Revising The Savings-Capital Formation Nexus: The Roles of Bank and Nonbank Savings in Nigeria

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ABSTRACT

The study investigates the Role of servings-capital Formation Nexus and the role of bank and nonbank domestic savings in Nigeria. The researchers employed advanced econometrics tests to ascertain the impact of bank and nonbank domestic savings on capital formation in Nigeria. The variables used in the analysis were subjected to unit root test to determine whether the variables are stationary or not. Co-integration test was used to determine the long run relationship between capital formation, bank and non-bank domestic servings in Nigeria for the period of 2006-2018. Findings revealed that none of the models was stationary at level but were all stationary at first difference. The results also show that there is a long run significant relationship that exists between the variables (ie all share index, insurance servings and bank total servings)and examined that there is a causal relationship between capital formation and bank and non-bank financial institutions through domestic savings in Nigeria within the period under study. The result also revealed a negative non-significant relationship between domestic savings and capital formation in Nigeria. The study recommends among others that policy formulators in Nigeria need to make some investors' friendly policies that will encourage, promote and attract more capital inflows and to provide a conducive and enabling environment for the gross fixed capital formation to thrive.

Keywords: Capital formation, bank and non-bank domestic servings.

1.0   INTRODUCTION

Capital formation is the net capital accumulation during an accounting period for a particular country. The term refers to additions of capital goods, such as equipment, tools, transportation assets, and electricity. Countries need capital goods to replace the older ones that are used to produce goods and services. If a country cannot replace capital goods as they reach the end of their useful lives, production declines. Generally, the higher the capital formation of an economy, the faster an economy can grow its aggregate income.

Producing more goods and services can lead to an increase in national income levels. To accumulate additional capital, a country needs to generate savings and investments from

household savings or based on government policy. Countries with a high rate of household savings can accumulate funds to produce capital goods faster, and a government that runs a surplus can invest the surplus in capital goods. The higher the capital formation, the faster an economy can grow its aggregate income. Caterpillar is one of the largest producers of construction equipment in the world. It produces equipment that other companies use to create goods and services. Caterpillar (CAT) is a publicly traded company and raises funds by issuing stock and debt. If household savers choose to purchase a new issue of Caterpillar common stock, the firm can use the proceeds to increase production and develop new products for the firm's customers. When investors purchase stocks and bonds issued by corporations, the firms can put the capital at risk to increase production and create new innovations for consumers. These activities add to the country's overall capital formation. The World Bank works as a source of financial and technical assistance to developing countries, with an aim to end extreme poverty through its programs. The World Bank tracks gross capital formation, which it defines as outlays on additions to fixed assets, plus the net change in inventories. Fixed assets include plants, machinery, equipment, and buildings, all used to create goods and services. Inventory includes raw materials and goods available for sale.The World Bank measures capital formation by assessing the change in net savings. If the household savings rate is increasing, savers may invest additional dollars and purchase stocks and bonds. If more households are saving, the country may report a cash surplus, which is a positive sign for capital formation.

The World Bank also reports the amount of government debt that a country's central government has outstanding, compared with the country's gross domestic product (GDP), which is the total of all goods and services produced by a country. If a country's rate of capital formation increases, so does the country's GDP. Capital formation essentially leads to more money swirling around the economy. The accumulation of capital goods translates to investment and the production of more goods and services, which should boost the income of the population and stimulate demand. Capital formation doesn't happen on its own. It depends on the income of the people living in the country and their capacity to save and spend.

Capital formation occurs when the population has enough income to save and invest. It starts with the creation of savings and is realized when those savings are invested. Capital formation is a key measure of a country's economic health. Boosting production and investment tends to result in the population becoming better off and having more money to spend, which helps to drive economic growth. In theory, an economy with high capital formation should keep growing, reinvesting its gains to accrue more of them—at least as long as inflation is kept at reasonable levels (Adegbite & Owualla, 2007).

Many economy depend on investments to resolve several economic problems, crisis and challenges. Less developed countries in Africa such as Nigeria is introducing various economic policies that will attract as well as keep hold of private investors. This is due to the fact that investments in certain sectors of the economy can rapidly transform the numerous economic challenges we are facing as a nation (Adegbite & Owualla, 2007).

Therefore, the Nigerian government at any given opportunity works a lot to attract investments into various sectors of the economy. The motive for this is not farfetched. Investment both private and the public comes with a lot of benefits such as job creation, increase in per capita income, reduction in the level of poverty, increase in standard of living, increase in GDP, etc. Real investment in the economy is an acceptable way of increasing capital formation in the economy has been known to increase productivity and output. Investment of this type can be

undertaken by the public or private sectors, with the government being involved mainly with autonomous investments which act as the main drivers of other investment in the economy. Autonomous investment had dwindled drastically while the expenditure being made by the public sector are not delivering value where rightly conceived (Akanbi, 2010).

A simple analysis of the capital formation statistics from the Central Bank of Nigerian shows that the nominal investment in capital formation is going down and has fallen in real terms. The investment could be social or soft in outlook (housing, health and education), while others are infrastructural or hard (transport, power and water), and yet others are purely economic, which the private sector undertakes for private capital accumulation (Orji, & Peter, 2010; Uremadu, 2006; Seng, 2014).

While financial investment is an avenue to increase wealth, real investment should be more emphasized to increase productivity and growth in the economy. Capital accumulation is often suggested as a means for developing countries to increase their long-term growth rates. To increase capital accumulation, it is necessary to: increase savings ratios, maintain good banking system and system of loans, avoid corruption, good infrastructure to make investment more worthwhile (CBN, 2016).

The problem becomes that Nigeria domestic investment as well as capital accumulation has not been growing and have declined by 24% between 1998-2013 (World Bank, 2014). This is a real problem. Although, foreign direct investment has been growing steadily except with the recent economic recession in the country that saw a substantial reduction in FDI by about 28% within 2014-2016 (CBN, 2016). It is, therefore, necessary to investigate holistically, the domestic investment, capital formation, and economic growth in Nigeria between the periods of 1980-2016. The main objective of this study is to determine the impact of capital formation on economic growth in Nigeria.

In Nigeria, studies especially those of Adekunle et al (2013), Acha (2012), Okeh (2012), Adelakun (2010) have shown that the financial system is not fully developed and as such the bank and non bank institutions have not attained the standards expected from them in the process of economic development. Bank and non-bank institutions have not really met with the high demand for loans and advances. It has been argued that bank and non-bank financial institutions have contributed less than expected due to lack of access to funds. In view of the above problems, the study investigates the activities of banks and Non-bank financial institutions in relation to the growth and development of the Nigerian economy.

The purpose of this study is to investigate the impact of Bank and non-bank financial specifically, the study seeks to achieve the following objectives;
1. To examine the effect of Bank total servings on Capital formation in Nigeria
2. To determine the effect of All share Index on Capital Formation in Nigeria.
3. To ascertain the effect of Insurance servings on Capital Formation in Nigeria.

2. Literature Review
2.1 Conceptual Framework
2.1.1 The Nigerian Financial System

Non-Bank Financial Institution
Anonbank financial institution (NBFI) is a financial institution that does not have a full banking license and cannot accept deposits from the public. However, NBFIs do facilitate alternative

financial services, such as investment (both collective and individual), risk pooling, financial consulting, brokering, money transmission, and check cashing. NBFIs are a source of consumer credit (along with licensed banks). Examples of nonbank financial institutions include insurance firms, venture capitalists, currency exchanges, some microloan organizations, and pawn shops. These non-bank financial institutions provide services that are not necessarily suited to banks, serve as competition to banks, and specialize in sectors or groups.

Risk pooling institutions

Insurance companies underwrite economic risks associated with death, illness, damage to or loss of property, and other risk of loss. They provide a contingent promise of economic protection in the case of loss. There are two main types of insurance companies: life insurance and general insurance. General insurance tends to be short-term, while life insurance is a longer contract, ending at the death of the insured. Both types of insurance, life and property, are available to all sectors of the community. Because of the nature of the insurance industry (companies must access a plethora of information to assess the risk in each individual case), insurance companies enjoy a high level of information efficiency.

Life insurance companies insure against economic loss of the insured's premature death. The insured will pay a fixed sum as an insurance premium every term. Because the probability of death increases with age while premiums remain constant, the insured overpays in the earlier stages and underpays in the later years. The overpayment in the early years of the agreement is the cash value of the insurance policy.

General insurance is further divided into two categories: market and social insurance. Social insurance is against the risk of loss of income due to sudden unemployment, disability, illness, and natural disasters. Because of the unpredictability of these risks, the ease at which the insured can hide pertinent information from the insurer, and the presence of moral hazard, private insurance companies frequently do not provide social insurance, a gap in the insurance industry which government usually fills. Social insurance is more prevalent in industrialized Western societies where family networks and other organic social support groups are not as prevalent.

Market insurance is privatized insurance for damage or loss of property. General insurance companies take a single premium payment. In return, the companies will make a specified payment contingent on the event that it is being insured against. Examples include theft, fire, damage, natural disaster, etc.

Contractual savings institutions

Contractual savings institutions (also called institutional investors) provide the opportunity for individuals to invest in collective investment vehicles in a fiduciary rather than a principle role. Collective investment vehicles invest the pooled resources of the individuals and firms into numerous equity, debt, and derivatives promises. The individual, however, holds equity in the CIV itself rather what the CIV invests in specifically. The two most popular examples of contractual savings institutions are mutual funds and private pension plans.

The two main types of mutual funds are open-end and closed-end funds. Open-end funds generate new investments by allowing the public buy new shares at any time. Shareholders can liquidate their shares by selling them back to the open-end fund at the net asset value. Closed-

end funds issue a fixed number of shares in an IPO. The shareholders capitalize on the value of their assets by selling their shares in a stock exchange.

Mutual funds can be delineated along the nature of their investments. For example, some funds make high-risk, high return investments, while others focus on tax-exempt securities. Still others specialize in speculative trading (i.e. hedge funds), a specific sector, or cross-border investments.

Pension funds are mutual funds that limit the investor's ability to access their investment until after a certain date. In return, pension funds are granted large tax breaks in order to incentivize the working public to set aside a percentage of their current income for a later date when they are no longer amongst the labor force (retirement income).

Other nonbank financial institutions

Market makers are broker-dealer institutions that quote both a buy and sell price for an asset held in inventory. Such assets include equities, government and corporate debt, derivatives, and foreign currencies. Once an order is received, the market maker immediately sells from its inventory or makes a purchase to offset the loss in inventory. The difference in the buying and selling quotes, or the bid-offer spread, is how the market-maker makes profit. Market makers improve the liquidity of any asset in their inventory.

Specialized sectoral financiers provide a limited range of financial services to a targeted sector. For example, leasing companies provide financing for equipment, while real estate financiers channel capital to prospective homeowners. Leasing companies generally have two unique advantages over other specialized sectoral financiers. They are somewhat insulated against the risk of default because they own the leased equipment as part of their collateral agreement. Additionally, leasing companies enjoy the preferential tax treatment on equipment investment.

Other financial service providers include brokers (both securities and mortgage), management consultants, and financial advisors. They operate on a fee-for-service basis. For the most part, financial service providers improve informational efficiency for the investor. However, in the case of brokers, they do offer a transactions service by which an investor can liquidate existing assets.

The Non-bank financial institutions assist in economic development through financial intermediation process (Acha, 2012). They mobilize funds of various means open to them and make same available for investment. Finance companies for instance make available funds raised through owners' equity contribution and borrowings from other financial institutions, individuals and companies to investors. The role insurance companies play in economic development is strikingly outstanding. While the deposit money banks mobilize deposits from customers in the form of savings, current and fixed deposits insurance companies on the other hand aggregate the premium paid by policy holders (Esezobor, 2003).

Apart from being a veritable source of long-term funds, the insurance companies possess an unquantifiable psychological assurance, allaying the risk and loss anxiety of investors. This assurance kindles local entrepreneurial spirit and encourages foreign direct investment. Also by indemnifying policy holders in case of actual loss, insurance companies ensure production continuity and the maintenance of established consumption patterns and hence improvement of existing living standards (Pritchet, et al, 1996, Isimoya, 2003).

In addition to mobilising their own funds, some NBFIs notably development finance institutions and primary mortgage institutions obtain significant grants and loans from the government and international financial institution for onward lending. This according to Onoh (2004) aptly articulates the investment funds generating abilities of NBFIs.

Equipment financing and industrial infrastructural development are also in the domain of development finance institutions. From the funds obtained in the form of loans or grants from international financial institutions such as World Bank, these development finance institutions fund long-term investments. They further contribute to economic progress by providing advisory services, technical and managerial expertise to such projects (Okereke *et al,* 2009). The NBFIs like Bureaux de change also helps in economic development through investment funding. Bureaux de change helps and encourages capital inflow. By offering higher rates than the official rate of exchange, citizens working abroad are thus encouraged to remit monies home. Since transactions in bureaux de change are carried out anonymously, citizen's resident abroad who wish to bring foreign exchange without passing through the official channels are given avenues to do so. The increased inflow of foreign currency which this engenders improves the country's Gross National Product (GNP) and by extension general economic well-being is enhanced (Aghogho'vbia, 2006). Housing is one of man's basic needs and its availability is a measure of his economic well -being. In the light of this, the role played by primary mortgage institutions in housing development is of significant economic importance. Whether they are disbursing funds they generated or those from the National Housing Fund, their underlying developmental impact is in making houses available and affordable to Nigerians (Sanusi, 2003) Another area where NBFIs have played a vital developmental role is in the reduction of money stock outside the banking system. Akpan, (1998), rightly pointed out that due to the existence of a grossly underbanked rural economy monetary policy measures instituted by the CBN are ineffective. Interestingly the introduction of the microfinance banks has helped to mop up substantial rural deposits.

Provision of a secondary market for trading in government securities by discount houses through their discount activities has also immensely contributed to the effectiveness of monetary policy especially Open Market Operations (OMO) (Adelakun, 2010). The presence of an avenue to discount these securities encourages banks and other investors to buy them and by so doing government is provided with development funds on one hand and open market operations became more effective as a monetary policy instrument on the other hand. Increased activity has been recorded in the market since the advent of the discount houses in 1993. This has improved financial structures and further deepened the financial system (Oke, 1993; Oresotu, 1993).

Finally it is apt to also state that the NBFIs contribute to the reduction in unemployment rate experienced in the country (Acha, 2012). Apart from those directly employed to work for them, there is a teaming number of unemployed graduates, artisans, farmers etc who established one business or the other from credits made available by the NBFIs. Their funding of small and medium scale enterprises is also a boost to employment as these enterprises are known to be the highest employers of labour in our economy. At this stage it is very imperative that we have an empirical exposition on some related literature. In other words the study will at this juncture attempt to identify with some empirical findings or contributions related to the research topic under investigation.

Adeoye (2006) and Nnanna (2004) developed a model showing the relationship between

financial sector development and economic growth in Nigeria. The chosen economic growth indicator is the Real Gross Domestic Product (RGDP) specified to depend on the financial indicators such as the ratio of M2 to GDP (M2 GDP), real interest rate (INTR) changes and the ratio of credit to private to GDP (CPGDP). Calderon and Liu (2003) noted that a higher M2 GDP ratio implies a larger financial sector and greater financial intermediary development. Real interest rate is included to fully and appreciably capture the effect of liberalized interest rate on economic growth. According to Phill (1970) a move from negative to positive real interest rates indicates progress in financial sector reform.

To further show the relationship or association between financial development and economic growth the model developed by Erdal et al (2007), a slight modification of the growth model of Rata Ram (1999) will be considered. The secondary data for the variables for the period 1980 to 2008 were sourced from CBN, Nigeria's National Bureau for Statistics. The test then showed that there was a strong relationship between economic growth and financial development. It therefore follows that from the empirical result financial sector development promotes economic growth in Nigeria.

It is worth noting that fixed assets in national accounts have a broader coverage than fixed assets in business accounts. Fixed assets are produced assets that are used repeatedly or continuously in production processes for more than one year. The range of fixed assets included in statistical measurement is defined by the purpose of using them. A vehicle, for example, is a fixed asset, but vehicles are included in GFCF only if they are used in work activities, i.e. if they fall within the scope of "production". A car for personal use only is not normally included. The boundaries are not always easy to define, however, since vehicles may be used both for personal purposes and for work purposes; a conventional rule is usually applied in that case. Non-produced assets (e.g. land except the value of land improvements, subsoil assets, mineral reserves, natural resources such as water, primary forests) are excluded from the official measure of GFCF (Seng, 2014; Ugwuegbe, &Uruakpa, 2013; Sarkar, 2006; Uremadu, 2006).

Also, ordinary repair work, purchases of durable household equipment (e.g. private cars and furniture) and animals reared for their meat are not part of GFCF. It is sometimes difficult to draw an exact statistical boundary between GFCF and intermediate consumption, insofar as the expenditure concerns alterations to fixed assets owned. In some cases, this expenditure can refer to new fixed investment, in others only to operating costs relating to the maintenance or repair of fixed assets. Some countries include the insurance of fixed assets as part of GFCF. Of recent, there has been a change in the treatment of expenditures on research and development (R&D) (Seng, 2014; Ugwuegbe, &Uruakpa, 2013).

It is now recorded as the production of an asset instead of intermediate consumption, which has the effect of increasing GDP. While it is not possible to measure the value of the total fixed capital stock very accurately, it is possible to obtain a reliable measure of the trend in net additions to the stock of fixed capital, since the purchase prices of investment goods are recorded. GFCF time series data is often used to analyse the trends in investment activity over time, deflating or reflating the series using a price index. But it is also used to obtain alternative measures of the fixed capital stock. This stock could be measured at surveyed "book value", but the problem here is that the book values are often a mixture of valuations such as historical cost, current replacement cost and current sale value/scrap value. In other words, there is no uniform valuation (Seng, 2014; Ugwuegbe, &Uruakpa, 2013).

According to Kanu, Ozurumba, and Anyanwu 2014, it has been acknowledged that the value of fixed assets is almost impossible to measure accurately, because of the difficulty of obtaining a standard valuation for all assets. By implication, it is also almost impossible to obtain a reliable measure of the aggregate rate of profit on physical capital invested, i.e. the rate of return. Arguably though, the data to provide an "indicator" of the trend over time; using mathematical models one can estimate that the true rate is most likely to lie within certain quantitative limits. Nowadays; fixed assets purchased may include substantial used assets traded on second-hand markets, the most significant items being road vehicles, planes, and industrial machinery. Worldwide, this growing trade is worth hundreds of billions of dollars. Often it is brought from Europe, North America and Japan, where fixed assets are on average scrapped more quickly. Statistical treatment of the trade in second-hand fixed assets varies among different countries. Increasingly an attempt is made in many countries to identify the trade in secondhand assets separately if it occurs on a quantitatively significant scale (for example, vehicles) (Kanu, Ozurumba, & Anyanwu 2014).

In principle, if a fixed asset is bought during the year by one organization, and then resold to another organization during the same year, it should not be counted as investment twice over in that year; otherwise, the true growth of the fixed capital stock would be overestimated. The expenditure on Gross Domestic Product of which GFCF is a component should include only newly produced fixed assets, not second-hand assets. In the computation of GFCF, offensive weaponry and their means of delivery were excluded from capital formation, regardless of the length of their service life; reason being that military weaponry is used to destroy people and property, which is not value adding production (Kanu, Ozurumba, & Anyanwu 2014).

Robson (2014) studied the causal relationship between investment and economic growth based on Zimbabwe, but the findings revealed that there is no causality from any direction between two variables. However, the study does not deny any other relationship between the investment, savings and Economic Growth. Lean and Song. (2009) chose the whole country and 4 representative provinces as their sample to analyze the relationship between economic growth and savings in China by using Johansen co-integration and Granger causality. The study found that there is bilateral causality exists between the household savings and economic growth in the short run and in the long run unidirectional causality exist from the economic growth to savings growth. Cambodia, Seng and Sothan (2014) investigated the causality between domestic savings and economic growth in South Africa. The study does not find any casualty runs from either GDS to Growth or Growth to GDS, so the study concluded that GDS and Economic growth are independent of each other in Cambodia. between capital formation and economic growth in Nigeria for the period of 2006-2018. The Granger causality test was also used to determine the causality between Capital Formation and economic growth in Nigeria for the period of 2006-2018.

The research utilises secondary data annual time series for the variables identified above. The data was from the sources such as; Central Bank of Nigeria (CBN) statistical Bulletins, Nigeria Stock Exchange (NSE), and World Bank Database for the data relating to real gross domestic product, fixed capital formation, government expenditure and domestic savings.

Bank Financial Institution
The banking, securities, and insurance markets have become increasingly integrated, with linkages across the markets rapidly increasing. In response, one of the most notable developments in financial sector regulation in the past 20 years has been a shift from the

traditional sector-by-sector approach to supervision (with separate supervisors for banks, securities markets, and insurance companies) toward a greater cross-sector integration of financial supervision (Čihák and Podpiera 2008). This had an important impact on the practice of supervision and regulation around the globe.

Three broad models are being used around the world: a three-pillar or "sectoral" model (banking, insurance, and securities); a two-pillar or "twin peak" model (prudential and business conduct); and an integrated model (all types of supervision under one roof). One of the arguably most remarkable developments of the past 10 years, confirmed by the World Bank's Bank Regulation and Supervision Survey, has been a trend from the three-pillar model toward either the two-pillar model or the integrated model (with the twin peak model gaining traction in the early 2000s). In a recent study, Melecky and Podpiera (2012) examined the drivers of supervisory structures for prudential and business conduct supervision over the past decade in 98 countries, finding among other things that countries advancing to a higher stage of economic development tend to integrate their supervisory structures, small open economies tend to opt for more integrated supervisory structures, financial deepening makes countries integrate supervision progressively more, and the lobbying power of the concentrated and highly profitable banking sector acts as a negative force against business conduct integration. (The related data on the structure of supervision are available on this website, https://www.worldbank.org/en/publication/gfdr.)

How do these various institutional structures compare in terms of crisis frequency and the limiting of the crisis impact? Cross-country regressions using data for a wide set of developing and developed economies provide some evidence in favor of the twin peak model and against the sectoral model (ˇCihák and Podpiera 2008). Indeed, during the global financial crisis, some of the twin peak jurisdictions (particularly Australia and Canada) have been relatively unaffected, while the United States, a jurisdiction with a fractionalized sectoral approach to supervision, has been at the crisis epicenter. However, the crisis experience is far from black and white, with the Netherlands, one of the examples of the twin peaks model, being involved in the Fortis failure, one of the major European bank failures. It is still early to make a firm overall conclusion, and isolating the effects of supervisory architecture from other effects is notoriously hard.

2.2 Theoretical Framework
Schumpeter's Theory of Economic growth and Development
Schumpeter is among the classical economist that explain the theory of economic growth and development. His theory is hinged on four features namely: Circular flow, Role of entrepreneur, cyclical process or business cycle and End of capitalism. On the circular flow, he argues that the economic activity produces itself continuously at a constant rate through time. Circular flow is based upon a state of perfectly competitive equilibrium in which coasts are equal to receipts and prices to average costs. According to Schumpeter (2011; 1934), "The circular flow is a stream that is fed from the continually flowing springs of labour power and land and flow in every economic period into the reservoir which we call income, to be transformed into the satisfaction of wants". Thus, the economy is always in a state of equilibrium without change except on the ground of innovation. He defined development as a "Spontaneous and discontinuous change in the channels of flow, disturbance of equilibrium which forever alters and displaces the equilibrium state previously existing". When changes take place in the economy, circular flow is disturbed, and the development process starts. He

assumed that change is the basic element of the dynamic process, and those changes come in the form of innovations.

According to Schumpeter (1934), an entrepreneur or innovator is the key figure in the society in the process of development. He occupies the central place in the development process because he initiates development in a society and carries it forward. Entrepreneurship is different from the managerial activity. A manager simply directs production under existing techniques, but entrepreneurship requires the introduction of something new. An entrepreneur is also different from a capitalist. The capitalist simply furnishes the funds while the entrepreneur directs the use of these funds. He further argues that in the process of growing an economy experiences business cycle that is characterized by recession and boom (Andersen, 2009). According to Schumpeter, the creation of bank credit is assumed to accelerate money incomes and prices in the economy. It creates a cumulative expansion throughout the economy. With the increase in the purchasing power of the consumers, the demand for the products increases in relation to supply. The rising prices and the high rates of profits stimulate producers to raise investments by borrowing from the banks. The credit inflation starts with the entrance of new entrepreneurs in the field of production, which superimposes on the primary wave of innovations. This may be called boom or prosperity period. In this stage, the economic activities reach their maximum heights and the idle or unemployed resources are minimized (Andersen, 2009).

Schumpeter (2011; 1934) argued that if profit increases that the per capita output will keep growing. Hence, "there is, therefore, no prior ceiling to the level of per capita income in a capitalist society. Nevertheless, the economic success of capitalism will eventually lead to its decay". The progress of capitalism makes industrialists and merchants economically powerful and they begin to dominate in the political field (Breschi, Malerba, Orsenigo, 2000).

2.3 Empirical Review

Oyedokun (2016) investigated the effect of working capital finance on the entrepreneurship business growth in Nigeria, the study employed ex-post facto research design using panel data analyses of financial information extracted from Financial Statements for the years 2010 to 2014 of 10 companies listed under "consumer goods" on the floor of Nigeria Stock Exchange using stratified and purposive random sampling technique of only companies under "Consumer Goods" sub-sector with multiple regression analysis with the conclusion that there is a significant positive relationship between entrepreneurship business growth and working capital finance.

Dada (2017) investigated the behaviour of government spending and economic growth in six ECOWAS nations using ARDL and UVAR-based modified Granger noncausality strategy with secondary data covering 1981-2013 sourced on key factors from (WDIs) 2014 version. He discovered that Johansen and ARDL bound test indicates a long-run equilibrium relationship between government spending and economic development in all the six countries. While the altered ARDL suggests that variables adjust to a long-run equilibrium path after a brief run deviation. The research concluded that there is a cause-effect connection between government spending among other variables and economic development in the developing ECOWAS nations. In the study of Aleksandra, Dragan, and Anastazija (2014) it was emphasised the important issues of the budget deficit and public debt and their impact on economic growth. The main outcome of the investigation indicates a crisis of public financing, which can be accumulated for several decades, with an increasing budget deficit and the

dominant external financing of the budget deficit. Though the study by Terry and Isaya (2014) reviewed the evaluation of Kenya's public debt dynamics and sustainability using annual data on a financial year basis for the period 1983 - 2013, they examined the sustainability of Kenya's public debt using both the co-integration and stochastic debt sustainability strategies. The results show that the public debt is sustainable. In addition, depreciation in the exchange rate did not have significant influences on the average rates of interest on external debt during the analysis period. Expenditure and enhancing the absorption of development capital and promoting domestic revenue mobilization efforts.

Abu and Abdullahi (2010) investigated Nigeria government investment and economic development from 1970 to 2008 using a disaggregated analysis and It was observed that increasing government expenditure has not translated to meaningful development as Nigeria still ranks among world's poorest countries. It was also revealed that government total capital expenditure, total recurrent expenditures, and government expenditure on schooling have an adverse effect on economic growth. According to Bakafre (2014) there is growing evidence that foreign direct investment enhances technological change through technological diffusions, Braunstein and Epstein (2002), argues that the impact of trade performance adopted by multinational enterprise in the case of vertical investment theoretical imperfect competition models predict complementary relationship between FDI and trade Choe (2003) analyses the causality between FDI and economic growth. They use data for 11 developing countries in East Asia and Latin America. Using co-integration and Granger causality tests and according to the findings of Choe (2003), causality between economic growth and FDI runs in either direction but with a tendency towards growth causing FDI; there is little evidence that FDI causes host country growth. Rapid economic growth could result in an increase in FDI inflows.

Bakare (2011) used OLS Multiple Regression analytical method in the economy of Nigeria to examine the relationship between capital formation and economic growth. The test proved that the growth rate of national income positively, related to savings and capital formation. Tang and Chau (2009) conducted a study based on the relationship between savings and growth in Malaysia by using nonparametric co-integration test and DOLS method. They found that savings and economic growth are cointegrated and positively related in the long run so the study indicates savings is an engine to economic growth through its impact on capital formation. Orji and Peter (2010) in their study, looked at the relationship between FPI, Capital Formation and Growth in Nigeria, using the two-stage least squares.

Aurangzeb (2012) in his own study tried to find out the impact of deposit money banks on the economic growth of Pakistan. Secondary data were sourced from the state bank of Pakistan and other official publication. The period under review was from 2001 to 2010. The variables for the survey were six namely: Gross Domestic Product, Deposits, Investments, Advances, Profitability and Interest Earning.

Dele (2007) investigated the banking reform in Nigeria by using the data of 40 commercial and merchant banks. The variables used were lending, interest rate, and foreign exchange policy. The study used the descriptive statistics to test the hypothesis. The result indicated that recapitalization has shown significance to reform the banking services and to the overall growth of the Nigerian economy.

Kayode *et al* (2010) in their contribution wanted to know the effort of bank lending and economic growth on the manufacturing output in Nigeria. Time series data for a period of 36 years (1973 to 2009) were used and the techniques used for the analysis were the co-integration

and vector error correction model (VECM). It was discovered that the bank rate of lending loan significantly affect manufacturing output in Nigeria. This view point is correct because interest rate has an indirect relationship with the volume of production in manufacturing firms. As the interest rate of loans goes up, manufacturers will access little or no loan hence volume of production goes down and invariably economic growth will retard. It is however the view of the researcher that such variable as foreign exchange rate policy ought to have been included. This is because the foreign exchange rate policy in place within the period under review will to a great extent influence the manufacturing activities and hence economic growth.

Khatib *et al* (1999) had to investigate the relationship between commercial banking performance and economic growth in Qatar. Variables such as bank profit, GDP, government revenues, government expenditures, foreign interest rate were used and also the regression analysis model and (OLS) techniques were employed. The data used were for the period 1986 to 1997. The result showed that the variables are highly effective and responsible for economic growth.

In his own study Koivu (2002) investigated the relationship between financial sector and economic growth by using empirical methods and data variables. The variables were INT = Difference between lending and deposit interest rates as percentage points; CREIDT = Ratio of bank credit to private sector to GDP; RI = Reform Index; ANF = Annual consumer price index as percentages. GDP growth = Real GDP growth rate. He concluded that these variables had positive relationship with the growth of the Ghanaian economy.

Fadare (2004) empirically identified the effects of banking sector reforms on economic growth in Nigeria by using the data 1999-2009. Variables used for the study are interest rate margins, parallel market premiums, total banking sector credit to the private sector, inflation rate, inflation rate lagged by one year, size of banking sector capital and cash reserve ratios. Results indicate that the relationship between economic growth and other exogenous variables of interest rate margin, parallel market premiums, total banking sector credit to the private sector, inflation rate and cash reserve ratio was negative and insignificant.

Whereas the interest in this study is to find out whether a long-run relationship exists between banks, non-banks and growth of the Nigerian economy, regression analysis based on the classical linear regression model otherwise known as Ordinary Least Square (OLS) technique is chosen by the researcher. OLS will be used on the data to test the type of relationship between variables whether positive or negative and to find out if the variables are significant or not.

3.0 Methodology

The research design that is adapted for the study is causal design research. Two variables,the dependent and the independent variables include the capital formation which is proxied by gross fixed capital formation(GFCF) which is the dependent variable while the bank and non bank domestic savings which is proxied by Total Commercial Bank Servings (SAV),All Share Index (ASI) and total Insurance Servings (IS). Unit root test was done to determine whether stationarity exist among the variable of study.Co-integration test was also done to determine the long run relationship of the variable of study

Model Specification

GFCF = F (SAV,ASI,IS) ---------------- (1)
Where:
GFCF =Gross Fixed Capital Formation
SAV   = Total Bank Savings.
IS   = Insurance Savings

The relationship is structurally expressed as follows:

$GFCF_t = \beta_0 + \beta_1 SAV + \beta_2 ASI + \beta_3 IS + \mu_t$ …………………………..(2)
Where; β_0 = Constant term,
β_1, . β_2 and β_3 =Regression coefficient
and U_t = Error Term

4.0   Estimation of Results and Discussion of Findings

The results of the Augmented Dickey-Fuller (ADF) are presented in table one below:

Table 1: Augmented Dickey-Fuller Unit Root Test Trend and Intercept @ Levels

Series	ADF Test Statistic	5% critical values	10% critical values	Order	Remarks
LGFCF	-1.433594	-3.552973	-3.209642	-	Not Stationary
LSAV	-3.287902	-3.552973	-3.209642	-	Not Stationary
LASI	-0.330000	-3.552973	-3.209642	-	Not Stationary
LIS	-1.946480	-3.552973	-3.209642	-	Not Stationary

Table 2: Augmented Dickey-Fuller Unit Root Test, at first Difference

Series	ADF Test Statistic	5% critical values	10% critical values	Order	Remarks
LGFCF	-6.228408	-3.548490	-3.207094	1	Stationary
LSAV	-4.092495	-3.548490	-3.207094	1	Stationary
LASI	-3.681068	-3.548490	-3.207094	1	Stationary
LIS	-4.039659	-3.548490	-3.207094	1	Stationary

Table 1 shows that GFCF, SAV, ASIand IS are not stationary at levels. Considering the time series using Augmented-Dickey Fuller at trend and intercept, all the calculated statistics are less than the critical values at both the 10% and 5% level of significance integrated of order one. However, at 5% level of significance, all the variables became stationary at first difference since their t-test is greater than the Critical value at 5% level of significance. Since the result is significant, we, therefore, proceed to conduct a cointegration test to ascertain if there exists a long-run relationship between the variables under consideration. The Johansen cointegration further conditions that data series in a system of equation that are all stationary at first differences (and none at levels or second difference) is ideal for using the Johansen cointegration test. With this condition at hand, this study further makes use of the trace and

max eigen values from a Johansen cointegration test output to decide on the long-run relationship between savings (bank and nonbank) and capital formation.

Table 3. Johansen co-integration test

Series: LOG(RGDP) LOG(DIN) LOG(GFCF) LOG(FDI) LOG(SAV) LOG(GEX)				
Lags interval (in first differences): 1 to 1				
Unrestricted Co-integration Rank Test (Trace)				
Hypothesized		Trace	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.596346	108.7602	95.75366	0.0047
At most 1 *	0.580214	77.00833	69.81889	0.0119
At most 2	0.447395	46.62800	47.85613	0.0649
At most 3	0.361792	25.86911	29.79707	0.1327
At most 4	0.247786	10.15094	15.49471	0.2693
At most 5	0.005278	0.185223	3.841466	0.6669
Trace test indicates 2 co-integrating eqn(s) at the 0.05 level				
* denotes rejection of the hypothesis at the 0.05 level				
**MacKinnon-Haug-Michelis (1999) p-values				

Under the Johansen Co-integration Test, there is one co-integrating equation. In Johansen's Method, the trace statistic determines whether co-integrated variables exist. As can be seen from the trace statistics, here only the absolute values of GFCF are greater than 5% critical values (i.e. GFCF [108.7602 > 95.75366], also its Eigenvalue is greater than 5% level of significance, signifying the presence of long-run relationship among the variables employed in the study. In other words, the null hypothesis of no co-integration among the variables is rejected since at least two variables in the equations at 5% were statistically significant. The test result shows the existence of a long-run equilibrium relationship among the variables.

Vector Error Correction Mechanism (VECM)
The presence of long-run equilibrium relationship among the variables as found from the Johansen co-integration led to the application of VECM. With this approach, both the long-run equilibrium and short- run dynamic relationships associated with variables under study is established.

Table 4: VECM Model (**Standard errors in ( )& t-statistics in [ ]**)

Co-integrating Eqn:	CointEq1	
LOG(RGFCF(-1))	1.000000	
LOG(SAV(-1))	0.090846	
	(0.14272)	
	[0.63656]	
LOG(ASI(-1))	-0.325163	
	(0.08823)	
	[-3.68522]	
LOG(IS(-1))	-0.716175	
	(0.09741)	
	[-7.35195]	
C	-2.795600	
Error Correction:	D(LOG(GDP))	D(LOG(GFCF))
CointEq1	-0.428541	-0.163049
	(0.10580)	(0.29740)
	[-4.05030]	[-0.54825]
D(LOG(GFCF(-1)))	0.443340	0.919901
	(0.14415)	(0.40519)
	[3.07546]	[2.27029]
D(LOG(GFCF(-2)))	0.423483	-0.088102
	(0.17245)	(0.48473)
	[2.45568]	[-0.18176]
D(LOG(SAV(-1)))	-0.060799	0.027314
	(0.07179)	(0.20178)
	[-0.84693]	[0.13537]
D(LOG(SAV(-2)))	0.114072	-0.303354
	(0.06387)	(0.17953)
	[1.78595]	[-1.68970]
D(LOG(ASI(-1)))	0.558821	0.406984
	(0.10406)	(0.29249)
	[5.37019]	[1.39143]
D(LOG(ASI(-2)))	0.166225	0.172094
	(0.10602)	(0.29801)
	[1.56783]	[0.57748]
D(LOG(IS(-1)))	0.227626	0.226474
	(0.10564)	(0.29693)
	[2.15480]	[0.76273]
D(LOG(IS(-2)))	-0.131125	0.142340
	(0.08930)	(0.25100)
	[-1.46841]	[0.56710]
C	0.083969	-0.151113
	(0.03932)	(0.11052)
	[2.13558]	[-1.36730]

R-squared	0.695744	0.482853

R-Squared = 0.695744, F-Statistics = 60.97888, Prob (F-Statistic) = 0.0000

The model, however, revealed the opposite, showing that all the independent variables have negative effect on gross fixed capital formation in Nigeria and does not have any significant impact, this is also revealed by the t-test above.

4.1 Discussion of Findings

The model revealed a negative non-significant relationship between bank and non-bank domestic servings on capital formation in Nigeria. This finding does not conform to stylized fact that domestic servings leads to capital formation in Nigeria. The study is contrary to the findings of Bakare (2011), Orji and Peter (2010), and Ugwuegbe&Urakpa (2013) that finds a positive significant relationship bank domestic servings and capital formation in Nigeria. But however, conform to the findings of Kanu, Ozurumba, and Anyanwu (2014) who finds a negative relationship between bank servings and capital formations in Nigeria.

On the long run relationship, the research revealed a significant long-run relationship among the variables under examination. The result as indicated by the trace statistics of the Johansen co-integrating equation shows that there exists a long-run equilibrium relationship Gross Fixed Capital Formation (LGFCF) and the explanatory variables: (LSAV, LASI andIS) within the period under review. The findings also collaborated with many of the empirical work reviewed earlier in the discussion. The study by Orji and Peter (2010) on the relationship between foreign private investment, capital formation and economic growth in Nigeria using a two-stage least square (2SLS) method of estimation. The study finds that the long run impact of capital formation and foreign private investment on economic growth is larger than their short-run impact. There is thus, a long-run equilibrium relationship between the variables as the error correction term was significant, but the speed of adjustment was found to be small in both models.

5.0   Conclusion and Recommendations

The general objective of this study is to investigate the relationship between bank and non-bank domestic servings on capital formation in Nigeria, while the specific objectives are to; ascertain if there is long run significant relationship that exists among total bank servings,all share index and insurance servings on capital formation in Nigeria within 1986 and 2021 and to find out if there is significant causal relationship between the variables.

The study employed causal research design using Nigeria's data obtained from Central Bank of Nigeria (CBN) (1986-2021). The empirical results were on Augmented Dickey-Fuller test. In the second step, Johansen Co-integration Test was conducted. The presence of long-run equilibrium found led to the use of Vector Error Correction Mechanism (VECM). It was found that bank domestic servings does not lead to growth of capital formation in Nigeria within the period under study. It is therefore imperative to conclude from the findings that bank and non-bank domestic servings did not have significant effect on capital formation in Nigeria. The findings could not find the statistically significant influence of bank and non-bank domestic servings on capital formation in Nigeria.

Recommendations

1.   Government of Nigeria should give more attention to capital expenditures as against the current trend of 68.32 **%** allocations to recurrent and capital expenditures respectively. Efforts must be made to mobilize the desired level of gross national savings that could be big enough

to attract foreign direct investments This is very vital as FDI will help to complement our domestic savings.

2. Policy formulators in Nigeria need to enact some investor-friendly policies that will encourage, promote and attract more capital inflows (Be it official or private inflows) and to provide a conducive and enabling environment for the gross fixed capital formation to thrive. There is need to play down on speculative businesses and to invest in the real sectors of the economy.

3. Capital flight should out of the country should be reduced. Inflows should be tied to specific, relevant and purposeful projects. This will help to create employment opportunities in the long run. Prudence and proper accountability should be the watchword in the management of accruals from official capital inflows and transfers. Such monies are expected to be channelled into productive ventures by the governments in power and not for profligacy.

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