this gap by accounting for the role of structural break (s) in debt sustainability in Nigeria after the exit from Paris Club. In addition, this paper adopted the fiscal reaction function recently developed by Bohn (2007) in the phase of the resurgence of fiscal sustainability issues globally. This function allows for the substitution of the standard stationarity and co-integration test used primarily under the present value constraints.

The rest of the paper is organized as follows: Section two discusses the time path of some fiscal sustainability indicators. Section three review the relevant literatures. Section four provides the theoretical frame work and methodology. Section five contains the data analysis and the discussion of the findings. Section six concludes the paper with relevant policy recommendations.

2. Time Path of Some Fiscal Sustainability Indicators

Figure 1 and 2 below shows the trend of external, domestic and public debt as a percentage of GDP, expenditure, revenue and primary balance before and after the exit from Paris Club. While examining Nigeria's public debt profile, Omotosho et al. , (2016) concluded that debt indicators in Nigeria are not sustainable. This however, is a necessary condition but not sufficient enough for fiscal unsustainability. This is because, a debt profile maybe rising, while its ratio to GDP is falling. When this occur, we may conclude that the growth of the economy is greater than the growth of the interest payment on debt. The observation of figure 1 and 2 shows that between 1998 and 2000, Nigeria's debt was strongly unsustainable. , The percentage of public debt profile to GDP, shows an increasing trend above the international and domestic sustainability threshold (Otonne & Oyenuga, 2019). This implies that the interest payment on public debt is greater than the growth of the economy. Between 2000 and 2005, the debt profile in Nigeria was weakly sustainable. However, between 2005 and 2007 following the period immediately after debt relief, it was strongly sustainable. Though an increase in debt profile was observed, yet, the growth rate of the economy was more than the growth of interest payment on debt hence a decreasing trend of the debt profile as a percentage of GDP. This is shown by the downward trend of the debt profile and the debt profile as a percentage of GDP. While between 2008 and 2016 the public debt in Nigeria was strongly unsustainable as increasing trend of the debt profile as a percentage of GDP was observed. This implies that the growth of the economy was less than the growth of the interest payment, which confirms that the current fiscal stance of the Nigerian government is strongly unsustainable.
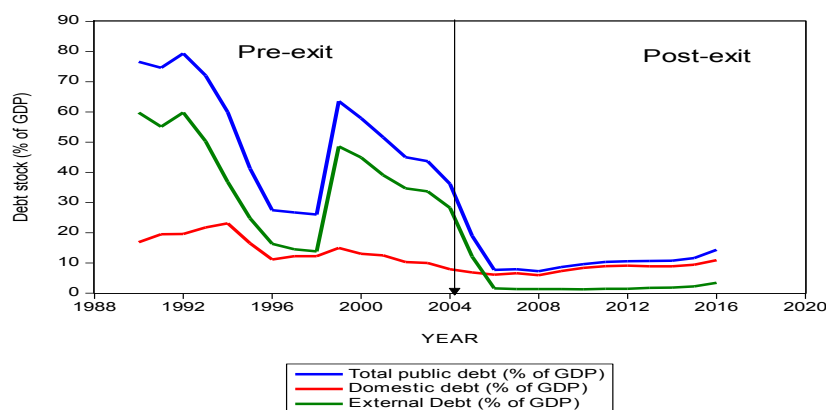

Figure 1. Trend of Nigeria's External, Domestic and Total Public Debt profile as % of GDP (1990-2016)

Source: Central Bank of Nigeria (CBN) Statistical Bulletin, (2016)

Also, figure 2 depict the relationship between government revenue, expenditure and balance of payment. The total expenditure with interest payment stood at ₦ 60. 27 billion in 1990. In 1991 the total expenditure stood at N40. 17 billion, accounting for about 11. 2% of GDP, while debt service was about N26. 4 billion which is more than half of both the recurrent and capital expenditure put together. Following the arrears of interest payment and the huge amount paid to the Paris Club, in 1992, the amount paid to service debt dropped by about N7 billion leaving expenditure at N73. 397 billion, which is 10. 2% of GDP. In 1993 the total expenditure increased to N191. 229 billion, representing 15. 2% of GDP. This could be due to the election that ushered in the civilian government after the third military regime. Also, after the exit, there was a rise in total expenditure between 2006 and 2016.

The trend in government revenue as a percentage of GDP was less erratic than the trend in government expenditure as a percentage of GDP, in spite of an increase in government revenue during the period. Government revenue (% of GDP) shows a decreasing trend from 1990 to 1992. It decreased from 7. 63 % in 1990 to an average of 5% in 1991 and 1992. However, in 1993 the revenue increased to 10% and subsequently decreases to 8. 6% of GDP in 1995. The fluctuation continued for over a decade on an average of 7% of GDP even after the exit from the Paris club. In 2008 during the global financial crises, there was a rapid fall in revenue and this trend continued until 2010 when the revenue began to increase due to the rapid rise in oil price at the international market. However, in 2014 the revenue began to decline rapidly due to the fall in oil price thereby taking Nigeria into an economic recession in 2016. With respect to fiscal actions, we observed a continuous rise in government expenditure amidst fall in government revenue. As a result, the fiscal deficit has been on the increase since 1998.
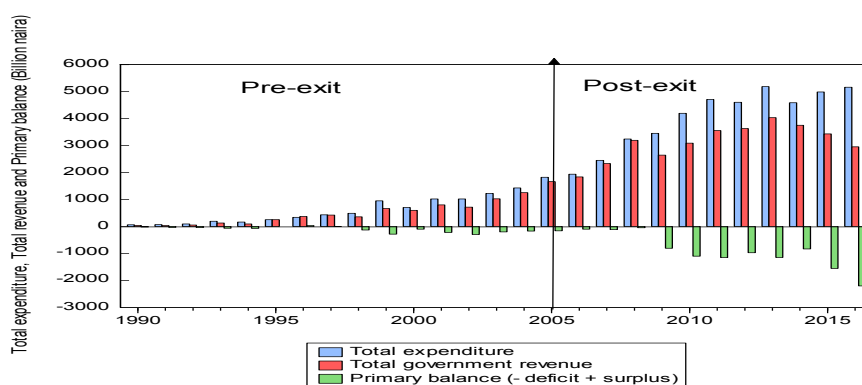

Figure 2. Government Expenditures, Revenue and Balance of Payment in Nigeria (1990-2016)

Source: Central Bank of Nigeria (CBN) Statistical Bulletin, (2016)

3. Review of Previous Literatures

Studies on debt sustainability in Nigeria, have been well examined by a substantial body of literature in public sector economics[1] and the results of their findings are mixed. For instance, while Akanbi (2015) in his study found fiscal sustainability in Nigeria to be unsustainable, Jubrilla (2015) on the other hand, found a weak fiscal sustainability in Nigeria. The study confirms a co-integration relationship between government revenue a nd expenditure and the slope of the long run elasticity is less than one, which indicates weak sustainability and the fact that the country might face debt financing problem in the long run. Also, Oyeleke and Ajilore (2014) investigated the fiscal deficit sustainability between 1980 and 2010 in Nigeria and found fiscal policy to be weakly sustainable. Further, Ayinde (2014) examine the sustainability of fiscal management in Nigeria between 1970 and 2011. Findings from the study reveal that fiscal policy is weakly sustainable when capital expenditure and revenue is considered and strongly unsustainable when recurrent expenditure and revenue is considered. The empirical result also implies that the government is faced with liquidity problem. In contrast, Folorunsho and Folade (2013) who investigated the relationship between fiscal deficit and public debt between 1970 and 2011 in Nigeria found public debt to be strongly sustainable for Nigeria.

Past studies on debt sustainability reveals that, ARDL cointegration technique has been widely used to analyze fiscal sustainability especially with regards to Nigeria[2]; very few studies in the literature employed the fiscal reaction function approach. This approach examines if government primary balance responds positively to rise in debt to GDP ratio. Other techniques that have been employed in literature include ordinary Least Square (OLS); Error Correction Model (ECM) and Autoregressive Distributed Lag (ARDL) approach. [3] However, most of these papers ignore the role of structural breaks in fiscal sustainability with the exception of Jubrilla (2015) and Otonne and Oyenuga (2019). This paper will therefore, contribute to the existing literature on public debt by accounting for the role of structural breaks in the series used.

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[1] See (Ayinde, 2014; Oyeleke & Ajilore, 2014; Akanbi, 2015; Jubrilla, 2015; Otonne & Oyenuga, 2019; Folorunsho & Folade, 2013).

[2] See for example (Wickens & Uctum, 1993; Ahmed & Rogers, 1995; Quintos, 1995; Neaime, 2004; Oshikoya & Tarawalie, 2010; Fedje, 2012).

[3] See (Bohn, 1998; Bohn, 2007; Jibao et al., 2010; Deyshappriya, 2012; Camarero et al., 2013; Folorunso & Folade, 2013; Oyeleke & Ajilore, 2014; Liliaine, 2015; Shatri & Sahrawat, 2015; Jubrilla, 2015; Shastri et al., 2017).

4. Methodology and Data Analysis

(i) Theoretical Framework

The theoretical framework for this study is rooted on the fiscal reaction function frame-work which incorporates factors that affect the government inter-temporal budget constraint used in these studies[1] According to Quintos (1995), and Cuddington, (1996) the theoretical derivation is done under the assumption of constant real returns on government debt, one period government budget constraint, and the "no ponzi game scheme". Thus, following Quintos (1995), the one period government budge constraint is stipulated below:

$$\Delta B_t = G_t^r - T_t ....(1)$$

Where,

B_t = Market value of federal government debt

G_t^r = Government expenditure,

T_t = Revenue from taxes.

The government expenditure is further expressed as:

$$G_t^r = G_t + r_t B_{t-1}...........(2)$$

Where,

$r_t B_{t-1}$ = Government interest payment expenditure

G_t = Non-interest payment expenditure.

Equation (1) holds in every period. Substituting equation (2) into (1), we obtained,

$$\Delta B_t = G_t + r_t B_{t-1} - T_t ....(3)$$

Equation (3) gives budget deficit as the rate of change of government stock of debt. The rate of change of government debt equals the difference between government revenue and expenditure, plus the real interest on its debt. With some algebraic manipulation, equation (3) becomes,

$$B_t - B_{t-1} = G_t + r_t B_{t-1} - T_t ....(4)$$

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[1] See (Hamilton & Flavin, 1985; Quintos, 1995; Cuddington, 1996; Neaime, 2004; Oshikoya & Tarawalie, 2010).

$$B_t = (G_t - T_t) + (1 + r_t)B_{t-1} ....(5)$$

Where;

$G_t - T_t$ = Primary balance (+ primary deficit and – primary surplus)

r_t = Real interest rate at time t, and it is stationary around the mean value of r.

Therefore, equation (5) becomes,

$$B_t = (G_t - T_t) + (1 + r)B_{t-1} ....(6)$$

The above expression gives the government budget constraint in level form, as against expressing the constraint as a ratio of GDP. Thus, to further capture the framework for the study, the budget constraint is expressed as a ratio of GDP. Expressing (6) as a ratio of Gross domestic product (Y_t), we have:

$$\frac{\Delta B_t}{Y_t} = \frac{(G_t - T_t)}{Y_t} + \frac{rB_{t-1}}{Y_t} ....(7)$$

Using the identity $Y_t \equiv (1 + g_t)Y_{t-1}$ on the right-hand side, equation (7) becomes,

$$\frac{B_t}{Y_t} = \frac{(G_t - T_t)}{Y_t} + \frac{(1 + r)B_{t-1}}{(1 + g)Y_{t-1}} ....(8)$$

Where;

g_t = Growth rate of GDP between t and t-1, and it revolves around its mean value.

Using the change in the debt to GDP ratio given as;

$$\Delta(\frac{B_t}{Y_t}) \equiv \frac{B_t}{Y_t} - \frac{B_{t-1}}{Y_{t-1}} ....(9)$$

Substituting equation (4. 8) into (4. 9), we have,

$$\Delta(\frac{B_t}{Y_t}) \equiv \frac{B_t}{Y_t} - \frac{B_{t-1}}{Y_{t-1}} = \frac{(G_t - T_t)}{Y_t} + \frac{(1 + r)B_{t-1}}{(1 + g)Y_{t-1}} - \frac{B_{t-1}}{Y_{t-1}} ....(10)$$

With algebraic simplification, and setting the change in debt to GDP ratio to zero, we have (10):

$$0 = \frac{(G_t - T_t)}{Y_t} + (\frac{(1 + r)}{(1 + g)} - 1)\frac{B_{t-1}}{Y_{t-1}} ....(11)$$

$$-\frac{(G_t - T_t)}{Y_t} = \frac{(r-g)B_{t-1}}{(1+g)Y_{t-1}} = \partial\frac{B_t}{Y_t}............(12)$$

Where;

$$\frac{(r-g)}{(1+g)} = \partial$$

$$Y_t \equiv (1+g_t)Y_{t-1} \text{ and}$$

$$B_t \equiv (r-g)B_{t-1}$$

Therefore,

$$-\frac{(G_t - T_t)}{Y_t} = \partial\frac{B_t}{Y_t}............(13)$$

Equation (13) above gives the mathematical expression for fiscal reaction function which explains the level of primary surplus (deficit) that would keep the debt to GDP ratio constant. This expression is what Bohn (1998) described as the fiscal reaction function which he proposed as a substitute for the standard stationarity and co-integration analysis used primarily under the present value constraints or econometric approach. Thus, equation (13) is the *fiscal reaction function.* According to this approach, sustainability is assessed when the debt to GDP ratio grows at a constant rate. That is, when the debt to GDP ratio increases, there is a corresponding increase in the primary surplus or decrease in the primary deficit to cover for the increase in debt to GDP ratio thus ensuring that the fiscal stance of the government is sustainable.

b. Model Specification

Bohn (2007) procedure allows testing if a government is implementing a corrective action to comply with the inter-temporal budget constraint by examining the relationship between budget surplus (deficit) and debt to GDP ratio. If primary surplus react positively to an increase in debt to GDP ratio, this means that the government satisfies the inter-temporal constraints, and it has taken necessary actions to maintain or ensure fiscal sustainability, and if primary surplus does not react positively to increase debt to GDP ratio, the inter-temporal budget constraint is not satisfied and that implies fiscal un-sustainability. Therefore, from equation (13), analyzing the fiscal policy reaction function requires the specification of equation (14). The dummy variables are included to capture any possible structural breaks in the series.

Thus, equation (13) can be written explicitly as;

$$\Delta SGDP_t = \partial_1 + \phi_1 DGDP_{t-1} + \phi_2 GDPGAP_{t-1} + \phi_3 EGDP_{t-1} + \partial_2 D_t + \partial_3 TB_t$$

$$+ \sum_{i=1}^{p} \beta_i \Delta SGDP_{t-i} + \sum_{j=0}^{q_1} \alpha_{j,i} \Delta DGDP_{t-j} + \sum_{k=0}^{q_2} \varphi_k \Delta GDPGAP_{t-k} + \sum_{l=0}^{q_3} \eta_l \Delta EGDP_{t-l} + \varepsilon_t \ldots \ldots \ldots (14)$$

Equation (14) can further be expressed as (15) which show the representation of the long run components in error term.

$$\Delta SGDP_t = \partial_1 + \gamma V_{t-1} + \partial_2 \Delta D_t + \partial_3 \Delta TB_t + \sum_{i=1}^{p} \beta_i \Delta SGDP_{t-i} + \sum_{j=0}^{q_1} \alpha_{j,i} \Delta DGDP_{t-j} + \sum_{k=0}^{q_2} \varphi_k \Delta GDPGAP_{t-k}$$

$$+ \sum_{l=0}^{q_3} \eta_l \Delta EGDP_{t-l} + \varepsilon_t \ldots \ldots \ldots (15)$$

Where;

$GDPGAP$ = Gross domestic product gap

$EGDP$ = Government spending ratio of GDP.

$DGDP$ = Public Debt ratio of GDP

$SGDP$ = Primary Surplus ratio of GDP

D_t = Dummy Variable for structural breaks

$$\text{Break} = \begin{cases} 1, \text{period after the breakpoint} \\ 0, \text{period before the break point} \end{cases}$$

V_{t-1} = Error correction term

TB_t = Break Date identified

$$\text{Break} = \begin{cases} 1, \text{t + TB} \\ 0, \text{for other periods} \end{cases}$$

$p \; and \; q_1 q_2 q_3$ are lag length on dependent and independent variables respectively. ε = Error term.

Furthermore, controlling for some variables helps in accounting for the potential impact of omitted variables. The study controlled for business cycle fluctuation by using Gross domestic product gap (GDPGAP) and temporary government expenditure by using the government spending as a ratio of GDP. It therefore follows from equation (13) that $\sum_{j=0}^{q_1} \alpha_{j,i}$ should be positive if fiscal policy is complying with

the inter-temporal budget constraint, while the $\sum_{k=0}^{q_2}\varphi_k, \sum_{l=0}^{q_3}\eta_l$ (Coefficient of the control variables) are expected to be negative. That is the surplus will decrease if government is spending more than necessary or if the economy is contracting.

5. Estimation and Discussion of Results

(i) Stationarity Test

Table 1 present the results of the unit root test. We test for stationarity using the conventional unit root test (Augmented Dickey Fuller (ADF) test and Philip Peron), and the modified ADF unit root test which account for structural breaks. The results of the conventional ADF and Philip Peron test show that all our variables of interest are stationary at first difference. However, using the Modified ADF test (see Table 1) we observed that all the variables are stationary at levels with the exception of SGDP and GDPGAP which are stationary at first difference. The series exhibits trend break (an unexpected and sudden shift in trend) in the second quarter of 2008 and fourth quarter of 2010, though the break is only significant in 2010. Also, DGDP is stationary at level, with a structural break in the third quarter of 2015. This means that the variable in its original form without differencing has a constant mean and variance overtime when structural breaks is accounted for. GDPGAP exhibits mean reversion (stationary) at first difference and a shift in intercept and trend break in first quarter of 2009. Further, EGDP is stationary at levels, and exhibits a trend break in the third quarter of 2008.

Table 1. Unit Root and Stationarity Tests

Unit Roots with Structural Breaks (Modified ADF Test)						
	Level			First Difference		
Variable	*Break Date*	*T. stat*	*P-value*	*Break Date*	*T-stat*	*P-value*
SGDP	2008Q2	-2. 977965[b]	0. 9178	2010Q4	-6. 736986[***b]	< 0. 01
GDPGAP	2010Q4	-2. 881579[b]	0. 9413	2009Q1	-7. 508337[***a]	< 0. 01
EGDP	2008Q2	-5. 383998[***c]	< 0. 01	2008Q3	-5. 750329[***a]	< 0. 01
DGDP	2015Q3	-5. 391261[***c]	< 0. 01	2007Q2	-6. 839209[***c]	< 0. 01

*, ** and *** denote the rejection of the null hypothesis of a unit root at 10%, 5% and 1% respectively. 'a' implies break point test equation with constant and trend, 'b' implies break point test equation with constant only, and 'c' implies break point test equation with trend only.

Table 1C presents the summary of the Unit root test from table 1A and 1B. The table shows that the result of the unit root test using the conventional unit root (ADF and PP) are consistent with the unit root with structural breaks test for SGDP and DGDP. Both series are integrated at order one while the unit root test for GDPGAP and EGDP are inconsistent as unit root with structural breaks and conventional ADF test shows that GDPGAP is integrated at order one while PP shows that GDPGAP is integrated at order zero. Also, the unit root with structural breaks test and PP shows that EGDP is integrated at order zero while ADF sshows that EGDP is integrated at order one. This mixed stationarity result given by the unit root tests employed is what necessitated the use of Autoregressive Distributed Lag model technique of analysis.

Table 2. Summary of Unit Roots Test

	Unit root with structural Breaks Results (Modified ADF)		Conventional Unit root Test Results		Comparison
Variable	*Break Date*	*I(d)*	*(ADF) Result*	*(PP) Result*	*Remarks*
SGDP	2010Q4	I (1)	I (1)	I (1)	*Consistent*
GDPGAP	2009Q1	I (1)	I (1)	I (0)	*Inconsistent*
EGDP	2008Q2	I (0)	I (1)	I (0)	*Inconsistent*
DGDP	2015Q3	I (0)	I (0)	I (0)	*Consistent*

(iii) Test for Co-Integration

Table 3 shows the results of the co-integration test for model one following the stationarity test. This test is necessary before estimating the primary surplus reaction function. The bounds test of co-integration which allows for mixed order of integration is employed. Also, Quandt-Andrews unknown breakpoint test was employed to identify unknown break point in the model. The test at 15% trimmed data indicates a break point at third quarter of 2009, significant at 1% level of significance. Therefore, an exogenous break point of 2009Q3 is accounted for as a fixed regressor using dummy variables DU and TB. Schwartz information criterion (SIC) and Alkaike information criterion (AIC) were employed for the lag selection. The results of the co-integration tests show that there is a long run co-integrating relationship, with the f-statistics of 5. 662 higher than the critical values of the upper bound at 1%, 2. 5%, 5% and 10% level of significance.

Table 3. Result of Bounds Cointegration Test

Growth Model: $SGDP = f(DGDP, EGDP, GDPGAP)$		
F-stat	5. 66162	
Critical Values		
Significance levels	I0 Bound	I1 Bound
1%	4. 29	5. 61
2. 50%	3. 69	4. 89
5%	3. 23	4. 35
10%	2. 72	3. 77

Source: Authors' Computation from E-views

(iv) Results and Interpretation

Additionally, we also used the Autoregressive Distributed Lag technique to estimates the primary surplus fiscal reaction function. Table 4 presents the short run dynamics and long run coefficients of the primary surplus reaction function. The Quandt-Andrews unknown breakpoint test was employed to identify unknown break point in the model. The result at 15% trimmed data indicates a break point at third quarter of 2009, significant at 1% level of significance. Therefore, an exogenous break point of 2009Q3 is accounted for as a fixed regressor using dummy variables DU and TB. The results of the ARDL estimation show that there is a negative relationship between debt to GDP ratio (DGDP) and primary surplus to GDP ratio (SGDP) in the short run and long run with coefficient of -0. 013 and -0. 060 respectively. This is however not significant at the conventional level of significance. The implication of the result obtained is that primary surplus does not respond positively to government debt in the short run and long run, and government is not complying with its budget constraint. This means that the debt to GDP ratio does not grow at a constant rate. Also, the results show that GDPGAP is positively significant to primary surplus to GDP ratio in the long run and short run. The coefficient of the GDPGAP is 0. 000361 in the short run and 0. 001 in the long run. Thus, implies that a 1% increase in the GDPGAP generates 0. 000361% increase in primary surplus to GDP ratio (SGDP) in the short run, and 0. 001% in the long run. This means that primary surplus to GDP ratio (SGDP) is countercyclical, that is primary surplus to GDP ratio (SGDP) has a countercyclical fiscal response to GDPGAP. Also, the dummy variable parameter is negative and significant at 5% and 1% level of significance in the short run and long run respectively. The coefficients are -0. 204 and -0. 948 respectively. The implication of this is that the trend break identified reduces primary surplus by 0. 204% in the short run and 0. 948% in the long run. Also, the error correction term is negative and significant at 1%. This conforms to our a priori expectation, and validates the presence of co-integrating relationship among the variables in the model. The magnitude of the error correction term is -0. 216; meaning that about 21. 6% of the disequilibrium caused by a disturbance in the previous year is corrected for in the current year. This suggests a speed of adjustment

of SGDP to the long run equilibrium following a particular shock or disequilibrium in the short run.

Table 4. Primary Balance Reaction Function

Short Run Coefficient			
Variable	**Coefficient**	**T − Statistic**	**P − Value**
D(SGDP(−1))	0. 373**	2. 204	0. 035
D(SGDP(−2))	0. 255	1. 222	0. 231
D(DGDP)	-0. 013	-0. 594	0. 557
D(EGDP)	13. 271	1. 660	0. 107
D(GDPGAP)	0. 000361***	8. 494	0. 000
D(GDPGAP(−1))	0. 000041	-0. 401	0. 692
D(GDPGAP(−2))	0. 000040	-0. 511	0. 613
D(GDPGAP(−3))	0. 000065	-1. 501	0. 144
D(DU)	-0. 204**	-2. 315	0. 028
D(TB)	0. 206	1. 344	0. 189
ECT(−1)	-0. 216***	-2. 801	0. 009
Long Run Coefficients			
Variable	**Coefficient**	**T-Statistic**	**P-Value**
DGDP	-0. 060	-0. 657	0. 516
EGDP	8. 394	0. 423	0. 675
GDPGAP	0. 001	2. 048	0. 049
DU	-0. 948***	-3. 673	0. 001
TB	0. 954	1. 421	0. 166
C	-0. 623	-0. 297	0. 769
Post Estimation Test			
Breusch-Godfrey Serial Correlation LM Test:		0. 9984 [0. 3812]	
Heteroskedasticity Test: Breusch-Pagan-Godfrey		0. 44986 [0. 9356]	

Note: ***, **, * indicate the statistical significance of coefficients at 1%, 5% and 10% respectively; the values in parentheses and block brackets are, respectively, the f-statistics and the probabilities

The findings from this study reveal that the Nigerian government is not implementing a corrective action to comply with the inter-temporal budget constraint as debt to GDP ratio does not positively and significantly affect the primary surplus. Thus, primary surplus does not react positively to an increase in debt to GDP ratio, and the debt to GDP ratio is not growing at a constant rate. This suggests that the government does not satisfy the inter-temporal constraints, and does not take necessary actions to maintain or ensure fiscal sustainability.

6. Conclusion and Policy Implication

This paper provides useful insight on public debt sustainability in Nigeria. We account for the role of structural breaks, using the modified ADF unit root test and ARDL fiscal reaction function. The study found that government borrowings and fiscal policy actions are not sustainable because government spending grow faster than its revenue. The study found a wide gap between the growth of government revenue and its fiscal expenditure which makes it impossible for government to meet its spending obligation including the interest payment on debt. These findings have implications on the current fiscal stance for Nigeria. As a result, we recommend the need for government to diversify its revenue base from crude oil and explore other promising sectors, such as agriculture, tourism, entertainment, mining of mineral resources, among others for its revenue and foreign exchange. In addition, we also recommend that government should minimize its borrowings in the economy which contribute to crowding out private sector investment.

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Security Spending and Foreign Direct Investment Inflows in Nigeria: An Autoregressive Distributed Lag Model Approach

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Abstract: The aim of this study is to study is to examine the relationship between security spending and FDI inflows between 1994 and 2017 in Nigeria. In Nigeria, security of life and properties have been volatile in the last one decade. This has been reflected in the inability of the country to equip and maintain effective security forces that are formidable enough to defend her territorial integrity against internal and external aggressions. In view of the above, data were collected from the CBN Statistical Bulletin and UNCTAD investment reports simultaneously. Consequently, the objective of the study was addressed within the framework of Bound Test and ARDL approach. The findings in the study could be summarized as follows; past FDI inflows have a significant positive impact on current FDI inflows in Nigeria. Defence expenditure and FDI inflows have a significant positive relationship. Meanwhile, internal security spending and FDI inflows have an insignificant positive relationship in the country. Also, inflation rate and FDI inflows have a positive relationship but the relationship is not significant. As a result of these findings, this study makes the following recommendations for the policy makers in the country; there is a very urgent need to pay a critical attention to the internal security spending and mobilization of adequate resources towards this sector in order to combat the internal security challenges negatively affecting investment climate in the country.

Keywords: Security Spending; FDI Inflows; Defence Spending; Internal Security Spending

JEL Classification: F21; F23; F43

1. Introduction

In the recent times, the volatility of security of lives and properties has been a critical issues in Nigeria. This has been manifested in the forms of the Niger Delta militancy, Boko Haram insurgencies, the Fulani Herdsmen menace, banditry, political uprising,

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and different kinds of kidnaping and ritual killings in every part of the country. This is statement is further reinforced by Aiyedogbon (2011) who argued that the level of security in Nigeria in the last twenty years has been compromised due to the incessant social unrest, bombing, kidnapping, political instability and religious crisis in all the nook and cranny of the country. Insecurity of lives and properties has created a bad image for Nigeria in the global community. Nigeria has been consistently occupied a low spectrum rank in the Global Peace Index. It is worth of note, in the recent data released by the Global Peace Index Nigeria occupied 148th peaceful country among 163 countries in 2017 and 2018 concurrently (GPI, 2018).

Meanwhile, the aftermath effect of insecurity in Nigeria has not only scared away many foreign investors but also discouraged majority of the Nigerian citizens both at home and in diaspora to invest in their fathers' land. The inflows of foreign of direct investment in Nigeria have been in the state of comatose since 2012 when insurgence became the order of the day in the country.
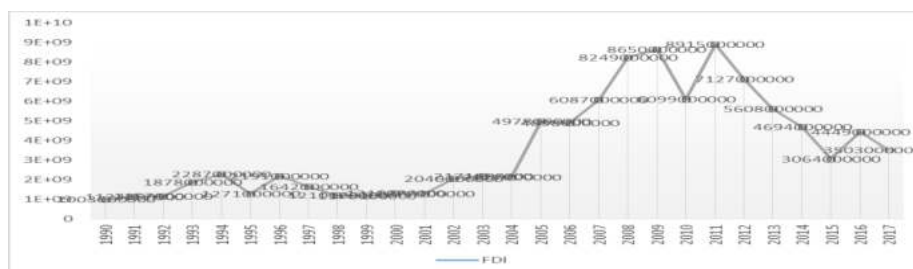

Figure 2. FDI Inflows in Nigeria (1990-2017)

Source: Authors' Computation (2019) from (UNCTAD, 2018)

Taking a panoramic view about the above figure, one could deduced that the FDI inflows in Nigeria has been declining continuously from 2012 till 2017, except 2016. This explains how the investment climate in Nigeria is compelling the foreign investors to leave the economy.

However, any serious government should be saddled with the responsibility of providing security for lives and properties in its country. This justifies the reason why developed countries benchmarked huge percentage of annual budget for security of their countries. For instance, The United State of America has always been the reference point because the country has distinguished itself as the highest military spender in the globe. Largest economic resources have always been committed to the security of life and properties in this country annually (SIPRI, 2013). No wonder the country is the most popular destination of FDI inflows in the world because investors desire safety for his/her life, properties and investments (UNCTAD, 2018).

Consequently, solving security challenges presently confronting Nigeria has become a critical issue of concern among the policy makers and scholars in the recent times. Addressing internal and external security threats in Nigeria has made the federal government to criminalize terrorism through the Anti-Terrorism Act in 2011. In the same vein, the government continually engages the mass media to create adequate awareness and broadcast security tips for the general public, installation of computer-basis closed circuit television cameras (CCTV) in some strategic parts of the country and the funding of security agencies by proving security facilities that can aid intelligence gathering in the country. This has caused an increment in the annual budget on security spending (Azazi, 2010). Therefore, the role of the security spending in advancing economic activities cannot be undermined in Nigeria. The ability of the country to equip and maintain effective security forces that would be formidable enough to defend the territorial integrity and internal aggressions of the country is a function of the resources committed to the security sub sector of the country. It is instructive to state that political stability, conducive business environment are highly necessary for the attraction of FDI inflows, and this can only be guaranteed if there are concerted efforts by the government and all the stakeholders in Nigeria to ensure a formidable security architecture in the country.

The important role of security on investment climate of a country necessitated the attention of scholars in examining how security spending could affect FDI inflows in developing countries facing security challenges in which Nigeria is highly inclusive. Meanwhile, nexus between security spending and FDI inflows in Nigeria has a received a little attention in the literature (Adermi et al. , 2018; Adeyeye, Akinuli & Ayodele, 2016). The bulk of studies focusing on the Nigerian economy address the nexus between security spending and economic growth. Against this backdrop the study intends to fill the gap in the literature by examining the relationship between security spending and FDI inflows in Nigeria.

In addition to introduction, the rest of this work is structured as follows; section two addresses literature review, while section three presents methodology, analysis, discussion and policy implication.

2. Literature Review

Literature on security spending is emerging in the recent times. As such, this section of the study shows the perceptions of different authors regarding this subject matter over time.

In a study conducted by Adeyeye, Akinuli and Ayodele (2016) focusing on the impact of security spending on foreign direct investment in Nigeria from 1985 to 2015. The author used error correction model technique to conclude that the security expenditure and inflation have a negative long run relationship with FDI but

expenditure on defence shows a positive long run relationship with FDI in the country. In another related study, Aderemi et al. (2018) examined link between security spending and FDI inflows in Nigeria from 1994 to 2016 with the application of Cointegration, DOLS and Granger Causality Approach. The paper asserted that internal security spending and FDI inflows had a positive relationship in the country. Meanwhile, a bidirectional causality relationship existed between FDI inflows and defence spending in the country.

In the same vein, Oriavwope, and Eshenake (2013) investigated the nexus between the security spending and economic growth in Nigeria employing Error Correction Model approach. The study posited that military spending had an inverse relationship with economic growth in the country. Anyanwu (2011) analyzed the linkage between defence spending and economic growth in Nigeria while utilizing the framework of a vector error correction model. It was discovered from the study that there exist a direct relationship between military expenditure and economic growth in both long and short run. While analyzing Ferda (2004) critically analyzed the relationship between defense spending and economic growth in Turkey between from 1950 to 2002 with the application of new macroeconomic theory and multivariate cointegration approach. The author submitted that there was an existence of positive long run relationship between aggregate defense spending and aggregate output in the economy. In another related study, Hassan, Waheeduzzanan and Rahman (2003) examined the nexus between defence expenditure and economic growth in the SARCC countries from 1980 to 1999. The study discovered that direct positive relationship existed between economic growth and military expenditure in those countries. While examining the linkage between defence spending and economic growth, Galvin (2003) adopted a cross-sectional data of 64 countries using three equations, one each for growth, saving and defence expenditure. The author used the results from estimation of OLS, 2SLS and 3SLS to conclude that military spending has an inverse relationship with economic growth in those countries.

However, Sandler and Enders (2008) opined that terrorism were very common to developing economies. This invariably caused negative impact on FDI and economic growth respectively in those countries. Dakurah, Davies and Sampath (2001) assessed the causal relationship between the military burden and economic growth for sixty two nations with the application of cointegration and error correction model. The authors submitted that there was no feedback effect between the military burden and economic growth in those countries. McKenna (2005) argued that high level of insurgence led to the rise in government expenditure in developing countries especially. The aftermath effect of this is depletion of foreign reserve and inflation in the affected countries.

In conclusion, studies on the nexus between security spending and FDI are very few in Nigeria in the recent times. The majority of available studies focus on security

spending and economic growth while neglecting its impact on FDI inflows in the country. Hence, the relevance of this study

3. Methodology

The data employed for this work were extracted from secondary sources. To be explicit, data from 1994 to 2017 were used for the analysis because data on security spending started from 1994. Meanwhile, data for defence spending, internal security spending and inflation rate were sourced from the Central Bank of Nigeria Statistical Bulletin. However, data for FDI inflows in Nigeria were got from UNCTAD database published by the World Bank. E-Views software was employed to run the data.

3.1. Model Specification

The model for this study can be specified in the general form as follows:

FDI = F (DS, ISP, INF)   (I)

If model (1) is log linearized, model (2) is emerged as follows.

LnFDIt = β_1 + β_2 LnDSt + β_3 LnISPt + β_4INF+ μ_i (II)

3.2. Autoregressive Distribution Lag (ARDL) Model Specification

Various diagnostic tests such as unit root test and Bound Test performed on the variables of interest motivated the choice of ARDL in this paper. The variables of interest have different orders of integration i. e. I(1) and I(0), as such the paper utilized Autoregressive Distribution Lag model to estimate its objective (Pesaran, Shin & Smith, 2001, Pesaran & Pesaran, 1997).

In a general form, ARDL model can be specified as follows:

ARDL (1, 1) model: $Y_t = \mu + \alpha_1 Y_{t-1} + \beta_o X_t + \beta_1 X_{t-1} + U_t.$ (III)

Meanwhile, Y_t and X_t are stationary variables, and U_t is a white noise.

Therefore, in an explicit way the model to capture the analysis of this work could be stated thus:

$$\Delta LnFDI_t = \beta_0 + \sum_{i=1}^{p} \beta_1 \Delta Ln\, FDI_{t-1} + \sum_{i=0}^{p} \beta_2 \Delta LnDSP_{t-1} +$$
$$\sum_{i=0}^{p} \beta_3 \Delta\, LnISP_{t-1} + \theta_1 INF_{t-1} + \mu i \text{ -} \qquad\qquad (IV)$$

Where FDI is net foreign direct investment inflows into the country, DSP is defence spending, ISP is internal security spending, INF is used to represent inflation rate which measures the stability of economy, Ln used to denote natural logarithm and ui is error term. t =1990-2017.

3.3. Results and Discussion

Table 1. Descriptive Statistics of Annual Data Series (1994-2017)

Descriptive Statistics	LnFDI	LnDPS	LnISP	INFL
Mean	3. 96E+09	1. 32E+11	1. 57E+11	16. 74750
Median	3. 28E+09	7. 19E+10	1. 08E+11	11. 90000
Maximum	8. 92E+09	4. 56E+11	4. 22E+11	72. 84000
Minimum	1. 18E+09	4. 21E+09	4. 10E+09	5. 380000
Std. Deviation	2. 54E+09	1. 30E+11	1. 39E+11	15. 87167
Skewness	0. 593506	0. 939965	0. 509841	2. 627367
Kurtosis	2. 092061	2. 638484	1. 907105	9. 024671
Jargue-Bera	2. 233351	3. 664831	2. 234173	63. 90890
Probability	0. 327366	0. 160027	0. 327232	0. 000000
Sum	9. 50E+10	3. 17E+12	3. 76E+12	401. 9400
Sum. Sq. Deviation	1. 49E+20	3. 88E+23	4. 45E+23	5793. 928
Observation	24	24	24	24

Source: Authors` Computation (2019)

The table 1shows the descriptive statistics of the dataset used for the econometric analysis in this paper. FDI inflows during the period of 24 years has minimum and maximum values of 1. 18 million dollar and 8. 92 million dollar respectively. It has a mean value of 3. 9 million dollar with standard deviation of 2. 5 million dollar. This implies that FDI inflows data deviate from the both sides of mean by 3. 9 million dollar. The data are not widely dispersed during the period of the study because its standard deviation is less than the mean value. Similarly, the values of skewness and Kurtosis are 0. 593506 and 2 simultaneously. These values indicate that the data agree with the symmetrical distribution assumption. Meanwhile, defence spending has a minimum value of 4. 2 billion naira and maximum value of 4. 5 billion naira. Its mean value and standard deviation are1. 32 billion naira and 1. 30 billion naira respectively. The data are moderately dispersed because the mean value and standard deviation of the data are almost identical. In the same vein, its coefficients of skewness and Kurtosis are 0. 939965 and 2. 638484 respectively. This shows that the data are positively skewed and did not agree with the symmetrical distribution assumption. Internal security spending data have a minimum value of 4. 1 billion of naira and maximum value of 4. 2 billion naira. While its mean value is 1. 5 billion naira and standard deviation is 1. 3 billion. This suggests that data for this variable are not widely dispersed during the period under study because the mean value is greater than the value of standard deviation. The skewness and Kurtosis values of the data are 0. 509841 and 1. 907105 respectively. This indicates that the data agree with the symmetrical distribution assumption. The inflation rate data has minimum value of 5. 3% and maximum value of 72% with mean value of 16. 7% and standard deviation of 15%. These data are moderately dispersed because the mean value is

greater the standard deviation of the data. Also, its values of the Kurtosis and skewness show that inflation rate date is positively skewed and do not agree with the symmetrical distribution assumption.

Table 2. Unit Root Test

Variables	ADF Test				
	Level	Probability	1st Diff	Probability	Remark
LnFDI	-2. 998064***	0. 5761	-3. 004861***	0. 0002	I(1)
LnDSP	-2. 998064***	0. 9861	-3. 004861***	0. 0011	I(1)
LnISP	-3. 040391***	0. 8493	-3. 040391***	0. 0570	I(1)
INF	-2. 998064***	0. 0402	-		I(0)
Variables	PP Test				
	Level	Probability	1st Diff	Probability	
LnFDI	-2. 998064***	0. 6149	-3. 004861***	0. 0002	I(1)
LnDSP	-2. 998064***	0. 9964	-3. 004861***	0. 0011	I(1)
LnISP	-2. 998064***	0. 9974	-3. 004861***	0. 0000	I(1)
INF	-2. 998064***	0. 0001	-		I(0)

*Source: Authors` Computation (2019) ** %5 level ( ) P-Value*

In the table above, an attempt has been made to verify the unit root of the data set via the standard Augmented Dickey-Fuller (ADF) and Phillips-Perron (PP) tests. This test becomes very imperative in order to establish the existence or otherwise of stationarity of time series data used for this work. Consequently, the estimated results in the table suggest that internal security spending, FDI inflows and defense spending have a unit root because the data are stationary after first differencing. However, inflation rate shows the absence of a unit root in the variable because the data is stationary at level.

Table 3. ARDL Bounds Test

Sample: 1996 2017				
Included observations: 22				
Null Hypothesis: No long-run relationships exist				
Test Statistic	Value	k		
F-statistic	3. 825662	3		
Critical Value Bounds				
Significance	I0 Bound	I1 Bound		
5%	3. 23	4. 35		
2. 5%	3. 69	4. 89		
1%	4. 29	5. 61		

Source: Authors` Computation (2019)

The table above shows the estimated result of the Bound Test to determine the long run relationship between the variables of interest in this study. From the table above the Null hypothesis of no long run relationship could not be rejected due to the fact

that the value of F-Statistic is less than the upper and lower Critical Value Bounds at all level of significance. Therefore, cointegrating relationship does not exist between the variables of the interest. Hence, this study estimated the short run relationship among the variables of interest.

Table 4. The Impact of Security Spending on FDI Inflows in Nigeria Dependent Variable: PE Method: ARDL

Short Run	coefficient	T-statistics	Probability
FDI(-1)	0. 418745**	2. 193416	0. 0471
ISP	0. 014100	1. 601042	0. 1334
DSP	0. 030178**	3. 812540	0. 0022
INF	2. 6839585	0. 576771	0. 5739
R-Squared	0. 893710		
DW	1. 596599		

*Source: Authors` Computation (2019) *Significant at 10%, **Significant at 5%,*

***Significant at 1%

From the estimated results reported in table 4 above, all the explanatory variables have the expected sign. The R- Squared of the model jointly explained about 89% of the systematic variations in the dependent variable, FDI inflows whereby leaving 11% unexplained owing to random chance. The past FDI inflows have a significant positive impact on current FDI inflows in the country. In the same vein, defence expenditure and FDI inflows have a significant positive inflows. A unit change in defense spending causes FDI inflow to increase by 3% in Nigeria. The finding in this study is in tandem with the submission of Adeyeye et al. (2016) despite the adoption of different methodology. But the finding contradicts the assertion of Aderemi et al. (2018) in a related study. However, internal security spending and FDI inflows have an insignificant positive relationship in the country. The insignificant effect of internal security spending could be attributed to the current internal security challenges such as Boko Haram insurgencies, the Fulani herdsmen menace and the Niger Delta Avengers Movement which bewilder the country. This might serve as a push factor to foreign investors in Nigeria. Inflation rate and FDI inflows have a positive relationship but the relationship is not significant at 10% level of significance.

4. Conclusion and Recommendations

This study investigated the relationship between security spending and FDI inflows between 1994 and 2017 in Nigeria. Consequently, the study utilized ARDL approach with the following findings, which could be summarized as follows; past FDI inflows have a significant positive impact on current FDI inflows in Nigeria. Defence expenditure and FDI inflows have a significant positive inflows. Meanwhile, internal

security spending and FDI inflows have an insignificant positive relationship in the country. Also, inflation rate and FDI inflows have a positive relationship but the relationship is not significant. As a result of these findings, this study makes the following recommendations for the policy makers in Nigeria; there a very urgent need to pay a critical attention to the internal security spending and mobilization of adequate resources towards this sector in order to combat the internal security challenges negatively affecting investment climate in the country.

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