

Financialisation, Capital Accumulation and Economic Development:

A theoretical and empirical investigation of the Nigerian economy.

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Abstract

The primary focus of this study is to highlight those unobtrusive, yet fundamental, factors undermining economic development in Nigeria. To begin with, it posits that the decelerating pace of capital accumulation in Nigeria, which naturally occasions rising unemployment and poverty levels, and widening inequality gap, is the result of the ‘low possibility’ of capitalist enterprises in the country of earning an adequate rate of profit from their productive processes. In turn, the ‘low possibility’ is argued to be the result of the uneven development inherent in the modern capitalist structure, the high cost of capital and of production peculiar to Nigeria, and the ineffective demand for goods made in Nigeria: these elements are viewed as been precipitated by the contradictions of the contemporary political-economic arrangement that organises the Social Structures of Accumulation. For Nigeria to ‘develop’, it is contended that the unobtrusive elements inherent in the contradiction of the political-economic economic that undermine the capitalists’ ability to earn a commensurate rate of profit in the country needs to be fully addressed first. Furthermore, this study suggests that it is crucial the country embraces knowledge-based industrialisation if it is to achieve some form of ‘competitive advantage’ in the global market, which could enable its productive processes extract a commensurate level of profit from the market. To facilitate the knowledge-based industrialisation, the state should, not only create a conducive environment for industrial development but also play the lead role in transforming the peripheral and oil dependent economy to a knowledge-based economy by coordinating business organisations and investing in high-risk innovations.

Keywords: Nigeria, capital accumulation, the rate of profit, financialisation, economic development and neoliberalism.

Declaration

I declare that while registered as a research degree student at this University, I have not been a registered or enrolled student for another award of this University or of any other academic or professional institution, and that no material contained in this thesis has been used in any other submission for an academic award. This thesis is the result of my own investigation, except where otherwise stated. Other sources used are acknowledged by explicit references. A bibliography is appended.

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Dedication

I dedicate this work to God and to my wonderful parents.

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PART ONE

INTRODUCTION AND THEORETICAL REVIEW

Chapter one: Introduction to the research

1.0 Introduction

The cause of Nigeria's perennial underdevelopment has been a subject of long debate over the years. The country's economic tragedy, in the face of the vast natural and human resources abundant in the country, has been the most baffling paradox. Remarkably also, there has been no consensus regarding the fundamental factors undermining development in the country¹.

Nigeria has, without a doubt, suffered many setbacks – some of which were self-inflicted (like the civil war) – that could be argued to have somewhat contributed to undermining its ability to achieve sustainable economic development². Nonetheless, given the continued poor economic performance in the country in recent times, the change in the

¹ Factors, such as resource curse, inept government, weak institutions, corruption, civil unrest, unfavourable weather conditions and lack of social capital have mostly been put forward as the main reason for the economic deterioration in Nigeria (see Collier, 2008; Collier and Gunning, 1999a; Sachs and Warner, 1997 and Bloom and Sachs, 1998, for instance). However, despite these views gaining traction in the mainstream, several other studies have also pointed to external factors (such as imperialism and unfavourable international relations) as the main cause of underdevelopment in Third World countries such as Nigeria (see Arrighi, 2002, Amin, 1977, Prebisch, 1963, Baran, 1957 and Singer, 1950, for example).

² The Civil war in 1967-70 caused the loss of a vast number of both human and physical capital. The constant ethnic and religious clashes have also contributed to undermining economic development in the country to some extent: The Boko Haram insurgency that has been destabilising economic activities in the northern part of the country since 2009 is a contemporary example. On the other end, the volatility of the price of oil – the country's main revenue earner – could also be seen as another element contributing to economic uncertainties, hence the inability of the economy to develop.

political-economic arrangement³ could also be said to have had little impact on the country's economic development⁴.

In some ways, therefore, the continued inability of the Nigerian economy to develop, despite the change in the political-economic arrangement, can be seen as casting aspersions on the findings of some of the studies that have examined the Nigerian case; especially those that contributed to the formulation of the current arrangement in the country. Therefore, the persistent underdevelopment could be interpreted to suggest that some fundamental issues undermining development in the country have not been adequately identified and addressed.

Bearing these in mind, the focus of this study, therefore, is to examine those unobtrusive factors inherent in the contradictions of the contemporary political-economic arrangement that have also contributed to the persistent underdevelopment of the Nigerian economy over the years.

³ The political-economic arrangement is interpreted here as the set of ideologies that govern both the political and economic institutions that impinge upon the capital accumulation process. In particular, it is viewed as those set of ideologies that expresses a perspective on the way an economy should run and to what end. The two main contending ideologies are the free-market system and the embedded or social market system. The Free- market ideology, also known as the laissez-faire system of capitalisation generally prescribe a minimal public enterprise and state regulation. Social Market or embedded capitalist system, on the other hand, also supports a free-market economy; however, it calls for state action in some sectors of the economy.

⁴ For instance, over 60% of the country's population still live below \$1.25 a day and over 80% below \$2 a day (according to the World Bank's 2013 estimate) despite the country being under peaceful civilian rule since 1999. In addition, the country's official national unemployment rate has been in the mid-twenties since the 1990s, while the youth's (15-25s') unemployment rate has been in the mid-fifties, and the gap between the rich and the poor has been widening despite the reduced government intervention in economic processes.

1.1 Research background

The nature and sources of wealth of nations have been the lead concern of economists since Adam Smith (1723-1790), Thomas Malthus (1766-1834), David Ricardo (1772-1823) and Karl Marx (1818-1883). Even though the writings of these classical scholars were diverse, ranging from philosophy to sociology, economic and socio-political issues remained central in their works: particularly those concerning economic growth, poverty and inequality.

To begin with, the central argument of Adam Smith's *Wealth of Nations*, first published in 1776, was that increasing returns (on investments), which he posits helps to accelerate the pace of capital accumulation cum economic well-being, stems from the division of labour. The division of labour, Smith remarked, determines the level of labour productivity, which influences the level of profits, from which further accumulation of capital is possible. For Smith, the division of labour (or gains from specialisation) is therefore the very basis of the wealth of a nation. Additionally, Smith also noted that self-interested pursuit of gain is productive of benefit to the society: he reckons that the enterprise of individuals was capable, when left free of regulation, of carrying the standard of material well-being of nations to heights hitherto impossible and scarcely calculable. Overall, Smith contended that division of labour and free-market are the main drivers of economic growth and development.

On the other end, reverend Malthus, in his famous book, *Essays on the Principle of Population*, published in 1798, reckoned that unchecked population growth is the basis of economic problems. Particularly, he argued that reproduction by the poor should be severely scrutinised lest the world succumb to overpopulation, which he contends will

lead to chaos and misery: since the population grows geometrically while food output grows arithmetically.

For Ricardo, who published his *Principles of Political Economy and Taxation* in 1817, if both population and output begin to grow steadily, land will become increasingly scarce relative to other goods. The law of supply and demand then implies that the price of land will rise continuously, as will the rents paid to landlords. As a result, the landlords, he contended, will claim a growing share of national income, as the share available to the rest of the population decreases, thus upsetting the social equilibrium.

Marx's *Capital*, published in 1867, focused more on the analysis of the internal contradictions of the capitalist system. Marx concluded that there is an inexorable tendency for capital to accumulate and become concentrated in ever fewer hands, with no natural limit to the process. For Marx, the development of the modern industry cuts from its feet the very foundation on which the bourgeoisie produces and appropriates products: what the bourgeoisie produces, Marx noted, are, above all, its own gravediggers – its fall and the victory of the proletariat, Marx concluded, are inevitable, hence the perpetual contradiction of the capitalist system. Overall, Marx's view of the capitalist system is of a system that has class struggle as an inherent feature, and which, in the long-run, will destabilise the capitalist economic system.

Despite this tradition of classical political economists writing on political and socio-economic issues, economic development⁵ (particularly regarding the issues of income

⁵ According to Dudley Seers, development means creating the conditions for the realization of human personality. Its evaluation, Seers argued, must therefore take into account three linked economic criteria: whether there has been a reduction in (i) poverty; (ii) unemployment; (iii) inequality (Seers, D. [1972]. What Are We Trying to Measure? *The Journal of Development Studies*, 8, 21-36).

distribution and poverty), as a theoretical topic, did not receive much interest from the economic profession until after the Second World War. In fact, the revival of interest in development theory, particularly concerning the distribution of wealth, came at the wake of the war. Mainly because several war-damaged nations were looking for ways to reconstruct their economies, while the newly independent and less developed ones were attempting to initiate programs in their economies that will help them achieve ‘Western’ level of economic advancement.

It could be argued that the major intellectual boost to the development discourse, in the twentieth century, actually came from the seminal publication of Simon Kuznets – the renowned Belarussian-American Nobel Laureate – in 1955: this is because the central theme of Kuznets’ ground-breaking paper was more on the character and causes of long-term changes in the distribution of income (income equality).

In the paper, Kuznets examined whether inequality in the distribution of income increases or decreases in the course of economic growth. Using data from the United States, England and Germany, Kuznets posited that the relative distribution of income, as measured from annual income taxes, has been moving toward equality as these economies experience significant rises in real income per capita (Kuznets, 1955: 4-5).

Also, Kuznets remarked that the wider inequality in the secular income structure of underdeveloped countries is associated with a much lower level of average income per capita (*ibid*: 23): according to him, the unequal income structure in underdeveloped countries coexists with a low rate of growth of income per capita.

In sum, Kuznets concluded that the countries of Latin America, Africa, and those of Asia, are underdeveloped because their rate of economic growth has been far lower than that in the Western World.

Based on this loose⁶ relationship between economic growth and living standards (or development), greater attention was thus accorded economic growth theories; they were thereafter seen as the “workhorse” of economic development.

From the plethora of economic theories that emerged after the Second World War, the Solow growth model is still seen as the “backbone” of economic growth/development theories in mainstream economics: because of its parsimonious mathematical properties.

In broad terms, Solow’s analysis has two main propositions. The first is that if the initial capital stock is below a certain equilibrium ratio, capital and output will grow at a faster pace than the labour force until the equilibrium ratio is approached. The other is that if the initial ratio is above the equilibrium value, capital and output will grow more slowly than the labour force. The inherent implication of these propositions is that poor countries (those with initial capital stock presumed to be below the estimated equilibrium ratio) will grow at a faster pace and will catch up with the rich (those with initial ratio above the equilibrium value) – this is the basis of the “convergence” thesis (see Barro, 1997: 1).

In essence, Solow’s theory, like Kuznets’, also affirms that poor countries – i.e. those with low starting capital/labour ratios – have the potential to grow at a faster rate, and as

⁶ In the sense that the connexion, as Kuznets also conceded (*ibid*: 26), was based on 95% speculation and 5% empirical information.

a result catch up (converge) to those already with higher capital/labour ratios (i.e. the rich countries); if the level of capital, cum output, could be increased (Solow, 1956: 70-71).

Following Solow's findings and that of many other notable economists at that time (such as Arthur Lewis and Walt W. Rostow), many newly independent countries in Africa thus turned their focus on mobilising capital. Convention then was that these economies had excess supply of labour but deep 'financing gap' (these views were explicitly put forward by Lewis in his famous book, *Theory of Economic Growth*, first published in 1955 and by Rostow, in his book, *The Process of Economic Growth*, published in 1960). It was based on these prevailing analyses then that interest ceilings were consequently adopted by many governments, to afford domestic capitalists cheap access to credits – in the bid to accelerate the pace of capital accumulation cum economic growth.

In all, during the period from 1945 to late 1970, active government intervention in the economic process was deemed necessary for mobilising capital, which was seen as essential for stimulating the growth (and development) of the economy. The active government participation was underpinned by the Keynesian view that the market economy would not avoid serious depressions unless the government stood ready to compensate for fluctuations in private investments.

Notwithstanding the concerted efforts that were put in place to help develop the underdeveloped economies in the 1960s/70s, many still lagged behind. So in the late 1970s, given the failure of many economies in the Third World to catch up with the development in the West (and the North – the United States mainly), attention turned to economic liberalism. Government intervention in the economic process was subsequently blamed for the sluggish performance of many of the developing economies. For instance, a renowned economist, Ronald McKinnon, argued then that government intervention

creates fragmentation in the economy, and causes the misallocation of resources (McKinnon, 1973). It was based on this, and other numerous arguments put forward in favour of free-market⁷, that most governments in developing countries, such as in Nigeria, deregulated and liberalised their economies in the 1980s.

Without a doubt, since the turn of the twenty first century, following the deregulation and liberalisation of the Nigerian economy, the growth rate of the country's Gross Domestic Product (which is the "economic growth" indicator) has indeed surpassed those of many developed and emerging economies. From 2000 to 2010, for instance, Nigeria's GDP grew at an average of 8% while that of OECD countries grew at an average of 1.8%, in the same period. In essence, based on Kuznets' interpretation that economic growth is the workhorse of development (the tide that lifts all boats), Nigeria should be 'converging' to the level of income distribution (or development) associated with developed countries, which had had such high economic growth rates in the past.

Unfortunately, however, beneath the promising economic growth outlooks and the abundant natural and human resources still lay a widespread underdevelopment: even though the country's GDP (the aggregate national output) has been growing exceedingly high over the years, and despite the economy becoming the biggest in Africa⁸, the majority of ordinary Nigerians are still no richer. In reality, over 60% of the country's population still live below \$1.25 a day and over 80% below \$2 a day (according to the World Bank's 2013 estimate).

⁷ These include the free-market ideologies of Friedrich Hayek and Milton – their arguments are discussed in more details in chapter two.

⁸ The country's GDP was rebased in 2013 and as a result, the GDP shot up from 42.4 trillion Nigerian naira to 80.2 trillion naira (equivalent to \$510 billion) in 2013, making the country's economy the largest in Africa ahead of South Africa's.

In light of these, this study is structured to examine those unobtrusive yet fundamental factors that are responsible for the continual deterioration of the capitalist accumulation process, and as a result the economic development propensity of Nigeria. The focus of this study will be on the impact of the contradictions of the political-economic arrangements on Nigeria's ability to develop.

1.2 Research objective, design and methodology

- *Research objective*

The inadequacies of many past studies that have tried to detail the causes of the persistent underdevelopment in developing countries – such as Nigeria – have been noted to derive mainly from the focus and, in some cases, the methodologies adopted by the researchers. For example, Kotz *et al.* (1994), observed that although many researchers recognize the inability to reproduce sufficient profit as undermining the capitalist accumulation process (and as a result the development of an economy) that they (the researchers) have nevertheless often tended to ignore the importance of the political-economic arrangement in the formation of expectations about the rate of profit, and in some cases, have failed to provide a substantive account of this factor.

Regarding methodology, many past analyses have been accused of being founded purely on the hypotheses of empirical enquiries that are often conducted based on ‘episodic’ events or in a particular epoch, which, as a result, does not account for historical elements that could also determine development in an economy. For example, Price (1974) remarked that both McKinnon’s (1973) and Shaw’s (1973) enquiries on the reasons why there were growing disparities between developed countries and poor countries in the 1970s spanned just a period of 25 years, and did not account for some historical elements that may have had lasting impact on those poor countries studied. As a result, episodic and purely empirical enquiries are seen as being inadequate in accounting for characteristic elements – such as historical events – that might have had a lasting impact on the economies studied.

In light of these findings, this thesis is structured to focus more on accounting for the political-economic and historical elements that determine, to a significant extent also, the pace of capital accumulation along with economic development in an economy⁹.

To summarise, the main aim of this study is to highlight those understated but fundamental factors undermining development in Nigeria. This objective is met by analysing how the contradictions of the contemporary framework for organising the institutions that impinge upon the capital accumulation process (i.e. how the contradictions of the political-economic arrangement) and some historical elements – such as the tendency for the rate of profit to fall – have been affecting the processes of capital accumulation along with economic development in Nigeria over the years. The research’s main objective is summed as follows:

- To highlight those unobtrusive factors inherent in the contradiction of the political-economic arrangement and historical trends that are impeding capital accumulation along with economic development in Nigeria.

- *Research design and approach*

As have been noted earlier, a plethora of past studies that have studied the African tragedy have often tended to focus on moral and ecological factors, administrative incompetence, resource curse, nepotism and several other factors, and have frequently been apt to omit

⁹ Since many past studies have covered some of the obvious reasons why Nigeria has not been developing (such as corruption, inept government, weak institutions, resource curse, adverse weather conditions etc.), it will therefore be synonymous to “re-inventing the wheel”, should these issues also be in the centre of this research.

the impact of the contradiction of the political-economic arrangement and historical tendencies.

In this study, however, the focus is on examining the impact of both the contradiction of the political-economic arrangement and historical tendencies on the ability of Nigeria to develop.

The reason for the emphasis on the impact of the contradiction of the political-economic arrangements on economic development is predicated on the supposition, as articulated by Kotz *et al* (1994), that the alternation between long periods of stagnation in capitalist history can be better explained by the successive creation and then collapse of the sets of ideologies that governs (or shapes) the behaviour of growth-promoting institutions.

Without a doubt, it is obvious that when we study the political-economic arrangement that we are inherently evaluating the way the behaviours (or features) of the various political and economic institutions in a particular economy are modified, and the subsequent implications of such behavioural modifications on the capital accumulation process. For example, the capitalist, in business to make profits, begins by investing funds in raw materials – such as labour power, machinery, buildings, and other materials, which form the factors needed for production. Here, money and credit are essential because money is required for paying wages and purchasing other inputs, and credit is needed to facilitate purchases until incomes are received. The financial institutions thus play a significant intermediary role in this process: they assist the capitalist acquire commodities for production (through the provision of credits), and facilitate the exchange of goods through the provision of payment mechanisms. In essence, analysing the impact of the

financial system deregulation¹⁰ on the ability of financial institutions to undertake effective financial intermediation in the economy will no doubt deepen our understanding of the contradiction (if any) of the ideologies that underpinned the deregulation.

Like the financial system, the pattern of government involvement in the economy does also affect all the steps of capital accumulation because the government can enhance the profitability of investment (through subsidies, greater commodity purchases, provision of essential amenities etc.) or diminish it (through taxation, regulation etc.). Thus, analysing the pattern of government involvement in the economic process since the free-market reforms and the effect on the aggregate national output will invariably help us better understand the implications of the reduction in state role in the accumulation process. Again, this will also help expose the inconsistency (if any) of the ideological framework that encouraged minimal state intervention in the economic system.

The final step in the capital accumulation cycle, the selling process, involves the capitalists realising their invested capital, plus a surplus-value. The success of realising this expanded money capital depends upon the structure of final demand, including consumer purchases, state consumption, and the export markets. Since the pace of capital accumulation is conditioned by the structure of inter-capitalist competition, the pattern of domestic consumers' and government purchases, examining how the behaviours of these demand institutions have metamorphosed since the emergence of the free-market system will no doubt also deepen our understanding of how their reformation has been affecting

¹⁰ The deregulation was formed by a set of ideological frameworks, which favoured free-market norms. The deregulation re-modified the features of the financial system – for instance, it encouraged the removal of interest rate ceilings. So by analysing the implications of the removal of interest rate ceilings, we expose the inconsistency (or consistency) of the ideological framework that encouraged such feature modification.

the ability of capital assets to earn sufficient rate of return that will ensure their continuous subsistence.

In general, analysing how the behaviours of the various political and economic institutions impinging upon the accumulation process have changed over the years, and the impacts of these changes on the accumulation process will almost certainly paint a clearer picture of the implications of the contradictions (or consistency) of the contemporary political-economic ideologies that have shaped these institutions.

For effective analysis of the main political-economic arrangements that have shaped Nigeria's Social Structure of Accumulation (SSA)¹¹ since the country's independence in 1960, two distinct periods in the country's history are studied in juxtaposition. The first cycle, 1945 to 1985, represents the interventionist periods – the pre-deregulation/liberalisation era – when state-led strategies shaped the politico-economic structures/institutions. The second period, 1986 to 2013, represents the post- deregulation and liberalisation or the free-market-led era: when the SSA was moulded to conform to free-market ideologies.

A casual observation of the growth rate of the examined macroeconomic variable (the level of gross capital stock) in the two sub-periods shows, on average, that the levels of

¹¹ The Social Structure of Accumulation, according to Kotz *et al.* (1994: 1), refers to the complex of institutions, which support the process of capital accumulation. These includes political, economic and cultural institutions, both domestic and international. The domestic institutions include the state of labour-management relations, the organisations of the work process, the character of industrial organisation, the role of money and banking and their relation to industry, the role of the state in the economy, the state of race and gender relations, and the character of the dominant culture. The international institutions may concern the trade, investment, monetary-financial and political environments.

this macroeconomic variable during the market-led periods have been somewhat below the rates achieved during the state-led periods (see Figure 2).

To help determine if the decline could also be traced to the inconsistencies of the adopted ideologies that have shaped the SSA, insights on the capacity of these ideologies to accelerate capital accumulation along with economic development are sought from the ground-breaking theoretical contributions of Adam Smith, Karl Marx and John Maynard Keynes¹².

In sum, therefore, the research could be seen as using historical evidence and seminal theoretical constructs to validate or repudiate the logic of the contemporary political-economic arrangement.

This approach of synthesizing historical evidence with theory is known as the *Marxist method of analysis*¹³. It differs from the traditional system of applying ready-made theories to history. In essence, the research's main approach could be seen as a critical analysis of Nigeria's political-economic arrangements. That is, the two main ideological frameworks are studied in juxtaposition, and historical evidence, in combination with Smith's, Marx's and Keynes' ground-breaking contributions, is used to evaluate the

¹² That is insights are drawn from their theoretical contributions on elements that determine the rise and decline of the modern capitalist system. In some sense therefore, this thesis could be said to be in the post- Smithian, Marxian and Keynesian tradition: which I take to mean that Smith, Marx and Keynes provided the shoulders of giants upon which I stood in order to see far and deep into the essential character of a capitalist economy. However, this does not mean that Smith's, Marx's and Keynes' works were merely interpreted in this study. Rather, what is achieved by standing on their shoulders is the understanding, from their point of view, of the intricate dynamism of the modern capitalist system. The knowledge gained is then used to evaluate the logic of the contending approaches that have moulded the SSA.

¹³ The *Marxist method*, as formally defined by Mandel [1968: 18], is an integration of dialectical rationalism with empirical grasping of facts; i.e. a critical, materialistic, dialectical interpretation of history

ability of the political-economic arrangements to promote capital accumulation along with balanced development in the economy in the longer-run.

- *Research methodology*

The empirical analysis carried out in this research, using annual time-series data from 1961-2013, is divided into two:

- (i) Statistical testing and
- (ii) Econometric analysis.

First, to be able to test the significance of the difference observed between the medians of the selected macroeconomic variable (the gross capital stock) in the two sub-periods, the research question is restated as follows:

1. The null hypothesis (H_0): this states that deregulation and liberalisation of the financial system (market-led strategies) have had the same impact on the economic variable as state-led strategies (the interventionist approaches). This hypothesis is based on the premise that the median of the real economic variable during the market-led epoch is not significantly different from that achieved during the state-led epoch.

i. $H_0: \mu_1 = \mu_2$ (Eq. 1.1)

Where: μ_1 represents the median of the share in the gross domestic product of gross capital stock in the first sub-period, and μ_2 represents same, but for the market-led epoch.

2. The alternative hypothesis (H_1): this states that the market-led strategies have not positively influenced the macroeconomic variable. This is premised on the fact

that the median of the real economic variable during the market-led epoch is significantly different from that in the state-led epoch.

ii. $H_1: \mu_1 \neq \mu_2$ (Eq. 1.2)

The Mann-Whitney (1947) technique is used to test these formulated hypotheses; given that the variable is not normally distributed (i.e. is non-parametric¹⁴). The Mann-Whitney test compares the two sub-periods and establishes if the difference between the median of the economic variable in the two periods is statistically significant. In other words, it compares if the levels of gross capital accumulation in the two sub-periods are significantly different.

For the econometric analysis, a modified empirical model, the Autoregressive Distributed Lag (ARDL) approach to cointegration testing (also known as the *Bounds Testing* model) – developed by Pesaran and Shin (1998) – was employed, with regressors of financial development variables, including some conditioning information set, to test the notion that financial deepening (often attributed to deregulation) spurs economic development.

The individual finance proxies used in the empirical model were designed according to those used earlier by Roubini and Sala-i-Martin (1991), King and Levine (1992), Odedokun (1996a) and Levine (2004). The data for the finance indicators were taken from the Federal Reserve Economic Database (FRED) and the Central Bank of Nigeria’s (CBN’s) database.

¹⁴ The outcome of the normality test (see Table 14) shows that this variable is non-normally distributed (i.e. non-parametric).

The financial development variables used in the empirical analysis are –

- i. The share of bank private credit in GDP (*BPC*)
- ii. The share of deposit money bank assets in GDP (*DMBA*)
- iii. The share of financial system's deposits in GDP (*FSL*)
- iv. Deposit money bank assets to deposit money bank assets and central bank assets (*DMBFA*)
- v. The ratio of banks' credit to banks' deposit (*BCD*)
- vi. The share of the central bank's assets in GDP (*CBN*)
- vii. The ratio of liquid liabilities of the financial system to GDP (*M₂*)
- viii. The ratio of quasi-liquid liabilities of the financial system to GDP (*QM*)

In the modified empirical model, the share of capital stock in GDP, labelled (*CKG*) is used as the dependent variable. The data for the variable was taken from the PENN World Table (PWT), version 8.0, compiled by Feenstra *et al.* (2013). The choice of this variable was influenced by the finding that it is econometrically practical to use the share of capital stock in econometric analyses, given that it is easier to capture endogenous elements that affect it than those affecting the aggregate GDP variable (see Odedokun's, 1992, 1996a, 1996b, views on this). Furthermore, this variable was chosen because it is thought to relate more directly with the three core pillars of development – which are employment, low level of poverty and inequality. It is believed that an increase in capital accumulation (industrialisation) will, almost certainly, reflect in increases in the rate of employment, which often entails reduction in the level of poverty and income inequality.

On the other hand, the choice of conditioning variables were influenced particularly by the studies by Levine and Renelt (1992). The proxy variable for trade policy is the ratio of exports to GDP (*SHX*) – to proxy trade openness. For fiscal policy, the share of

government expenditure in GDP (*GOVT*) is used. The GDP per capita annual growth rate (*GDPKC*, to proxy rate of growth of initial income) is also used as a conditioning variable and the spread between deposit and lending rate (*SPREAD*) is used to proxy financial liberalisation (i.e. to proxy the competition between Deposit Money Banks). The annual average inflation rate (*CPI*) is also used to proxy monetary policy (interest rate ceiling deregulation). The conditioning variables were sourced from the PWT and the CBN's statistical databases.

In order to capture all the effects of these various financial deepening indicators that have been traditionally employed in related studies without over-parameterizing the endogenous growth model, composite indicators of financial development were generated. These synthetic composite indicators were created using the Principal Component Analysis (PCA) approach. The PCA approach helps circumvent the problems associated with multicollinearity, given that most of the financial deepening indicators are highly correlated (see Table 23A in the appendix). The PCA approach have been widely adopted by similar studies (see Ang, 2008; Gries, *et al*, 2009 and Sahay, *et al*, 2015) as a method of ascertaining the impact of substantially large variables without over-parameterizing a model.

1.3 Contribution of the research to the field of Nigeria studies

Although the weight of the arguments from past studies that have examined the effects of the contradiction of the political-economic arrangement on the real economy are undeniably persuasive, their conclusions, however, cannot be simply accepted as the most complete explanation of the causes of the persistent decline in capital accumulation (along with the increasing level of underdevelopment) in Nigeria. This is because many of these past studies have mostly analysed the contradiction of the political-economic arrangement

by explaining their impact on developed or Latin American economies. For example, while Krippner (2005), Crotty (2005) and Orhangazi (2008), to name a few, focused mainly on the U.S. economy when they discussed the consequences of the free-market ideologies on the real economy, Palma (2013) and Chandrasekhar and Ghosh (2013) focused on emerging and Latin American economies. A few others have mostly focused on European economies (e.g. Fouskas and Dimoulas, 2013 and Lapavitsas, 2013a). Therefore, given that there are huge differences between the financial and economic structures in these regions and those in Nigeria¹⁵, it will certainly be somewhat erroneous to use the conclusions from these studies to also account for the experiences in Nigeria¹⁶.

On the other end, a plethora of empirical studies employing cross-country comparison (panel or cross-sectional analyses) and country-specific (time-series) approaches in the study of the financial development-economic growth/development nexus, even those conducted concerning Nigeria, have mostly been designed with GDP (in some cases the per capita component or its growth rate) as their sole dependent variable¹⁷. Such models, however, have now been shown to be flawed; due to the inconsistency inherent in using the GDP variable (or its counterpart, or their rate of growth) in any econometric model that is mostly populated by financial development indicators (as the explanatory

¹⁵ The difference in the structure stems from the size of the financial institutions operating in these countries and those in Nigeria, including the level of product sophistication (with regards financial products). The level of development of human capital, the poor infrastructures prevalent in Nigeria and the low technological advancement also contribute to the difference between Nigeria and these other economies.

¹⁶ Although there are studies that have critically examined the impacts of neoliberal reforms on developing economies (see for instance Easterly, 2001, Arrighi 2002 and Samir 2012), these studies however did not extensively, as did here, deal with all the peculiar elements undermining Nigeria's economic development.

¹⁷ See for example, Fowowe (2008), Udoh and Ogbuagu (2012) and Ujunwa *et al.* (2012)

variables¹⁸). In view of this, past empirical studies that used the GDP aggregate as their sole dependent variable could also be argued to be incomplete with regards providing a consistent analysis of the finance-growth nexus.

Aside the inconsistency of using GDP (or its growth rate) as the sole dependent variable in a model that utilizes financial proxies as the main explanatory variables, these indicators have also been shown to be poor indicators of development. In fact, Piketty (2014) remarked that, contrary to the belief that economic growth (represented by the national output – i.e. the GDP) is a growing tide that lifts all boats (as claimed by some authors), that it actually masks the underlying inequalities (and the overall underdevelopment) in a country. This, he explained, is because the Gross Domestic Product (or its rate of change) could be increasing while the underlying indicators of development – employment, low-poverty and income inequality levels – are worsening, given that the indicator only shows the aggregate output and does not reflect the internal distribution. In essence, not only are previous empirical models (those designed with the GDP indicator) miss-specified, they are also inadequate with regards measuring the determinants of economic development.

Additionally, several of the past empirical analyses have also been shown to be somewhat inconsistent because of the conflicting exogenous variables used in the analyses. For instance, Ang (2008) remarked that many past studies that have investigated the finance-growth nexus try to include as many financial proxies as possible in the estimation in

¹⁸ Odedokun (1996a, 1996b) observed that the GDP indicator is an inappropriate dependent indicator in a model that uses mostly financial development variables as explanatory variables because the Gross Domestic Product (or its growth rate) is affected by a multiplicity of factors that are often not sufficiently captured by financial proxies.

order to present a more ‘complete’ picture of financial development. However, he noted that this leads to the problem of multicollinearity in both cross-sectional and panel data investigations, as well as over-parameterization in time series analyses: the consequence being the production of spurious results. In essence, the results from most past empirical studies on the theme of this research could also be said to be biased because of the presence of this statistical problem.

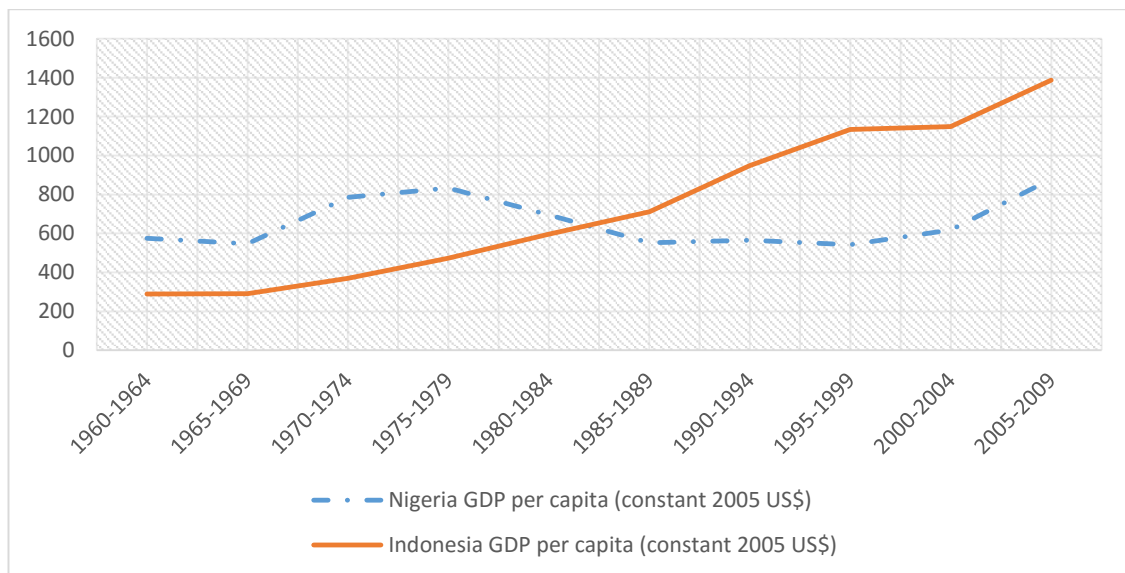
Overall, this study contributes to the field of Nigeria studies by filling the gaps that exist in both the theoretical and empirical literature on growth and development in Nigeria. It combines relevant theoretical constructs – which cogently explain the fundamental factors that constitute to the formation and decline of an economic system – with consistent empirical measures in the critical assessment of Nigeria’s development problems. To begin with, this study deviates from the orthodox approach of analysing Nigeria’s problems purely based on the factors internal to the country and by imposing ready-made theoretical logics on history. Rather, it studies Nigeria’s problems in juxtaposition with the world system and imposes historical evidence on theoretical logics. Secondly, it synthesises the explanatory variables to form a composite index that resolves the issues of multicollinearity, without sacrificing relevant variables. The empirical model also adopts a dependent variable that is econometrically feasible to measure, and which at the same time relates directly to economic development.

In essence, by adopting a peculiar approach, which has not been previously coherently applied in the discussions regarding Nigeria’s development tragedy, and by also employing a wide range of consistent variables in its econometric analyses, this study contributes significantly to the existing body of knowledge and provides a more coherent perspective on the trajectories of economic underdevelopment in Nigeria.

1.4 Scope and limitations of this research

The focus of this study is to elucidate the impact of the inconsistency of the political-economic arrangements on Nigeria's ability to develop. First, Nigeria is an interesting case because, relative to its own history and in comparison with other countries (especially Indonesia that was comparable to her in most respects in the 1960s-80s), the country's economic development tragedy stands out. For example, while the per capita income of the country has stagnated, those of Indonesia, which were relatively lower in the 1960s-80s, have risen faster (see Figure 1 below).

Figure 1 - Average GDP per capita (constant 2005 US\$) from 1960 to 2009



Source: Own elaboration based on data from the World Bank 2015 Development Indicators.

Second, the strategic relevance of the country to the stability and development of the Sub-Saharan African region and Africa as a whole, makes Nigeria's underdevelopment a pressing issue. This is because Nigeria accounts for over 30% of the region's national output and over 50% of the region's population. Therefore, a vibrant and growing Nigerian economy will certainly act as a strong growth pole for not only the region but Africa as a whole.

Without a doubt, the focus on Nigeria alone has a noteworthy downside: because it restricts the generalisation of the research outcome. Though true, it, nonetheless, does not take away the validity of the findings. In fact, studies¹⁹ have shown that country-specific studies perform better in elucidating the main underlying factors concerning that country than pooled or cross-sectional studies that lobb countries with heterogeneous identities together, thus masking the peculiarities of each and, in some cases, the distinctive historical factors that have shaped the social formations of each country. In essence, it is, for the sake of practicality, better to study an individual country (in juxtaposition with the world-system) than to lobb heterogeneous economies together, for the sake of generalisation, which in turn has no policy relevance.

On the other end, the major causes of the continual underdevelopment in Nigeria, as postulated in this study, are mostly blamed on the contradiction of the political-economic arrangement and some historical elements, with less emphasis on administrative, moral, ecological and some other indeterminate constraints. The reason for this deliberate emphasis is not that these other issues are trivial, but rather that most of them have been exhaustively deliberated.

Given therefore that these other factors have been comprehensively discussed, it will thus be synonymous to “re-inventing the wheel” (aside the word count limit) if they were to also feature extensively in this research. Furthermore, although it is true that when administrative, moral, ecological and the numerous other indeterminate constraints are present, the resolution of some of the issues explicated in this research could still be doubtful in making much meaningful headway in the acceleration of economic

¹⁹ See Ang (2008) and Arestis and Demetriades (1997), for instance.

development in Nigeria: given that corruption, bad weather, bureaucratic bottlenecks, and nepotism, etc., can still significantly undermine any meaningful policy intentions. Nevertheless, since it is more effective to tackle economic issues first, in order to gain political support and then administrative competence for bolder actions later, addressing the problems (as pointed out in this study) that undermine the accumulation process first could perhaps still prove to be a more viable entry point for effective reforms that could accelerate development in Nigeria. This is because high employment and low levels of poverty and inequality (most of which derives from increasing level of capital accumulation) often ensures peace and reductions in nepotism and corruption, which, altogether, are the right recipe for a sustained development in the long run²⁰. In essence, addressing the economic issues that affect capital accumulation (commerce and industry) first could perhaps be a better strategy for an effective development drive in the end.

For the empirical analysis, the data used were restricted to the periods from 1961 to 2013. First, this was due to the availability of data. Secondly, because of the need to eliminate periods of structural breaks – periods with an unexpected shift in the time series. For the theoretical discussions (chapters 1 to 5), references are made to historical figures as far back as 1960 (the year the country received its independence from colonial rule) and as most recent as 2014 (the last year for the official figures held by many statistical sources consulted as of January 2015). For the empirical analyses, however, figures for the period from 1961 to 2013 were used in order to circumvent the distortion effect of structural breaks, which culminated from 2013 rebasing of the country's national account. Including

²⁰ Adam Smith did note this point in his writings. He did remark that growing commerce and manufactures introduces order and good government, and with them the liberty and security of individuals among the inhabitants of the country, who had before lived almost in a continual state of war with their neighbours and of servile dependency upon their superiors (Smith, [1776] 2005: 331).

data from this period would have led to forecasting errors and unreliability of the econometric model in general; because of the abnormal fluctuation in the national figures that resulted from the rebasing exercise, which is not cyclical.

In addition, although careful consideration was given to the choice of sources of data²¹, the validity of these collected data could still be questioned: because of human fallibility. In essence, conclusions drawn from the empirical analysis may still have some element of error despite the careful consideration. However, to reduce the amount of bias that could arise because of the unreliability of the data source, attempts are made, where possible, to corroborate data from different sources in order to minimise the degree of data irregularity. Nonetheless, this does not completely absolve the research's conclusion from any data irregularity.

Overall, the scope of this study, that is, the focus on Nigeria and on external environment elements, including the perceived limitations (the non-generalisation of the outcome and the possible unreliability of the secondary data used) could be said to pose little threat to the validity and contribution of this research. This is because the many advantages of the research, after all, dwarf the few shortcomings.

²¹ Most data used in this study were collected from official sources – the World Bank database, the Central Bank of Nigeria's database, the Federal Reserve Economic Data (FRED), the PENN World data, the IMF World Economic Outlook database, the International Labour Organisation (ILO) statistical database, the World Trade Organisation (WTO) database and the United Nations statistical database.

1.5 Organisation of the thesis

For a coherent discussion, subsequent chapters of this thesis are structured as follows. Chapter 2 presents the review of some theoretical literature on the capital accumulation-growth/development nexus. The chapter begins with a discussion of the concept of ‘engine of development’ (in section 2.0): it is acceded to here that the main reason for the persistent underdevelopment in Nigeria is the decelerating pace of capital accumulation in the country²².

Chapter 2 continues with an extensive review of some leading mainstream theories of investment growth (these are set out in section 2.1), starting with the Harrod-Domar analyses. This section also discusses Solow’s exogenous growth theory and its shortcomings. The endogenous growth theories that were propounded in the 1980s to address some of the inadequacies of Solow’s theory are also briefly discussed in this section.

Section 2.2 documents a detailed analysis of the emergence, features and contradictions of the two contending frameworks for organising the political-economic institutions that impinge upon the accumulation process. The theoretical support for the argument put forward in this thesis is partly formulated in this section. Section 2.3 documents the major criticisms of the established growth theories and literature.

²² For increasing capital accumulation has, as a corollary, rising employment, and decreasing poverty and inequality levels.

Section 2.4 documents some of the main heterodox theoretical arguments that have been put forward to counteract mainstream theories of economic growth. This section examines, in particular, Marxian theoretical constructs of capital accumulation and economic development – ranging from the centralisation and concentration paradigm to the crisis of accumulation, dependency and the world system analyses. Section 2.5 discusses some contemporary heterodox views on the impact of the free-market system on the real economy, while section 2.6 contains discussions on the role of the ‘rate of profit’ in the accumulation-growth process. It is argued here that a commensurate rate of profit, a factor that is often omitted in development debates, is vital for accelerating economic development, since profit is a fundamental element that determines the pace of capital accumulation, which will invariably stimulate economic development. Thus, understanding factors that undermine the rate of profit is contended to be integral for pinpointing the factors that undermine economic development. The conclusion to the chapter is contained in section 2.7.

Chapter 3 contains the discussion on Nigeria’s political-economic environment since the Bretton-Woods agreement. The chapter discusses the political-economic arrangements that have been in place since the country’s independence in 1960: starting with the reasons or factors that necessitated the transformation from the embedded capitalist system to the free-market system, and the main features of these systems. A summary of the main monetary policies that were implemented in the country from 1959 to 2013 is contained in 3.2, with the conclusion to the chapter set out in 3.3.

Chapter 4 documents the perceived unobtrusive yet fundamental factors that are contended to have contributed significantly to the perennial underdevelopment of the country’s real economy over the years. Particularly, it discusses the various consequences

associated with the contradictions of the political-economic arrangements that have moulded the structures of accumulation in Nigeria since the country's independence. The chapter is organised as follows: section 4.1 starts with the discussion on how low profitability is the bane to capital accumulation, along with economic development, in Nigeria. In section 4.1.1, the factors undermining the ability of capitalists in the country to earn the adequate level of profit, which could sufficiently validate their business obligations and as such allow them to grow, are examined. These factors are graphically illustrated in section 4.1.2 with data from the 2013 Business Expectation Survey (BES). In section 4.2, the inadvertent trends that have emerged in Nigeria, which are contended to have been occasioned by the contradiction of the free-market reforms (such as the deregulation of interest rate and capital account controls and the liberalisation of trade), are exhaustively examined. The conclusion to the chapter is contained in section 4.3.

The second part of the thesis concludes with chapter 5, which contains the summary of the major findings of the research with some concluding remarks, and suggestions for future research attention.

For the third part, the section starts with a review of empirical literature on the finance-growth nexus – these are documented in chapter 6. Since early 1970, attention has been on the role of the financial system in economic development. The financial system is now seen as the *'axle that spins the engine of growth'*: a well-functioning financial system is argued to be paramount for accelerating the pace of capital accumulation. The critical roles the financial system plays in the economic process, i.e. in stimulating capital accumulation, are broadly examined in section 6.1.

Despite the increasing acceptance of the critical role of the financial system in economic development, the relationship between financial 'development' – defined narrowly, as

deepening in the financial system – and economic development, has been a major cause of disagreement in academic discourse in recent years. The confliction arises from the impact some policies are viewed to have on the financial system, and subsequently on the real economy. The critical review of some of the leading literature on this debate are contained in sections 6.2 to 6.4: section 6.2 provides a critical review of some of the first studies on the finance-growth debate (i.e. the pre-1990 studies) while section 6.3 discusses the second generation (post-1990s). The more recent studies (the third generation/post-2000s) are reviewed in section 6.4. The conclusion to the chapter is contained in section 6.5. The econometric analyses conducted in relation to the financial deepening-growth debate are included in chapter 7.

Taken together, it is hoped this research will paint a clearer picture of the effect of the contradictions of the dominant political-economic ideologies in Nigeria, and, perhaps, will be instrumental in reshaping policies that will help accelerate the pace of capital accumulation along with economic development in the country someday.

Chapter two: Review of theoretical literature

2.0 Introduction

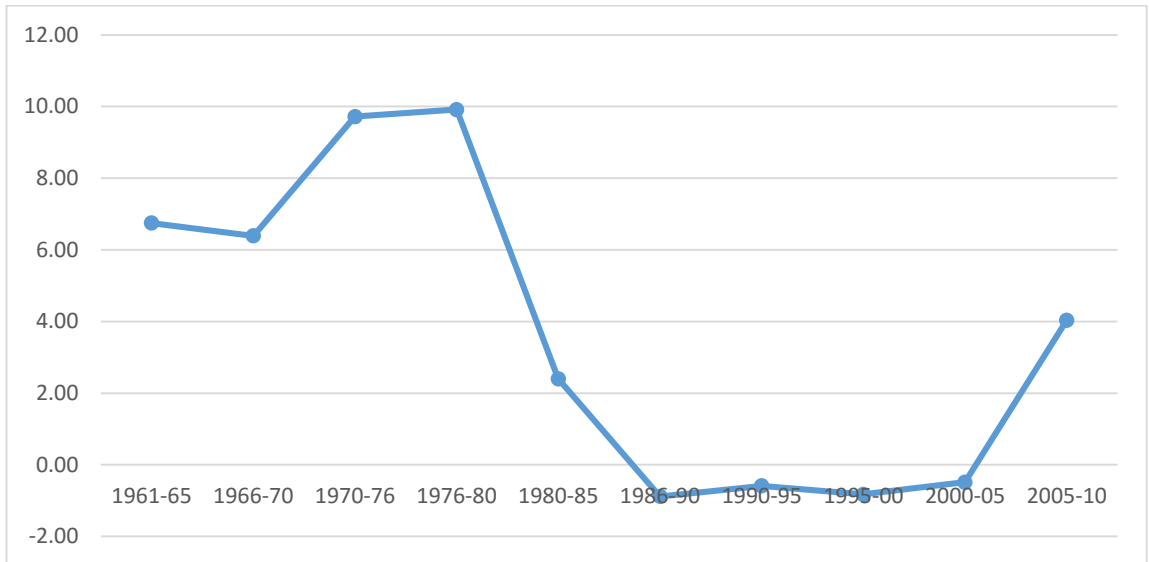
Nigeria's perennial underdevelopment could be said to be the result of the declining rate of capital accumulation²³ in the domestic economy: for a declining rate of capital accumulation (real investment or industrialisation) has, in addition, rising unemployment, which accelerates poverty and widens income inequality. Aside the obvious benefits that derive from the expansion of capital accumulation, the enhancement of skills – such as the training of managers – and the dispersion of technology also emanate from the expansion of industrialisation. These latter benefits are often viewed as *technological externalities*: they are claimed to benefit the development of the wider economy also in the long-run (see Levine and Zervos, 1998).

Since early 1980, the rate of growth of the real capital stock (a proxy for capital accumulation) in Nigeria has declined sharply (see Figure 2 below). The deceleration of the rate of accumulation of capital could be seen to have, in turn, exerted significant social and economic cost on the country: the rate of unemployment in the country has risen considerably over these years (see Figure 3) and employee compensations (nominal

²³ Capital accumulation, as interpreted in this text, follows the definition given by Marx ([1867] 1990). It is viewed as the capitalist process of reconvertng *surplus value* into *capital*. Surplus value, on the other hand, is defined as that extra value that is created from the sum of the values of the commodities (such as labour, raw materials, machines etc. – referred to as inputs) used in production (*ibid*). Surplus value is derived as follows: in the $M-C-C^l-M^l$ circuit, C is commodity capital, which contains constant capital, c and variable capital, v . So $C = c + v$. When transformed through the labour process of production, it becomes $C^l = (c + v) + s$, where s is the surplus value. This surplus value, according to Marx, is a mere congelation of surplus labour time. The surplus value can be split into various parts – profits, interest, merchant's profit, rent, etc. In simple terms however, it can be viewed as the 'excess' value accumulated from the employment of a given *capital*: *Capital* is seen here as only those resources (e.g. money) that begets commodities (such as raw materials, labour etc. [the factors of production]), of which their interaction in turn also beget the original money expended, including the surplus-value which can be reconverted into further accumulation of money capital.

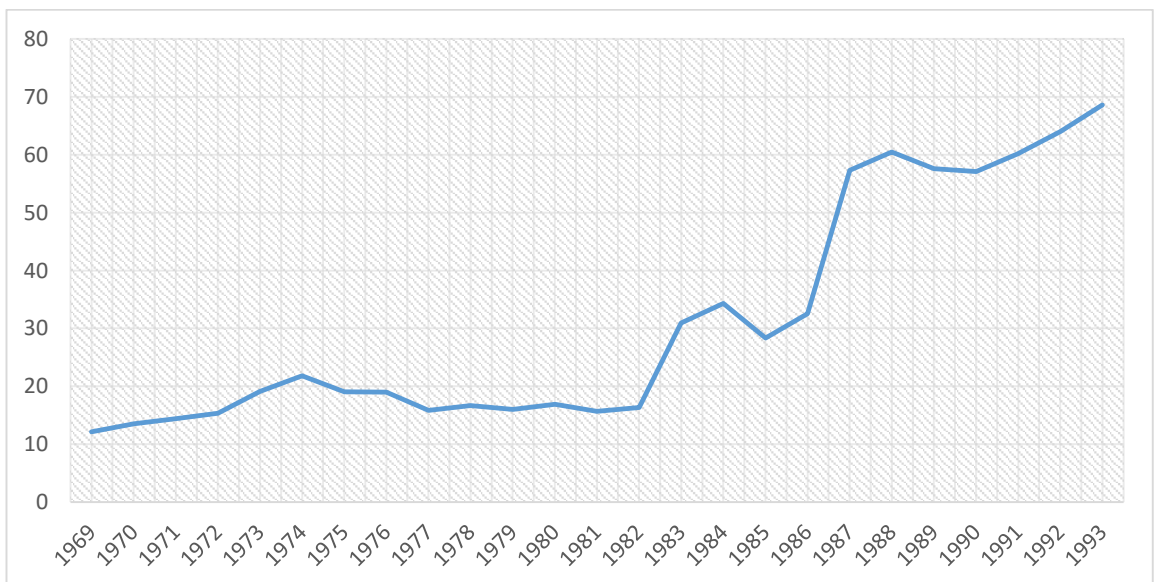
incomes) have declined significantly (see Figure 4). These economic deteriorations also reflect in the increase in the number of people living below the poverty line in the country – which has witnessed sharp increase since the mid-1980s. Furthermore, income inequality has also been widening (see Figure 5).

Figure 2 - Average percentage change in the level of capital stock in Nigeria (1961-2010)



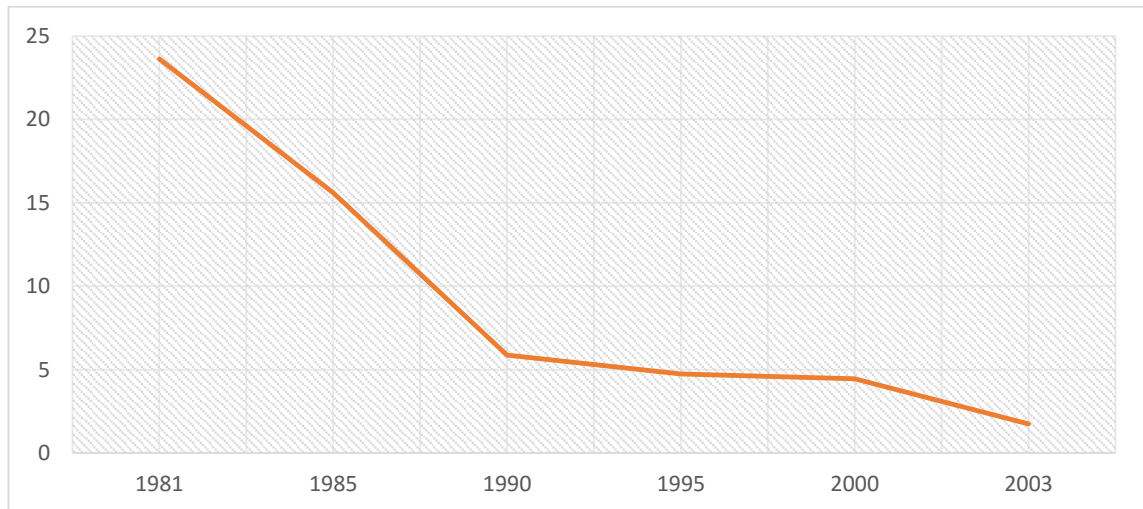
Source: Own elaboration with data from the Penn World Table, Version 8.0, compiled by Feenstra *et al* (2013).

Figure 3 - Registered unemployment for persons aged 15+



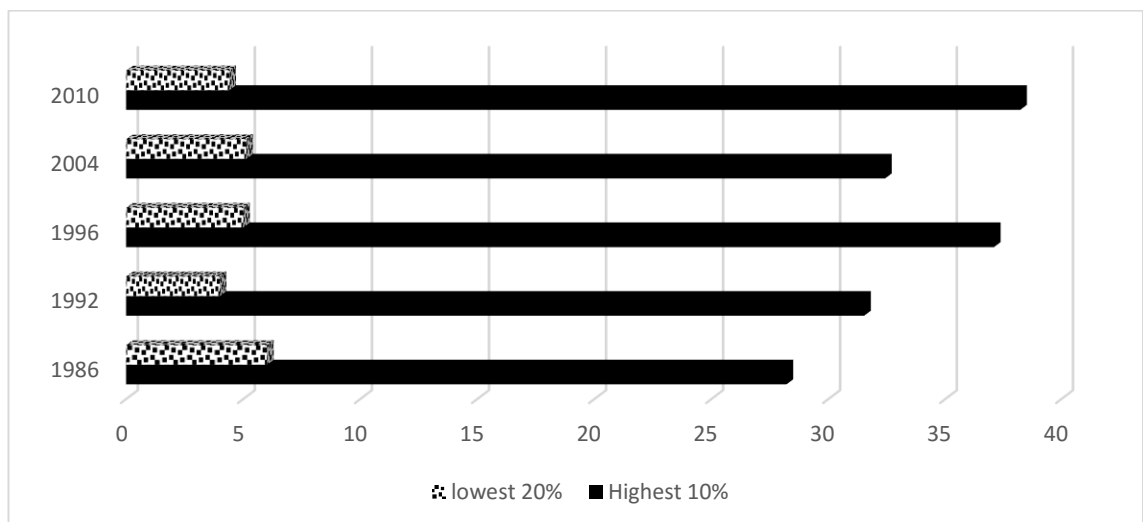
Source: Own elaboration based on data from <http://laborsta.ilo.org>

Figure 4 - Figure 4 - Employee compensation (as a ratio of GDP)



Source: Own elaboration with data from the CBN database, <http://statistics.cbn.gov.ng/cbn-onlinestats/DataBrowser.aspx>

Figure 5 - Income distribution



Source: Own elaboration based on data from World Bank 2014 development indicator database, <http://databank.worldbank.org/data/views/variableselection/selectvariables.aspx?source=world-development-indicators>

In sum, the deceleration of capital accumulation could be argued to be one of the main reason for the growing unemployment, poverty and widening of income inequality – the three pillars of development – in the economy: a declining rate of capital accumulation could thus be said to reflect a growing underdevelopment in the economy.

The pace and character of industrial development (i.e. capital accumulation) of a country, as the World Bank carefully articulated in its 1987 development report, and which Kotz *et al* (1994) also summed in their book, depends on several factors, which if right, it was claimed, accelerates the capital accumulation process and economic development consequently. These factors, as the Bank and Kotz *et al.* highlighted, include - the country's size, its natural and physical resources, the external political-economic arrangement, the stability of government and institutions, and their ability to promote effective fiscal, monetary and exchange rate policies that are conducive to industrial development, the skills of its people and a series of other factors that, one way or the other, impinge upon the accumulation process (World Bank, 1987; Kotz *et al*, 1994).

These factors if harnessed effectively, it was remarked, determine the pace of capital accumulation and promotes economic and social development in the long-run. In other words, when these factors are not harnessed, there is a tendency the pace of capital accumulation along with the development of a given country could decelerate. This is why, over the years, it has been a standard practice for analysts to examine one or two or a combination of many of these factors, and how their development or underdevelopment impinges upon the accumulation process. For instance, the cause of the declining rate of real capital accumulation in developing countries such as Nigeria in the 1940-60s was largely attributed to the low rates of savings that were prevalent in many developing countries at that time (see Lewis 1955 and Rostow 1960). In fact, these scholars remarked then that any key strategy of development necessary for economic 'take-off' in Third World countries would require the mobilisation of domestic and foreign savings in order to generate sufficient investment to accelerate economic development. Furthermore, weak financial institutions widespread in many Third World countries were also seen to be contributing to the low rate of savings (Sikorski, 1996): the weak institutions were

seen to be ineffective in mobilising the scarce financial resources needed to quicken the pace of capital accumulation that will accelerate economic development. Equally, immediately after the Second World War, capitalism as it were then (unfettered) was deemed to have failed to guarantee overall well-being (development) of human race; Minsky (1986: 121) noted that it was self-evident in the 1930s that the liberal market system was 'a fallible coordinator of economic activities'. Overall, the political-economic arrangement of 'Economic liberalism' was also deemed ineffective at quickening the pace of economic development in most economies, such as in Nigeria.

In general, given this consensus then, the 1940s-1960s was thus replete with various suggestions for reforming the liberal market mechanism. As many economists argued at the time, to achieve a close approximation to full employment, an appropriate use of fiscal and monetary policy was needed. Most posited that the only democratic way forward, which would guarantee peace, inclusion, improved well-being and stability, was to construct the right blend of state, market, and democratic institutions (that is a regulated political-economic arrangement) that could facilitate the mobilisation of savings, address weaknesses in the financial systems and in the real economy: given that the liberal system was a 'fallible coordinator'.

As a result, of this general consensus on the ability of government intervention in the economic processes to ameliorate the various institutional weaknesses and to assist with the mobilisation of savings, government participation in the economic processes were thus deemed both pertinent and necessary for stimulating capital accumulation, and for accelerating economic development in most countries. As Long (1993) and Harvey (2005) observed, the administrative setting of interest rate ceilings and allocation of credit to essential industries and the use of subsidies were all deemed conventional for

stimulating economic development in those years given the perceived varying structural weaknesses in the economic system. To plug the finance gap that was deemed as the bane of development in most Third World countries then, interest rate ceilings were used, and foreign aids aggressively solicited by the governments of most developing countries. In all, the convention then was that the state should focus on full employment, economic growth, and the welfare of its citizens and that state power should be freely deployed in the market processes to achieve these ends (Harvey, 2005).

By mid-1960 however, there emerged a surfeit of academic literature arguing that government interventions in the economic processes were the causes of the deceleration of capital accumulation then. Broadly, the political-economic arrangement of embedded capitalism, which replaced the liberal system, was seen as the root cause of the persistent stagnation in the global economy in the 1960s. Friedrich Hayek provided the intellectual support for this view. He explained that there would be no difficulty about efficient control or planning were conditions so simple that a single person or board could effectively survey all the facts. However, as the factors that have to be taken into account become numerous and complex, no one centre, he contended, can keep track of them: the constantly changing conditions of demand and supply of different commodities, he argued, can never be fully known or quickly enough disseminated by any one centre.

Nevertheless, Hayek opined that under competition – and under no other economic order – the price system automatically records all the relevant data: entrepreneurs, by watching the movement of comparatively few prices, as an engineer watches a few dials, he asserted, can adjust their activities to those of their fellows and as such ensure efficient utilisation of resources (Hayek, 1976: 59). Compared with this method (of *laissez-faire*)

of solving the economic problem, Hayek concluded that central direction is incredibly clumsy, primitive and limited in scope and cannot guarantee long-run development.

The studies by Gurley (1964) and Gurley and Shaw (1967), following Hayek's argument, also claimed that subsidisation, which many governments in developing countries were adopting to boost capital accumulation, was the reason why most of them run very low surpluses. This, they contended, causes there to be low government savings to be mobilised in the economy: the low revenues generated by their tax receipts, as such the low government savings, they noted, do not often offset increases in current expenditures by most of these governments.

Based on this growing consensus on the overwhelming advantages of market-led strategies over a state-led approach, several free-market policies were subsequently implemented in most economies in the late 1970s and early 1980s. Furthermore, many regulations, such as the Glass-Steagall Act of 1933, the Securities Exchange Act of 1934 and the Investment Company Act of 1940, which had been used to stem the risk of another financial crisis and to simultaneously direct savings toward productive investments and away from speculative activities (which were perceived to have been the cause of the financial crisis in 1929 [Arestis and Basu, 2004; Silvers, 2013]) were subsequently repealed, during the wave of the free-market ideology in the early 1980s. The Garn-St. Germain Depository Institutions Deregulation and Monetary Control Act of 1982, for instance, got rid of interest rate ceilings that were originally imposed in the 1930s in the U.S. Similarly, in the U.K., the Financial Services Act of 1986 abolished any oversight of the courts on derivative contracts, which had been considered speculative and disruptive earlier. Also in Nigeria, at the back of the weakening economy in the 1970s, several structural reforms, such as capital account deregulation, removal of interest rate

ceilings and liberalisation of the financial system – embedded in the Structural Adjustment Programme (SAP) prescribed by the World Bank and IMF – were implemented in an attempt to reverse the growing deterioration of the economy.

The main proponents of financial reforms in the 1970s, McKinnon (1973) and Shaw (1973), aside the remarks by Hayek and Milton, and later on by Gurley regarding the ‘crowding-out of savings’ that government subsidies occasions, contended also that government intervention in the financial and economic system, through interest rate regulation and the administrative allocation of loanable funds, destabilises the equilibrating mechanism of the price system and represses the financial system, and as such, causes there to be disequilibrium in its allocation of funds to potential investment opportunities.

McKinnon (1973) and Shaw (1973) argued that the setting of nominal interest rate ceilings by the government results in very low and often times negative real rates (due to high inflation) on both the loans (debt-intermediation view advanced by Shaw) and deposits (complementarity hypothesis by McKinnon) of the banking system. They claimed that when interest ceilings are set very low, that it leads to excess demand for loans and also shifts savings away from domestic financial assets and towards real assets such as buildings or foreign financial assets (which they affirmed reflects capital flights). In real terms, they noted that financial repression thus results in reduced rates of saving and misallocation of investment, both of which they believe adversely affects economic growth.

The efficiency of capital assets, they also explained, stems from the fact that allocating credit at a higher price (which they argued reflects the truer ‘market’ worth of the credit) will ensure only those investment projects, which have great potential to meet repayment

obligations, would be undertaken, thereby lowering the number of unproductive investments undertaken in the economy.

Overall, McKinnon and Shaw advocated for a deregulated and liberalised financial system where the rate of interest will increase to a point where it equilibrates the supply of loanable funds to the demands of those loanable funds. In sum, the works of McKinnon and Shaw (widely referred to as the McKinnon-Shaw theses) ‘formalised’ the view that liberalization and deregulation of the financial sector will give rise to a market-clearing interest rate that can help stimulate economic growth. The deregulation and liberalisation policies, such as the financial reforms, that were embodied in the Structural Adjustment reforms carried out by most developing countries, such as Nigeria, in the 1980s and 1990s typifies these market-led arguments.

The purpose of this chapter is to provide a detailed critical review of the main economic growth theories that have been put forward over the years, and to analyse the inherent contradictions of the two main contending political-economic frameworks that have shaped the SSA in most countries.

To begin with, the method of analysis in this chapter is dialectical: that is, it is based on the opposition of embedded capitalism to free-market capitalism. Secondly, historical facts, in combination with seminal economic theories, are used to appraise the capability of the contending frameworks to accelerate the capital accumulation cum economic development.

For a coherent discussion, the chapter is structured as follows: section 2.1 discusses the more established (mainstream) theories of economic growth – ranging from the Harrod-Domar’s growth theories to the latest finance-endogenous growth theory. The section also

discusses how these established theories shaped development policies over the years. Section 2.2 documents the origin, characteristics and contradictions of the frameworks for organising the Social Structure of Accumulation. To broaden the discussion, section 2.3 documents some major criticisms of the mainstream theories and views. Marxian theories of capital accumulation and growth and the various contradictions of capitalism, as articulated by Marxian scholars, are documented in section 2.4. In section 2.5, some of the contemporary heterodox views on the finance-growth nexus are discussed, and the role of the rate of profit in the capital accumulation process is examined in section 2.6. The conclusion to the chapter is contained in section 2.7.

2.1 Orthodox theories of economic growth

2.1.1 The Harrod-Domar (the neo-Keynesian) growth theories

The first attempt to construct a formal growth theory came from Roy Harrod and Evsey Domar in the wake of the Keynesian revolution in the early twentieth century. The Harrod-Domar analyses were motivated, largely, by Keynes' macroeconomic theory, which had tried to show how a market economy could be directed to full employment by means of short-run demand management policies. Harrod and Domar endeavoured to extend Keynes' theory to long-run situations and to discover the rate of growth at which the economy must expand in order to maintain a continuous state of full employment.

To begin with, Domar acknowledged that the idea that the preservation of full employment in a capitalist economy requires a growing income had prevailed since Marx. It was previously conceived, he remarked, that labour force (man-hours worked) and its productivity (output per hours worked) are supposed to increase according to some certain rate, and if full employment is to be maintained, then national income must grow at the

combined rate of those of labour force and productivity (Domar, 1946: 138). Nevertheless, Domar countered this assumption. He remarked that for relatively short-run purposes that such assumption was a good method, but that its analytical merits are not high because it presents a theoretically incomplete system: since, he explained, an increase in labour force or in its productivity only raises productive capacity and does not by itself generate income (*ibid*: 138). In effect, Domar noted that the assumption does not account for the demand side.

On the other hand, the state of full employment, according to Domar, can be maintained if investment and income grow at an annual rate of the product of the marginal propensity to save and the increase in potential capacity. That is, investment (as with income also) must grow at the proportion at which the marginal propensity to save *times* the increase in potential capacity increases²⁴, if the state of full employment must be maintained (Domar, 1946: 145)²⁵. As a result, if this equilibrium rate of growth remains constant, the maintenance of full employment requires then that investment grows at the constant compound rate.

Using a production function of fixed proportions, where output requires labour and capital inputs in fixed ratios, and assuming that total savings are a fixed proportion of national income, Harrod demonstrated that the rate of growth of output (the national output) could be expressed as the ratio of the marginal propensity to save to the marginal capital-output

²⁴ For instance, if the marginal propensity to save equals 2% and the increase in potential capacity equals 2%, then for full employment to be achieved, Domar remarked that investment (as with income) must therefore grow at 4%.

²⁵ The fundamental Domar growth equation is represented as $I = I_0 e^{\sigma t}$ (Domar, 1946: 141); where σ is assumed to be the increase in potential capacity $= \frac{\Delta P}{\Delta t} / I$; I is the investment rate per year; P is the productive capacity; and α is the marginal propensity to save $= \frac{dY}{dt}$.

ratio. However, for the economy to be continuously at full employment, Harrod explained that the warranted rate of growth of output (which depends on the savings and investing habits of households and firms)²⁶ should also be equal to the sum of the growth rates of labour – which was named the ‘natural’ growth rate (given that the growth rate of labour is biologically determined by natural causes – birth and death) – and of productivity (Harrod, 1948).

Overall, the key parameters highlighted by Harrod-Domar as the core determinants of economic growth are – (i) the savings ratio (that is the propensity to save) (ii) the capital-output ratio (the level of productivity) and (iii) the rate of increase of the labour force (the natural rate of growth).

The characteristic and powerful conclusion of the Harrod-Domar line of thought is that even for the long run, the economic system is at best balanced on a ‘knife-edge’ of equilibrium growth. Therefore, should the magnitudes of these key parameters – the savings ratio, the capital-output ratio, the rate of increase of the labour force – slip ever so slightly from dead centre (the equilibrium rate), the consequence, they concluded, would be either growing unemployment or prolonged inflation. In other words, the critical question of balance boils down to a comparison between the natural rate of growth which depends, in the absence of technological change, on the increase of the labour force, and the warranted rate of growth, which depends on the saving and investing habits of households and firms.

²⁶ The propensity to save tells us how much of net output will be saved and invested. Hence, we know the net accumulation of capital during the current period – this is why the warranted rate of growth depends on the savings and investing habits of households and firms.

2.1.2 *The exogenous and the endogenous growth theories*

The Harrod-Domar analyses implied, although full employment is possible for a market economy in the long-run that it is very unlikely that it could be maintained by the interplay of spontaneous market forces: this implicitly restates Keynes' view that underemployment is possible in a market economy, and that full employment is indeed not the rule but the exception (Keynes, 1936). Furthermore, Harrod's results suggest that the 'warranted growth' rate is inherently unstable, as divergences of the natural growth rate of the economy from the warranted rate of growth would not only fail to correct themselves but could worsen the situation by creating larger divergences.

The neoclassical growth models were thus developed as a reaction to the Harrod-Domar approach, and particularly against Harrod's pessimistic implications concerning the slim possibility of full employment growth. The Solow model in 1956 is one of the pioneering neoclassical growth models that tried to counter Harrod's pessimistic outlook. Solow's growth theory showed that steady-state growth was very likely to occur and that this growth path would be 'constant'²⁷.

Generally, Solow noted that the economy would move toward the steady-state growth path regardless of the initial levels of the capital stock and the labour force (Solow, 1956: 70). If the initial capital stock is below the equilibrium ratio, capital and output, he remarked, will grow at a faster pace than the labour force until the equilibrium ratio is approached. On the other hand, if the initial ratio is above the equilibrium value, capital

²⁷ The constant return to scale notion was based on the assumption that there is no scarce non-augmentable resource like land. The scarce-land case, Solow noted, would lead to decreasing returns to scale in capital and labour (Solow, 1956: 67). By constant returns to scale, real output, Solow noted, will also grow at the same relative rate n (rate of growth of the labour force), which means output per head of labour force will be constant (*ibid*: 70).

and output, he noted, will grow more slowly than the labour force. Overall, the growth of output, he concluded, is always intermediate between those of labour and capital.

The basic conclusion of Solow's analysis is that when production takes place under the usual neoclassical conditions of variable proportions and constant returns to scale, no simple opposition between natural and warranted rates of growth is possible (countering Harrod's *knife-edge* conclusion). The system, Solow asserted (*ibid*: 73), can adjust to any given rate of growth of the labour force, and eventually, approach a state of steady proportional expansion.

In addition, the Solow growth model viewed the level of technology as the major determinant of growth (Solow, 1956: 85). Solow's emphasis, unlike the earlier theories, was extended to the relation between the level of technological progress and the aggregate national output (GDP). He asserted that technological change multiplies the production function by an increasing scale factor: to some extent, Solow implied that GDP (economic) growth is not significantly influenced by changes in labour or in physical capital but by improvements in technology. The Solow model became known as the *exogenous* neoclassical growth model because the variable for technology was inserted exogenously in the production function as a time trend²⁸.

By late 1970s however, it was remarked that Solow's model did not adequately explain sources of long-term growth in the economy. Solow's model credited the bulk of economic growth to an exogenous process of technical change termed the *Solow-residual*, whose source was not explicitly defined, and it implied that there is a 'constant' marginal return to capital investments in the 'steady-state'. However, it was argued, because it is

²⁸ The extended Solow model is represented as $Y(\text{output}) = A(t)F(K, L)$ - (Solow, 1956: 85).

impossible to analyse the determinants of the technical change (given that it is independent of internal economic agents), that the Solow growth model is deficient in properly enlightening the processes of long-term (outside the steady-state) economic growth (Stern, 1991; Mankiw *et al.*, 1995).

By mid-1980s, a new set of growth theories emerged, due to this perceived deficiency of Solow's growth model. These new theories postulated a conceptual framework that could be used to analyse economic growth that is essentially influenced by the internal systems regulating the production function rather than by forces outside the system. The new growth models sought to explain the factors that determine the size of the change of the *Solow-residual* – the exogenous technological change.

These new models also discredited the assumption of 'constant' return to scale postulated earlier by the Solow model and asserted rather that there is an 'increasing' return to scale. The new model described the technological change (that was hitherto assumed to be externally given by Solow) as an endogenous outcome of public and private investments in human capital, including Research and Development (R&D). So through investments in knowledge-intensive industries, research and development, and other public infrastructures such as schools – where human capital is developed – an economy is argued to achieve technological progress (Romer, 1986, 1987, 1990; Lucas, 1988; Rebelo, 1991; Grossman and Helpman, 1991; Aghion and Howitt, 1992).

These new growth models also emphasised the relevance of active participation of public policy, based on its ability to promote investments in human capital formation. In addition, the new models stressed the importance of foreign private investment in knowledge-intensive industries. It believed that the complementary investments in infrastructural development, such as in building schools, and in knowledge-intensive

industries, where human capital can be developed (through learning by doing for instance), can help induce ‘increasing’ returns to investment and as such engender growth in capital accumulation and in the economy.

The Romer (1986, 1987, 1990), Lucas (1988), Rebelo (1991), Grossman and Helpman (1991) and Aghion and Howitt (1992) contributions, which countered the Solow’s ‘exogenous’ theory, are often referred to as *endogenous* growth theories; because of their ‘internalisation’ of technological change in the production function (Barro, 1997: 5-6)²⁹. These latter theories specifically acknowledged technological advance, a by-product of knowledge, as an input in production that can cause increasing marginal productivity. In these settings, technological advancement results from purposive R&D activities (knowledge activities), and these activities are rewarded, along the lines of Schumpeter (1943), by some form of ex-post monopoly power. If there is no tendency to run out of ideas, then growth rates can remain positive in the long run.

Overall, these endogenous models expressly asserted that in a fully specified competitive equilibrium, the rate of investment and the rate of return on capital may increase rather than decrease (or remain constant) with increases in capital stock and human capital (knowledge). In effect, these models ruled out exogenous technological change and rather included it as an endogenous technological change in which long-run growth is driven primarily by the externalities or the spill over effect derived from the accumulation of knowledge.

²⁹ See Barro (1997) also for a detailed empirical discussion of the exogenous and endogenous growth theories.

2.1.3 *The finance-innovation endogenous growth theory*

More recently, the finance-innovation theory, which emerged in the 1990s, noted that the technological externalities deriving from human capital development occur in a significant proportion only when there are adequate ‘deepening’ of the financial system. This is because a deepened (or a globalised) financial system, it is claimed, will substantially ameliorate liquidity risks thus ensuring capital is not prematurely withdrawn from enterprises where knowledge (technological advancement) could be developed.

For the finance-endogenous growth theorists, finance plays a significant role in the growth process. It is contended that a globalised and competitive financial structure is the only most effective system that can ensure the unabridged development of human capital and the continual occurrence of technological externalities in production, which, they argue, induces both economic growth and development in the long run (Diamond and Dybvig, 1983; Bencivenga and Smith, 1991; Bencivenga *et al.*, 1995; Levine and Zervos, 1998).

2.2 The Social Structures of Accumulation (SSA) and the two main contending ideologies

Since the 1940s, the debate has evolved from what determines the rate of growth of investment and the national output to how those elements that are perceived to determine the growth of the real economy could be arranged – i.e. mobilised, controlled and harnessed – to ensure rapid economic growth. For instance, in the 1940s-70s, the state-led strategy, largely modelled according to Keynes’ demand-led approach, was deemed appropriate for organising the economic institutions (such as the demand structure) that impinge upon the accumulation process. However, from mid-1980, the free-market ideology, largely modelled according to Hayek’s and Friedman’s ‘free market’ ideas,

dominated both academic and policy debates. These latter theories provided the justification for a minimalist state role in the organisation of the economic process.

However, despite the latter model being the dominant ideological framework in recent times in many economies, the debate over which arrangement is more suitable for organising the economic system has continued to develop amidst controversies.

- *Formal definition of the SSA concept*

To begin with, a Social Structure of Accumulation (SSA) is interpreted as a coherent, long-lasting capitalist institutional structure that promotes profit-making and forms a framework for capital accumulation (Kotz, *et al.* 1994: 1; Kotz, 2008). In essence, the SSA refers to the domestic and international institutions that exist in a particular place and time, and which encourage capital accumulation or affects individual capitalist's capabilities of continual capital accumulation: it consists of all the institutions that support the process of capital accumulation – these includes political, cultural, and economic institutions. According to Kotz *et al.*, the domestic institutions may include the state of labour, i.e. management relations, the organisation of work processes, the character of industrial organisation, the role of money and banking and their relation to industry, the role of the state in the economy, the line-up of political parties, the state of race and gender relations, and the character of the dominant culture and ideology – such that shapes the social, political and economic institutions. The international institutions, on the other hand, may concern the trade, investment, monetary-financial, and political environments.

- *Changes in the Social Structure of Accumulation*

The modern capitalist system has indubitably undergone restructuring – with regards the ways political and economic institutions interact with the accumulation process – since

the end of the Second World War. The two main economic ideologies that have shaped the political-economic institutions since the Second World War are the embedded capitalist model and the free-market model. The embedded or the Keynesian ‘demand-management’ model focuses more on demand management and active government intervention in the economic process, whereas the free-market or the *neoliberal*³⁰ model has a full emphasis on minimal government participation in economic activities, and an overarching focus on supply-side management.

The purpose of the restructurings, according to Kotz (2008), derives from the need to organise the various economic institutions that impinge upon the capital accumulation process in order to form a coherent framework that will ensure profit making by the capitalist.

Generally, the distinctive difference between the two contending models is based on the level of government participation necessary for organising the many institutions (and factors) that impinge upon the accumulation process. Given the revelations by the mainstream growth theories that savings, labour, physical capital, and technological change are all rudimentary elements needed to spur economic growth, the question then arises of how best to mobilise and allocate scarce resources to these key production inputs in order to achieve desired growth rate. There are those who argue that unless the government stood ready to intervene in the economic process that no substantial growth

³⁰ Broadly, neoliberalism is interpreted as a theory of political economic practices that proposes that human well-being can best be advanced by liberating individual entrepreneurial freedoms and skills within an institutional framework characterized by strong private property rights, free markets, and free trade. The role of the state, this theory posits, should just be to create and preserve an institutional framework appropriate to such practices.

would be achieved and some that argue that the market, and not the government, contains the right information that could direct resources for efficient use.

The origin, characteristics and the contradictions of these two contending ideologies that have moulded the social structures of accumulation over the years are discussed in-depth in sections 2.2.1 to 2.2.2 below.

2.2.1 Embedded capitalism or the Keynesian 'demand management' approach and the balanced growth theory

- The Keynesian demand-management argument

Immediately after the Second World War, it was deemed pertinent to restructure the economic system to avoid a repeat of the Great Depression witnessed in the 1930s. According to several sources, J. M. Keynes contributed immensely to restructuring the economic system after the war. It was him, it is widely acknowledged, that advocated for a system of regulated capitalism, commonly referred to as *embedded liberalism* (see Harvey, 2005), in which the state should be accorded a more active, interventionist role in the economic process (Harvey, 2005; Dumenil and Levy, 2005; Kotz, 2013).

In general, Keynes' main concern then was on stimulating *effective demand*³¹: the mainstream, he argued, have safely neglected the effective demand function in their theories. They refuse, Keynes remarked, to take account of the drag on prosperity which insufficiency of effective demand exercises (Keynes, 1936: 29). He asserted that high levels of income inequality that was prevalent in many economies then were suppressing

³¹ Effective demand, according to Keynes (1936: 27) is the sum of two factors, namely the amount which a community is expected to spend on consumption (D_1) and the amount which it is expected to devote to new investment (D_2)

the relative purchasing power of the working class and were thus causing a reduction in their consumption, which subsequently inhibits capital accumulation. Keynes was of the view that the market cannot function efficiently if the government does not actively intervene in the economic process. He stated that the central controls necessary to ensure full employment will, of course, involve a large extension of the traditional functions of the state (Keynes, 1936: 239). In general, he stressed that the government should intervene in the economic system by using policies aimed at boosting effective demand³².

Similarly, Keynes also observed as flawed the assertion that any individual act of abstaining from consumption (i.e. savings) necessarily leads to and amounts to the same thing as causing the labour and commodities thus released from supplying consumption to be invested in the production of capital wealth. In fact, Keynes concluded that those who think along this 'supply-side' economics are deceived: he asserted that they are fallaciously supposing that there is a nexus, which unites decisions to abstain from present consumption with decisions to provide for future consumption. Instead, Keynes argued that the motives, which determine investment, are not linked in any single way with the motives, which determine abstinence from present consumption. He concluded that *effective demand*, which validates the expectation of the capitalist, is the main determinant of the rate of capital accumulation.

These advances by Keynes were then deemed a revolution in economic thought when compared to those propounded by classic economic theorists of the late eighteenth and nineteenth century in which the state was accorded minimal role in the operation of the economic system, and where emphases were on savings mobilisation. Nevertheless, most governments heeded to Keynes' propositions by engaging in several activities aimed at

³² Such as reduction in taxes and expansion of government expenditures.

boosting effective demand. For example, social welfare programmes were established in some countries³³ and various regulatory policies such as subsidies were used to prop up local industries. In many countries, the state established commercial corporations in key industries in order to create a system of price leadership that stabilises both prices and profits (Kotz, 2013).

- *The balanced growth argument*

Paul Rosenstein-Rodar's and Ragnar Nurske's nationalistic interpretation of Tibor Scitovsky's balanced growth argument, in some ways, share Keynes' view of active government intervention in the economy.

To begin with, according to the accounts by Scitovsky (1989: 55), the idea of balanced growth can be traced back to John Stuart Mill's qualified restatement of Say's Law that '*every increase in production, if distributed without miscalculation among all kinds of produce in the proportions which private interest would indicate, creates its own demand*'. For Scitovsky, this implies that the structure of additional productive capacities needs to match the structure of additional demand – i.e. investment would have to proceed simultaneously in the economy's various sectors and industries in the same proportions in which the buying public apportions the expenditure of its additional income among the outputs of those sectors and industries. Therefore, this suggests a faster growth of sectors and industries for whose output the income elasticities of demand are high and a

³³ For instance, in the United Kingdom, the National Insurance Act that was enacted in 1946 established a comprehensive system of social security, and the National Assistance Act, enacted in 1948, provided for a social safety net for the poor: all in the bid to help boost effective demand.

simultaneous but slower growth of those whose products' income elasticities of demand are low: this, according to Scitovsky, is the meaning of *balanced growth*.

The nationalistic interpretation of the balanced growth theory, espoused by Paul Rosenstein-Rodan and Ragnar Nurkse, calls for inward-looking development policies: that is investment in productive capacities to match the expansion of domestic demand. Rosenstein-Rodan and Nurkse believed that, in poor countries, the market left to itself perpetuates poverty. This is because the investment that would be required to lift the economy is impeded not only by the low saving of the poor but even more by the lack of profit incentive to build high-productivity plants, especially when the already existing local market for their output is too small (Rosenstein-Rodan, 1943; Nurkse, 1953).

As a means of escaping such vicious circle of poverty, these authors favoured the central planning of investment to overcome the lack of private incentive; Nurkse believed that even indicative planning would provide enough additional incentive, especially when aided by tariff protection, tax concessions or cheap credit. For Rosenstein-Rodan, complementarities and externalities in demand and production create a need for the programming of investment. Rosenstein-Rodan's arguments justified the need for an across-the-board 'big push' for a successful start to the development process (Rosenstein-Rodan, 1963).

To summarise, both Keynes', Rosenstein-Rodan's and Nurkse's views centred on the active participation of the central government in the economic process. These scholars believed that without active government role in the management of the economic system that the system would not be able to produce an all-encompassing level of economic development in the long run.

- *The era of embedded (regulated) capitalism*

In the period following the Second World War, the Keynesian demand-management model and the balanced growth debate influenced the political-economic arrangement adopted in the world system. These models influenced policy-makers in developing countries, who mostly adopted active fiscal intervention and import-substituting industrialisation approaches.

In most countries in the 1940s-80s, the government actively intervened in the economic system and tamed the business cycle through vigorous use of fiscal policies. In Nigeria, for instance, immediately after its independence from British rule in 1960, the fiscal and monetary policy framework adopted by the newly independent government placed emphasis on active state participation in economic activities, and also on direct monetary controls (CBN, 2011). The policies adopted under these frameworks relied heavily on public sector participation in economic activities – through sectoral credit allocation, credit ceilings, cash reserve requirements, and administrative fixing of interest and exchange rates as well as the imposition of special deposits. This regulated approach lasted from 1959 to 1985; the only exception was in 1966 when credit restriction was lifted temporarily in order to enable banks to finance the government's participation in the civil war (CBN, 2011). From 1972 through to the later part of 1985, a combination of direct credit ceiling, selective credit control, and cash reserve requirements, stabilisation securities, and interest rate controls was re-established.

Overall, the economies of many developed and the newly independent countries in the 1940s-80s were greatly shaped by the Keynesian model of the regulated social structure of accumulation, in combination with the neo-Keynesian system of balancing growth. Where there were shortages of savings, the state had to intervene by borrowing from

developed countries. Interest ceilings were also used as a tool to help entrepreneurs to access cheap funds. Expansionary fiscal policies were also aggressively used to prop domestic demand and import restrictions (through tariffs and quotas) were used to regulate the influx of imported goods.

In summary, the post-World War II social structure of accumulation, organised according to the Keynesian demand-management model, was characterised by -

- Active state regulation of economic activities both within states and in the global system
- Well-developed welfare states
- Significant capital-labour cooperation
- A co-respective form of competition among large corporations

- *The break-down of the embedded/Keynesian economic arrangement*

By the end of 1960, the regulated SSA showed some signs of exhaustion: signs of crisis of capital accumulation, reflected through rising unemployment and raging inflation, re-emerged in many industrial economies by mid-1960. The primary cause of this breakdown of the capitalist system in the 1960/70 has been attributed to the phenomenon of Uneven and Combined Development (*UCD*), which is seen as an inherent tendency of the capitalist structure (Brenner, 2006; Fouskas and Gokay, 2012). The reconstruction of several war-torn countries (Germany and Japan in particular) through the large-scale economic aid programme instituted by the United States after the Second World War – which promoted a preferential regime for West European and Japanese products to be exported to the United States – was seen to have occasioned the uneven and combined development that precipitated the stagnation of the global capitalist system in the

1960s/70s. Broadly, Brenner (2006) and Fouskas and Gokay (2012) contended that the U.S. balance of payment deficit arose mainly because rivals of the United States in Europe and Japan were accumulating capital at a faster rate compared to the United States. The main reason being that these economies were producing based on far lower costs than the U.S. As a result, Germany and Japan were argued to have outpaced the U.S. because these countries' (German and Japanese) firms were using newer and more cost-saving technologies, including lower wage costs, compared to those used by U.S. firms.

In essence, the international competitiveness of U.S. businesses was posited to have faded in the face of the rapid development and advancement of these other economic centres that also had access to its (America's) markets. This, it was remarked, caused an accumulation of U.S. dollars in the hands of European, Japanese and Asian producers, and a shortage in the U.S. economy in those periods, thus contributing to a severe balance of payment crisis in America; given that the U.S. was importing more than it was exporting.

The balance of payment problem, Fouskas and Gokay further argued, did not constitute, by itself, the real weakness of the dollar then as a means of international payment for the U.S. They remarked that what constituted to the real weakness of the dollar is the connection the balance of payment has with the issue of government and private debt. The combined factors of U.S. spiralling debt (due to the various wars it was engaged in at that time) and the deteriorating balance of payment, Fouskas and Gokay remarked, exerted enormous pressure on the dollar: these twin issues, they emphasised, undermined confidence in the U.S. economy and subsequently culminated to a *run* on the dollar.

The massive switch from holding dollars to holding gold, engineered in 1965 by Charles de Gaulle, former France president, who demanded gold from the United States in return

for millions of dollar – a strategy that others subsequently followed – Gokay (2009) observed, was essentially predicated on the sharp decline in confidence in the U.S. economy during the 1960s. The gold rush, he remarked, accelerated the run on the dollar, thus provoking a currency crisis in the United States. It was this eventual currency crisis, Gokay concluded, that pushed President Richard Nixon to announce, on the 15th of August 1971, that the U.S. would no longer honour the dollar for gold valued at a fixed rate under the Bretton Woods agreement, but would only agree to a system of floating exchange rate: where each currency would be valued according to world demand.

The de-linking of the dollar from gold undoubtedly restored dynamism to the U.S. economy; the U.S. was, as a result, able to devalue its currency in the face of its rapid balance of payment deterioration. However, this, Gokay (2009) noted, eventually led to an immediate explosion of global price inflation³⁴. These increasing inflationary pressures and creeping unemployment, coupled with deteriorating balance of payment and of trade witnessed in most economies at that time contributed to the global stagflation that pervaded the world economy in the 1970s. It was in the bid to tackle these contradictions that a new form of Social Structure of Accumulation was created.

Another concomitant and important event that was argued (see Gokay, 2009 also) to have contributed significantly to shaping the capitalist system in the 1970s was the agreement between the United States and Saudi Arabia. The U.S.-Saudi Arabian Joint Commission on Economic Cooperation, established in 1974, on the heels of the OPEC oil embargo and price increases, sought to foster closer political ties between the two countries through

³⁴ Inflationary pressures were also accelerated by the conscious price increases that were pursued by many Western European and Japanese firms in the bid to boost their falling profitability because of the oil price increase that arose from the OPEC oil embargo of 1973.

economic cooperation (United States, 1979). Through the agreement, the U.S. agreed to assist Saudi industrialization and development, for which it (the U.S.) expected full reimbursement (*ibid*: 1). In essence, the agreement facilitated the flow to Saudi Arabia of American goods, services, and technology and also the flow to America of Saudi's oil money.

Furthermore, the U.S.-Saudi Arabian agreement also paved the way for oil to be sold and bought only in dollars: an arrangement that was soon adopted by OPEC. With the oil price hike in early 1970, which vested a vast amount of financial power on the oil-producing states such as Saudi Arabia, Kuwait and Abu Dhabi, the flow of petrodollars into the American economy re-established the dollars as the hegemonic currency in the global system.

In sum, the U.S.-Saudi arrangement re-established dollars as the hegemonic currency in the world economy and provided the U.S. with an endless stream of almost interest-free loan: the petrodollars were repatriated back into the U.S. economy as investments in U.S. treasury securities, stocks, mutual funds and bonds.

However, given the depressed state of the U.S. economy at that time, more opportunities that are profitable had to be sought abroad for the largely repatriated petrodollars. For this to occur required, Harvey (2005) and Fouskas and Gokay (2012) noted, open entry and reasonably secure conditions on the international market. The system of regulation that existed under Keynesianism, however, stood on the way. Gowan (1999) remarked, as did Fouskas and Gokay (2012) later on, that the American banks with excess petrodollars, in alliance with the U.S. imperial tradition, prised open new investment opportunities abroad

through the *financial statecraft*³⁵ tactic – what Gowan described as the *Dollar-Wall Street Regime* (DWSR).

In all, the huge amounts of petrodollars that were sitting idle in the vaults of New York banks were noted to have found their way to the pockets of many governments in the developing world, who were themselves in need of foreign finance – needed to plug the finance gap in their domestic economies. The repayments of these borrowings were achieved through the use of U.S. imperial power; the U.S. treasury and the IMF were used to ensure a safe lending environment for the U.S. lenders (often by enforcing austerity measures on borrowing countries), and to resolve cases where indebted national governments were having difficulty repaying their loans. In many cases, in return for debt rescheduling, indebted countries were required to implement institutional reforms such as cuts in welfare expenditures, institute more flexible labour market laws, deregulate capital accounts, liberalise financial systems and privatise public assets.

To conclude, the uneven development (which could be seen as the development of a state at the detriment of another) inherent in the capitalist system was seen to have undermined the economic system and to have contributed to the collapse of the embedded capitalist system in the 1970s. The weakened U.S. economy and the global stagflation that ensued,

³⁵ The active participation of the U.S.'s monetary institutions in the facilitation of new forms of global capital flows (securities, asset management, credit default swaps, derivatives and futures, circulation of liquid currencies, portfolio investment) by way of promoting further dollarization, underwriting foreign debt and imposing financial sanction on undisciplined actors. Furthermore, they noted that it is also the liquidation, on International Monetary Fund (IMF) order, by the new subaltern liberal executives of state assets, the liberalisation of banking capital, privatisations and manipulation of monetary instruments such as interest rates, in order to curb inflation (Fouskas and Gokay, 2012).

later on, coupled with excess petrodollars in U.S. banks that needed outlets for profitable ventures all necessitated the restructuring of the global economic system.

2.2.2 The Free-Market (Neoliberal/Supply-Side) approach

There was a rampant fiscal crisis in the global economy in the late 1960s as tax revenues plunged everywhere. The OPEC oil embargo of 1973, which increased oil (a vital production input) price and subsequently caused an increase in output prices in the global economy also worsened the crisis. The Bretton Woods system of fixed exchange rate backed by gold reserves collapsed in 1971 and saw the devaluation of dollars – which also fuelled the rising output prices in the global economy. Although the Smithsonian agreement tried to reinstate a form of fixed exchange regime in December 1971, the agreement, however, failed to stall the pressure on the dollar and by 1973, a free-floating regime was pursued by many countries. It was these tumultuous circumstances in the global economy in the late 1960s and early 1970s that gave grounds to the consolidation of the neoliberal form of economic organisation as the orthodox ideology for organising the SSA. The theoretical foundations for this new form of political-economic arrangement were provided by the seminal works of Friedrich Hayek and Milton Friedman, and the political backing needed for their consolidation were subsequently provided by the administration of Ronald Reagan in the United States, and that of Margaret Thatcher in Britain around late 1970 and early 1980.

Overall, it was in the attempt to resolve the 1960s/1970s global crisis and the persisting underdevelopment in many Third World countries that several institutional and policy changes took place. First was the breakdown of the fixed exchange regime in 1971, and the second was the draconian monetary shift in 1981 (the latter was designed according

to the precepts of the neoliberal idea of monetarism and was initially implemented by the then U.S. Federal Reserve Chairman, Paul Volcker).

Ironically, the aggressive interest rate increase by Paul Volcker³⁶, in an attempt to quell the rising inflation in the U.S., adversely affected many developing countries, especially those in the Sub-Saharan African region that had borrowed excessively from abroad. The interest rate increase inflated the cost of borrowing for many and resulted in the extensive debt burden and the economic woes witnessed by most in the 1980s. Palma (2013), succinctly described these consequences for the Latin American economies: he noted that due to the increase in the rate of interest by the United States' Treasury in early 1980, the debt burden of some Latin American economies increased drastically and that it subsequently led to external debt and economic crises in those economies.

Nigeria, like most of its counterparts in developing Latin America, also witnessed rising external debt burden in the 1980s because of the increase in the rate of interest in the US: Nigeria was one of the many African countries that had borrowed heavily from private financial institutions in the Western world (Arrighi, 2002) and the Volcker 'shock' substantially increased the debt burden on the country. For instance, the country's external debt stock, which was still manageable at 3.77% of GNI in 1976, increased

³⁶ The real rate of interest, which had been negative during the inflationary surge of the 1970s (in 1979 for instance, the rate of inflation in U.S. was around 11.3% while the federal funds rate stood at 11% in the same period) was rendered positive by fiat of the Federal Reserve; the prime rate of interest, after a few ups and downs, peaked at 21.5% by June 1982 (data were sourced from the Federal Reserve Statistical database, available from <http://www.federalreserve.gov/releases/z1/>)

sharply by 1259.8% to 51.3% of GNI by 1983 and by 1989, the external debt stock of Nigeria, reached a tremendous high of 138.44% of its GNI³⁷.

Indeed, during the periods of embedded liberalism, 1945-70 to be precise, some Western European countries, Japan, and North America to some extent, experienced unprecedented economic growth. However, despite the tremendous economic growth that took place in many of these developed countries in those periods, most newly independent countries in Africa experienced stagnation, and in some cases further deterioration. The *golden age of capitalism*, 1945-70, could be said, therefore, to have not taken place in most Third World economies, more especially in Sub-Saharan Africa – given the huge reversal in economic fortunes experienced by many of the countries in this region during those periods. The decadence in Africa during the 1945-70 period was aptly summed by Harvey (2005): he remarked that the successes of embedded liberalism (the golden era) remained a “mirage” in much of the Third World, especially the Sub-Saharan African countries.

So, in response to the 1960s/70s crisis and the continued underdevelopment of Third World countries, Kotz (2013) observed that the contemporary institutional form of capitalism along with its dominant economic ideologies underwent a remarkable restructuring. By late 1970 and early 1980, a new form of the social structure of accumulation replaced the regulated economic orthodoxy that had dominated since the 1940s.

³⁷ Data collected from the Central Bank of Nigeria’s Statistical Bulletin and the World Bank Development Indicators. The author did the calculations.

The new form of liberalism which replaced the Keynesian model, according to Reder (1998), was largely built on the ideas of Friedrich Hayek and Milton Friedman, both from the Chicago school of economics.

According to Friedman (1962) and Hayek (1964), the market, not the state, contains adequate information for ensuring the attainment of the well-being of the populace. State decisions on matters of capital accumulation, they argued, are bound to be wrong because the information available to the state could not rival those contained in market signals. Furthermore, Friedman also argued that state decisions are often politically biased, sometimes depending upon the strength of the interest groups involved and very often not for the greater good of the society.

The central theme of Hayek's economic research, according to Garrison and Kirzner (1998), was on the *intertemporal discoordination* of the market – i.e. on the failure of coordination between individual market participants. Hayek's economic writing focused mainly on discovering the sequence of events that could cause the economy-wide coordination failures – i.e. on the sequence of events that could cause an economy to collapse into economic depression.

According to Hayek, the market is characterised by more complex and intricate underlying factors that cannot be easily construed, as been deliberate efforts by individual participants to achieve coordination among each other. Hayek explained that fundamental institutions in the society owe their existence to no identifiable creator; they are, he argued, the 'results of human actions but not of human design' (Hayek, 1964: 332-349). It is precisely the existence of this 'spontaneous order', he remarked, that provides the subject matter for the science of economics. In other words, Hayek posited that coordination failures are an integral part of an ongoing market process that iterates

towards a greater degree of discoordination: an oversupply or undersupply of some particular goods, he argued, is evidence that the plans of the producers and consumers of that good are not well-coordinated one with the other. However, this discoordination, he observed, provides both an indication of the inconsistency in plans and the incentive for producers and consumers to make appropriate adjustments.

The presence of these uncoordinated actions between participants in the market featured prominently in Hayek's economic analysis. According to Hayek (1976: 45), the dispute between the modern planners and the liberals is not on whether we ought to employ systematic thinking in planning our affairs. It is a dispute about what is the best way of so doing. The question, he remarked, is whether we should create conditions under which the knowledge and initiatives are given the best scope so that they can plan most successfully or direct and organise all economic activities according to a 'blueprint' – that is, to 'consciously direct the resources of society to conform to the planners' particular view of who should have what'. Hayek contended that the liberal argument favours the best possible use of the forces of competition as a means of coordinating human efforts. Free market, he noted, is based on the conviction that where effective competition can be created it is a better way of guiding individual efforts than any other. For Hayek therefore, the very complexity of modern conditions makes competition the only method by which a coordination of affairs can be adequately achieved.

Hayek also introduced the concept of neutral money. By definition, neutral money characterises a monetary system in which money, while facilitating the coordination of economic activities, is itself never a source of discoordination (Hayek, 1935). According to this view, money is neutral so long as the value of money (as measured by the general level of prices) remains unchanged when the volume of money in circulation changes.

According to Hayek, for money neutrality to hold it requires the absence of ‘injection effects’ – which is the temporary distortion in relative prices, which causes the price system to communicate false information about consumer preferences and resource availabilities. Thus, increases in economic activity require proportionate increases in the quantity of money in circulation.

It was based on this neutrality of money that Hayek made a crucial distinction between interest rate changes attributable to changes in the intertemporal preferences of consumers (that is the market determined rate) and interest rate change attributable to central bank policy (the government determined rate). In the first instance, he explained that entrepreneurial actions, and resulting changes in the pattern of prices, allow the structure of production to be efficiently modified in accordance with the changed consumer preferences (Hayek, 1935: 49-45). In the second, he opined that changes in the pattern of prices induced by the injection of new money – through the credit market by, say, repressed interest rate by the government – constitutes ‘false signals’ instead, which results in the misallocation of resources among the stages of production. The artificially low rate of interest often set by government ceilings, he remarked, can trigger an unsustainable boom in which too many resources are committed to the early stages of production. Nevertheless, the eventual realisation of the discoordination, he noted, will eventually necessitate partial liquidation, which constitutes a bust (Hayek, 1935: 54-62).

Similar to Hayek, Milton Friedman’s works were also heavily critical of active government intervention in economic activities. Friedman actively propagated alternative approaches to Keynesianism. His theories primarily advocated for the use of freely floating exchange rates, privatisation, and deregulation in the management of economic activities. He argued, similar to Hayek, that the change of the money supply premeditated

by the monetary authority, will only primarily affect output in the short-run but that in the longer-run, the effect will be on the price level (rising inflation). Overall, Friedman advocated against the use of planned monetary policies (such as interest ceilings) in regulating demand but rather contended that it is best to allow the market to determine the rate of interest and to manage the economic system (Friedman and Schwartz, 1963).

Broadly, neoliberalism (i.e. the free-market ideas of Hayek and Friedman), as a theory of political economic practices, proposes that human well-being can best be advanced by liberating individual entrepreneurial freedoms and skills within an institutional framework characterised by strong private property rights, free markets, and free trade. The role of the state, the theory posits, should just be to create and preserve an institutional framework appropriate to such practices (Harvey, 2005).

In general, by mid-1960, views that found faults, particularly with the conventional approaches to government intervention, started gaining wider recognition in academic discourse, especially as regards the impact of government intervention on the financial system. These studies gained wide audience due to the growing importance that was attached to financial development or deepening, which government intervention was seen as often inhibiting. The relative importance of financial deepening to economic growth was initially discussed by Goldsmith (1954): he remarked that ‘deepening’ (that is an expansion) of the financial system will induce faster growth in the economy because it will reflect larger mobilisation of savings and the allocation of such vast surpluses to many investments.

Later on, the work by Gurley (1964), which distinguished three main sources of savings (government savings, private [household and firms] savings, and savings from abroad) through which the financial systems can mobilise finance noted that subsidisation, which

many governments in the developing countries were adopting to boost capital accumulation was, in fact, the reason why most of these governments run very low surpluses, which then causes there to be low government savings to be mobilized by their financial institutions. Gurley explained that pressures on increases in current expenditures by governments of most developing countries, often partly due to the subsidies granted to public and private enterprises, are not offset by the revenue generated through their tax receipts. This, the study explained, causes there to be non-existent government savings to be mobilised by the financial system in most of these countries. Rather, it was pointed out that what was prevalent in these economies were heavy borrowings by the government, which are subsequently used to fund its current expenditures and which invariably drains the little finances that could have been allocated to the real productive sector of the economy. Overall, Gurley concluded that government subsidisation was adversely impeding deepening of the financial system and economic growth.

The study by Gurley and Shaw later in 1967 also argued the need for there to be accessible funds to the real productive sector of the economy and not the public sector. Their work posited that it is the private entrepreneurs and not the grandiose and colossal state-sponsored development projects (which in most cases were subsidised public enterprises) that are the driving forces behind economic growth. They maintained that the state should devote its resources to creating an environment that is conducive for private entrepreneurs to flourish. Such environment, they opined, is the deregulation (free from government control) and liberalisation (creation of competitive environment) of the financial system (Gurley and Shaw, 1967).

The works of McKinnon (1973) and Shaw (1973) comprehensively catalogued the excesses of the intervention paradox. Based on the arguments for economic liberalism by

Hayek and Milton, and the relevance of a 'deepened' financial system to economic growth, as articulated by Goldsmith, and Gurley's remarks on the negative impact of government intervention in the financial system, McKinnon and Shaw contended therefore that stagnation in developing countries' economies were largely due to government intervention in the economic and financial system.

McKinnon (1973) argued that the interventionist activities of governments cause 'fragmentation' (a situation where firms and households in an economy are so isolated that they face different effective prices for land, labour and capital, and do not have access to the same technologies) in the economy. He noted that interventions, such as interfering with domestic prices (subsidisation), intended as a means of generating cash flows for investments generally distort the allocative functions of price mechanisms in planning. He pointed out that firms in a particular industry that the government wants to encourage by raising their relative price or by granting them import licences will have their incomes increased regardless of how inefficient they may be operating, and may when they receive these subsidies re-invest only a part of it. He posited that these causes the distribution of income to be tilted in their favour thereby contributing to the existing fragmentation in the economy.

McKinnon also argued that a tariff or other trade restrictions cause the domestic price structure to diverge from the international market price, due to its tendency to raise the internal prices of the protected commodities. He reasoned that these higher internal prices would as a result cause unnecessary loss of efficiency by unduly restricting the consumption of the output with rising prices.

McKinnon also explained how cheap bank credit and tax concessions for 'essential' industries, and easy access to domestic fuel supplies and outputs of other government-

owned industries results in monopoly pricing by the 'essential' industries. In all, he concluded that these interventions by the authority are counter-productive to the overall development of the whole economy

Shaw (1973), on the other hand, also asserted that government intervention in the financial system as a policy tool prevents the interest rate from playing the role of balancing the supply and demand for money. He argued that when the government sets ceilings for interest rates, that it destabilises the equilibrating functions of interest rate and as such causes a sluggish growth in the real sector, due to the savings-loans mismatch rate ceilings often precipitate. On the contrary, he argued that deregulation permits interest rates to equilibrate supply and demand for money.

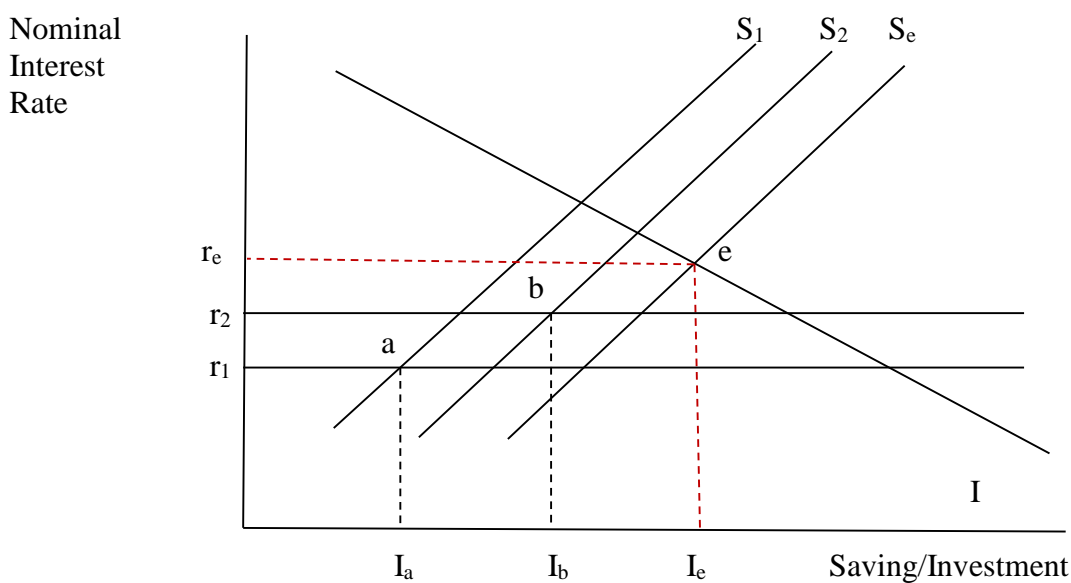
In all, Shaw contended that financial system deregulation is the keystone of a policy package, which will tend to raise the ratios of both private and government savings, reduce the need for foreign aid or inflationary deficits, open the way for better allocation and contribute to the stability of growth in output and employment.

Shaw's argument centred on the role of money *vis-à-vis* the impact of interest rate on economic growth. Shaw considered money³⁸ and capital to be the same asset. As such, he posited that in countries where the capital market is not well developed, that those policies which reduce the attractiveness of holding money assets will rather hinder capital accumulation and development. Shaw's hypothesis was further expanded by Fry (1978) with the aid of a conceptual diagram. In the diagram (replicated below) the level of savings is represented by (S), at different income levels (Y_0 , Y_1 , Y_k). The savings level

³⁸ Money here refers to inside money; that is bank deposits, assumed to be ultimately claims to capital.

has a positive relationship with the nominal interest rate (r); it is assumed that the level of savings is subject to or influenced positively by the nominal interest rate (that is $S = f[r]$). Also, the investment level (I) is shown to have an inverse relationship with the nominal interest rate (that is $I = f[1/r]$).

Figure 6 - The relation between interest, savings and investment



Source: Figure adapted from Fry (1978, pg. 465)

Assuming that the government adopts a repressive policy and sets an interest rate at r_1 , below the equilibrium rate r_e , Fry argued that this would contract savings to S_1 . Due to this limited supply of savings, investment (I) will be constrained to I_a . Fry explained that the repressive policy permeated through this interest rate ceiling will thus cause sluggish growth in the economy because investment will be constrained to that low savings S_1 . If the government raises interest rate from r_1 to r_2 , the level of both savings and investment, Fry commented, will increase. Savings will increase by shifting to the right from S_1 to S_2 . Investment will also increase because at that rate, Fry contended, investors are still willing to borrow. Thus, investment will increase from I_a to I_b . Fry also argued that when financial repression (interest rate setting) is totally removed that the levels of savings and investment will be higher compared to when there were interest rate ceilings. Overall, he

argued that when interest rate ceilings are removed, both savings and investment levels would rise to the equilibrium level, e .

From the above discussions, it is clear that Shaw's and Fry's underlying argument of what inhibits the growth of capital accumulation is the repressed rate of interest (the setting of nominal interest rate ceilings) by the government. They both argued that such policy results in very low and often times negative real rates (due to high inflation) on both the loans and deposits of the banking system. They explained that when interest ceilings are set very low that it leads to excess demand for loans and also shifts savings away from domestic financial assets and towards real assets such as buildings or foreign financial assets (causing capital flights). They also noted that financial repression results in reduced rates of saving and misallocation of investment, both of which they believe adversely affects economic growth. Therefore, they advocated for a deregulated and liberalised financial system where the rate of interest increases to a point it equilibrates the supply of loanable funds to the demand of those loanable funds.

It was between the late 1970s and early 1980s that attention turned fully to deregulation and liberalisation of the financial and economic systems. The intellectual climate at that time looked upon it as the panacea for the global economic stagnation that has re-emerged in the global sphere.

The political support needed for the take-off of these neoliberal ideas were provided by the administration of Reagan and Thatcher. Following her election on the 4th of May 1979 as the Prime Minister of United Kingdom, Margaret Thatcher, under the influence of Keith Joseph, a strong advocate of monetarism, acknowledged that Keynesianism had to be abandoned and that monetarist (the supply-side) solutions were essential to cure the stagflation that had characterized the British economy over the years (Harvey, 2005).

Because of this, Thatcher privatised public enterprises (including social housing) and rolled back the commitments of the welfare state. The powers of labour unions were undermined and several regulations that had kept the financial institutions under the close control of the state were subsequently relaxed.

In the U.S., following his election as the 40th President of the United States in 1981, Reagan also used the neoliberal framework to restructure the SSA in U.S. He deepened the transportation deregulation started earlier by the administration of Jimmy Carter and extended the deregulation exercise to the finance and agricultural sectors. He also re-appointed Paul Volcker as the Federal Reserve chair: it was under his tenure that Paul Volcker initiated the draconian monetarist reform – the interest rate hike, which was an attempt to end the inflationary pressure in America at that time, at the detriment of full employment.

Likewise, in Nigeria, in line with the IMF/World Bank financial deregulation and liberalisation policies embodied in the Structural Adjustment Programme that was adopted in 1986 in the country, there was a paradigm shift from the previously ‘repressive’ direct monetary policy control method to a ‘liberal’ indirect approach, mostly anchored on the use of market instruments in policy management. In particular, the liberal indirect approaches to policy management adopted by the government were, exchange control deregulation, adoption of relevant pricing policies in all sectors of the economy (such as the deregulation of the rate of interest and reduction in government subsidies), a further restructuring of public expenditures (austerity measures including privatisation of public enterprises) and elimination of custom tariffs and import quotas.

Of particular importance to this research is the liberalisations/deregulation of the financial system. These reforms could be captured under five headings – (i) reform of financial

intermediaries, (ii) monetary policy reforms, (iii) foreign exchange reforms, (iv.) liberalisation of capital accounts, and (v) capital market reforms. The impact of these reforms on macroeconomic variables is the central focus of this thesis. A detailed analysis, with regards their impact on the Nigerian economy is carried out in part two.

In conclusion, at the heart of all the various neoliberal economic reforms initiated by Reagan's and Thatcher's administrations in the late 1970s, and advocated by the IMF and the World Bank for developing countries to implement in the early 1980s in order to revive their ailing economies were the deregulation and liberalization of the financial system and the capital accounts. The main features of the neoliberal free-market social structure of accumulation could be summed as follows:

- The removal of barriers to free movement of goods, services and capital throughout the global economy
- A withdrawal by the state from the role of guiding and regulating economic activity
- Privatisation of state enterprises and public services
- The slashing of state social programmes
- A shift from cooperation between capital and labour to a drive by capital, with the aid from the state, to fully dominate labour
- The replacement of co-respective behaviour by a large corporation with unrestrained competition.

2.3 Major criticisms of the neoliberal social structure of accumulation and the established growth theories

Over the years, there have been growing polemics against the established growth models that underpinned the growth strategies pursued by many countries in the 1950s-80s, and against the neoliberal ideology that restructured the social structure of accumulation then.

Firstly, the established growth models have been argued by many to lay emphasis purely on structures within the national state, when highlighting the principal factors that mitigate its economic growth (Amin, 1977; Arrighi, 2002). Such narrow views, as remarked by Amin (1977), are fundamentally flawed because development at the periphery, Amin observed, is the result of external aggression and not of internal evolution. In essence, Amin contended that it is a fundamental error if each time a particular phenomenon, such as underdevelopment, of the Third World is studied to seek its causes in the Third World itself, instead of placing them within the dialectic of the world system.

Many other scholars have also concluded, just like Amin, that the fundamental error of the established growth models lie in their neglect of the fact that deep ‘structural’ factors, some of which are of ‘international’ context, might, in fact, be the core impeding factor to economic progress of some of the developing nation-states (see Chase-Dunn and Hall, 1993 and Arrighi 2002, for instance).

Overall, Amin, Arrighi, Chase-Dunn and Hall, and several scholars, contend that the traditional growth theories, Lewis’ and Rostow’s growth theories, for instance, could be viewed as flawed analyses because they laid emphasis mainly on internal factors (particularly on the shortage of domestic savings/capital) as the fundamental cause of

underdevelopment in Third World countries. They failed, as Chase-Dun and Hall and Amin pointed out, to recognise that there could be external aggression that contributes to underdevelopment in these regions.

More particularly, criticism has mostly been directed at Rostow's abstraction, which posited that all national states could follow a particular path of evolutionary growth or development. Chase-Dunn and Grimes (1995), for instance, countered such assertion and explained how periphery countries are structurally constrained by external factors that cause them to experience developmental processes that replicate their subordinate status, instead of developing along the paths hitherto taken by core countries in the past. Chirot and Hall (1982), also noted that Rostow's stages of development literally disregarded both the benefits and the destructive effects colonisation has had on the development of former colonies. Amin (1977) also remarked that the present situation of underdeveloped countries, shaped by imperialist domination, is not the same as those experienced by the now developed centres at a previous stage of their evolution. As such, present poor economies, he argued, cannot follow the same path of development, as did the advanced economies in the past. In similar stance, Domar's investment growth theory, Easterly (1997) argued, was purely an off-shoot from the aftermath of the Great Depression in the 1930s that was constructed based on the events within that period that inherently did not account for historical factors, such as the impact of colonialism

Further to the above, many scholars also contend that established growth models generally did not explore the critical problems underlying the capitalist economic system itself. It is remarked that mainstream economists often focus on a given phase in order to explain everything, thus ignoring the various tendencies of the capitalist system that has the capacity to cause recurrent stagnation in the economy. For instance, Sweezy and

Magdoff (1972), and more recently Foster and Magdoff (2009), remarked that the natural tendency of the rate of profit to fall in capitalist production, which often causes recurrent economic stagnation, is mostly overlooked by mainstream studies when they analyse factors that mitigate real capital accumulation cum economic growth in the capitalist system.

In addition, several prominent economists, led by Joseph Stiglitz, have also shown substantial reservations about the benefits of financial liberalisation. Stiglitz and Weiss (1981) contended that keeping interest rates at low levels can actually raise the average quality of borrowers and that imposing credit constraints (such as raising the level of interest) encourages the issue of more equity to finance business expansion – a trend both Stiglitz and Weiss (1981) and Singh (1997) remarked could undermine development in the long-run. According to Singh, the expansion of the stock market in developing countries, aided by neoliberal liberalisation and deregulation, is likely to impede long-term growth because most of these stock markets are still immature and subject to informational problems, a lack of transparency, and disclosure deficiencies that can contribute to their and the economy's fragility in the long run.

Conversely, Stiglitz (1993) suggests that government intervention – by way of repressing financial systems – can reduce market failures and improve the overall performance of an economy. In fact, Stiglitz and Weiss (1981), contrary to McKinnon's and Shaw's theses, argued that increasing the rate of interest would not equilibrate the supply of loanable funds with its demand. They contended that an increasing interest rate actually increases the riskiness of bank's loans portfolio – either by discouraging safer investors or by inducing borrowers to invest in riskier projects – and therefore could decrease the bank's profit margin which potentially mitigates future allocation of funds. This 'adverse

incentive' effect, Stiglitz and Weiss asserted, distorts the allocation of finance to the rightful investments, which may have the proper capacity to influence any sort of growth in the real economy. In essence, increasing the interest rate, they remarked, often undermines economic growth in the end.

Equally, Sikorski (1996) also noted that the problem of high debt-equity ratio that weakens most corporations follows from the fact that the ultimate objective of financial deregulation, which is to increase the rate of interest, puts highly leveraged firms into a 'Ponzi-game' of doubly increasing costs. Which means the firm must borrow more to meet an increase in payment on outstanding debt. In effect, Sikorski argued that the additional borrowing only serves to increase the debt load instead of constituting to further capital investment, thus worsening the financial position of the firm. The banks, he noted, are also drawn into the 'Ponzi-game' through a vicious 'moral hazard': the banks continue to lend to stave off their own immediate failure even though the loans they are extending are rapidly becoming non-performing. All these, Sikorski remarked, further undermine any meaningful growth in the real economy.

On the other end, Morck *et al.* (1998) and Morck and Nakamura (1999) contended that bankers' surveillance on corporate governance, which has been argued ensures corporate borrowers to not default on their debt, casts doubt on the reliability of bankers. This, they noted, is because such surveillance may encourage risk-averse behaviour in investment undertaking which then promotes excessive investment in tangible assets (which can be used as a loan collateral), rather than knowledge-based assets which have the propensity to accelerate economic efficiency. In essence, they remarked that corporate monitoring by banks may often constrain firms' opportunity to expand; by so doing, they argued that it thus inadvertently exerts a negative influence on the real economy.

In summary, past growth theories are seen to have been mostly formulated based on ephemeral economic events, which many argue do not account for the historical (given the negligence of colonial impacts) and structural (such as the inherent tendency of the capitalist system to stagnate) factors, and the external precedents (such as uneven development) that impacts, to a significant extent, on the ability of Third World countries' to grow and develop.

These oversights by traditional analysts led some scholars such as Hilferding (1910), Lachmann (1944), Amin (1977) and more recently Sweezy and Magdoff (2009a), to conclude that most of the established economic scholars flaunt 'general' theories, which often rests on assumptions that are mere 'records' of the conditions of economic activity during some particular period of time that does not account for the basic and significant historical precedents that shape the course of events. In fact, most established theories are seen to be based on the hypotheses of empirical analysis conducted on the 'episodic' economic events of particular epochs.

The inadequacies inherent in such 'episodic' empiricist studies were expertly summed by Braudel (1982): he criticized such 'event-dominated' or 'episodic historical' and 'purely empiricist' studies and likened studies with such inherent tendencies to *dust*, and argued that it gets into the *eyes* of the scholars and prevents them from seeing the 'real' underlying structures. He contended that such studies mainly discuss about ephemeral phenomena and as such are inadequate for explaining the core factors that affect the economic system. Hilferding (1910), foretold that it is a 'bad habit' to draw general conclusion from a small number of observations over a period of few years and to elevate the experience of a partial phase of the industrial cycle (or at best the experience of a particular unique cycle) to the level of general 'laws'.

Wallerstein (2004), just like Hilferding, Braudel and many other Marxists, also contended that one should not study phenomena such as underdevelopment in a narrow context, such as in a purely economic framework often characterised by empirical analysis of circumstances in a particular period of time or on a particular nation-state. He also believes that such narrow studies will afford the scholar only a tiny bit of understanding of the whole phenomenon.

Chirot and Hall (1982) also concluded that studying individual societies in isolation from each other is both misleading and dangerous. In fact, the locus of analysis, they argued, should not be an isolated unit of analysis. Instead, the society, they asserted, should be placed as an integral part of a multiplex of economic units.

To summarise, the inadequacies of established growth theories could be argued to have helped spark the search for an alternative approach to the investigation of the phenomena of underdevelopment in Third World countries. Given the peculiar oversights of these mainstream theories, the alternative approach that has been advanced as a better and more comprehensive approach to the study of capital accumulation along with underdevelopment in Third World countries is that which encompasses the historical, internal, and external factors that have the propensity to affect a nation-state in the modern capitalist economy. That is, an approach that elucidates the historical precedents that have moulded social formations, and at the same time addresses the internal and contemporary external forces that affects the capitalist production process.

2.4 Heterodox theories of capital accumulation and economic growth

To completely understand the inner structures of a given social form of economic organisation, particularly the capitalist mode of production, Ernest Mandel (in his book,

Marxist Economic Theory) remarked that the works of Marx are ‘absolutely fundamental’ (Mandel, 1968: 13-20). Mandel noted that Marx’s works lay bare the ‘laws’ of motion which govern the origins, the rise, the development, the decline and the disappearance of a given social form of economic organisation – particularly the capitalist mode of production. More recently, Magdoff and Foster (2014) also remarked that in order to examine the roots of economic stagnation more critically that it is necessary to turn to the Marxian tradition, where the focus, they also noted, is on the dynamic synthesis of economic history and economic theory.

Without a doubt, Marx’s approach to the subject matter of capital accumulation has very little in common with what is understood today in mainstream economics. In fact, Marx’s theory, unlike the mainstream’s, focuses more on the inner structures of the observable relations of accumulation: Marx’s theory is not addressed primarily to economic abstractions (which Marx pointed out as dealing merely with the relation between people and things [Marx, (1867), 1990]) but to the ‘social economy’ through which labours are socially recognised, recompensed, allocated and exploited. The basis of Marx’s theory is thus the social relations of production – specifically of how capital relates to wage-labour. Marx argued that the ‘social form’ of the economy is the key to understanding the economy’s movement, reproduction, developments, limits and destiny.

2.4.1 The centralisation paradigm and its economic consequences

To understand the causes of the contradiction of the capitalist economic system fully, it is useful, perhaps, to appreciate, first, the historical tendencies of the system. For, according to Marx (cited in Mandel, 1968: 16), it is only when we have ‘*appropriated the material in detail [that is understood the historical tendencies] that we can then analyse its different forms of development, and be able to trace out their inner connexion*’. This

“Marxian method” – an integration of dialectical rationalism with empirical (and practical) grasping of the evidence – implies understanding the fact that economic categories are equally historical categories. The Marxian method, Mandel remarked (*ibid*: 18), holds that it is only by revealing the law-governed nature of social life (i.e., that it is only by revealing the historical tendency of a particular social life) that one can reveal and show the mechanism of evolution – of how the economic category is born, changes and passes away, and how it all happens.

Marx’s own analysis of the capitalist production process in the nineteenth century reflects this materialist conception of history. Marx explained, after examining the historical evolution of the capitalist production system, that capital begins to flow into a branch of industry only from the moment when high profit can be extracted from it. The influx of capital into any branch of industry, he observed, will result, however, in increased competition and as such lead to equalisation of the rate of profit across the industry. This ebb and flow of capital, Marx noted, is a constant motion in the capitalist system and is governed by the “pursuit of profit”. The ebbing of capital, he explained, tends to reduce production and creates a shortage of goods in those branches of industry and as such leads to an increase in prices and profits in those branches. The influx of capital, on the contrary, causes intensified competition in the sectors affected resulting in the fall of prices and profits in those areas. Based on these motions, and the competition in capital and commodities they precipitate, Marx, therefore, concluded that an average rate of profit (equalisation of profit) is attained in all sectors in the end.

Consequently, Marx remarked that the ‘equalisation of profit’, which was because of the ebb and flow of capital, favours only those capitalist enterprises which have the highest degree of productivity (and low costs), and it works against those enterprises that operate

with costs of production above the average prices of production. It is the best-equipped enterprises, those with the highest ‘organic’³⁹ composition of capital, Marx observed, that often come out more profitable in the end.

Additionally, Marx ([1867] 1990) noted that the industrial capitalist is inherently urged on to new conquests by the pressure of the newly acquired machinery. Due to the increased productivity (output per hour) attained with the help of the advanced machine, and because of the increased cost incurred from acquiring the machine, the capitalist, Marx explained, therefore needs more markets in order to sell his increased outputs, and to achieve sufficient profits to cover his increased costs.

Likewise, the capitalist, Marx further remarked, has to be abreast of his competitors in reducing prices (this, he explained, is as a perpetual incentive to the entrepreneur, both to increase his scale of production and to avail himself of the improved lower-cost machines that are constantly being produced).

Overall, Marx explained that the further machine production advances, the higher the organic composition of capital needed for an entrepreneur to secure the average profit in the industry. Hence, the average capital needed in order to start a new enterprise capable of bringing in this average profit increases. It follows therefore that the average size of enterprises likewise increases in every branch of industry. The increases in the average size of enterprises results in a large number of small enterprises being beaten in the competitive struggle by a small number of big enterprises which command an increasing

³⁹ This refers to the ratio between the means of production (constant capital - c) and labour (variable capital - v), i.e. c/v . Marx asserts that as capital is accumulated, that this ratio (c/v) will rise; considering that a greater amount of constant capital will now be used in place of labour power.

share of capital (including a big share of organic capital), labour, funds and production in the entire branches of industry. A few large enterprises thus emerge that *centralise* means of production. These processes are what Marx concluded that are the natural tendencies of capital accumulation.

In conclusion, Marx noted that in the competitive struggle, large enterprises defeat the small ones because the latter produces at prices, which are too high: as a result, they are unable to continue to dispose their products at a profit, and therefore will go bankrupt. However, Marx reckoned that when the destruction of the medium and small enterprises, especially those of the craft type, is not accompanied by an all-round industrial advance which creates new needs for labour-power, the former owners of means of production, dispossessed through competition, he remarked, are not transformed into employees but simply thrown out of the production process. They are, Marx concluded, no longer proletarianised but are completely pauperised. According to Marx therefore, the history of capital is the history of the destruction of the property of the majority for the benefit of the property of an even smaller minority.

2.4.2 Theories of concentration of capital, crisis of accumulation, dependency and world-system analysis

Rudolf Hilferding's expansion of Marx's theory of centralisation of capital in his book, *Finance Capital*, included the idea of the *concentration* of capital. He noted, just like Marx, the tendency of the capitalist system to generate a greater consolidation of capital that leads eventually to big 'cartels' and 'joint stock companies'. In addition to this, Hilferding pointed to the tendency of this capitalist development (i.e. the centralisation process) to produce a *concentration* of banking (Hilferding, 1910: 223).

Hilferding explained that when competition in an industry is eliminated (i.e. production has been centralised), that there is then an increase in the rate of profit. However, these tendencies (centralisation of capital and increase in profit), he observed, leads to the advancement of *finance capital*⁴⁰. According to Hilferding, the development of capitalism (centralisation of production) precipitates a continual increase in the amount of money which the productive classes (through increased profits) and non-productive classes (those taken out of business) place at the disposal of the banks, who in turn convey it to the industrialists (the cartels, joint stock companies etc.) that needs extra funds for further expansion.

So, given that the centralisation tendencies increases the amount of organic capital needed for production, the cartelised ventures, in need of larger funds for continued production are as a consequence forced to turn to the banks who have accumulated a vast amount of money capital from the industry reserves and from the non-productive classes. In other words, the control of the funds, which are indispensable to the quasi-monopolised industries, now largely rests with the banks.

As a result, with the development of capitalism and of the machinery of credit, Hilferding noted that the dependence of industry upon the banks also increases. Overall, Hilferding concluded that the development of the capitalist industry produces a concentration of banking, which, in turn, is itself an important force for attaining higher stages of capitalist development (*ibid*: 223-224).

⁴⁰ Hilferding defined finance capital as the capital, in money form, which is with the banks but would eventually be transformed into industrial capital (Hilferding, 1910: 225): so finance capital retains the money form, because it bears interest and can always be withdrawn by the owners as money, but is often inevitably invested through loan advancements by the banks to the capitalist agents.

Based on Marx's centralisation outlines and Hilferding's concentration paradigm, many analysts have gone ahead to articulate the consequences of the tendencies of these theories for real economic growth and development. Generally, these historical tendencies are seen as the reason why the modern capitalist system is inherently prone to crisis.

Michal Kalecki is remarked to be the first to propound a theory of economic crisis that was premised on Marx's abstraction of the capitalist process (Foster, 2013). Michal Kalecki, Foster remarked, conceived the concept of the 'degree of monopoly', which explained the extent to which a centralised firm (a monopoly) was able to maintain a price markup on prime production costs (such as worker's wages and the cost of raw materials). This ability of the monopolist to maintain a set profit margin, Kalecki later observed, underpins the stagnation tendency of the capitalist process.

Firstly, Kalecki (1954, 1971: 26) remarked that mass unemployment seems to be the most obvious symptom of depression (this follows from the consequence of the centralisation process articulated by Marx). Like Marx, Kalecki also explained that unemployment is not due to the shortage of capital equipment (or capital). The reverse, he noted, is the case. During depression, the existing capital, Kalecki explained, is utilized to a small degree; the idle capital equipment, he remarked, is the counterpart of the unemployed labour force. The reason why the owner of unutilised equipment who encounters a lasting supply of idle labour does not embark upon production, Kalecki explained, arises because of unprofitable propositions in the economy.

According to Kalecki, a reduction in wages is often conventionally recommended as a way to overcome depression. He explained that usually in a competitive setting, the reduction in wages, and likewise in taxes, would probably induce the entrepreneurs (owing to the improved price-wage relation) to utilise their equipment to the capacity,

and as a consequence unemployment will vanish. However, this, he noted, by no means resolves depression because goods produced have still to be sold. But since production has risen considerably – as a result of an increase in the price-wage relation, the part of production equivalent to profits of the capitalist, he opined, has also grown even more (*ibid*: 26). A precondition therefore for equilibrium at this new higher level, Kalecki observed, is that capitalists from their increased profits should acquire this part of production, which is not consumed by workers or by civil servants. In other words, the capitalists must spend immediately all their additional profits on consumption or investment in order to correct any imbalance in the process.

However, if it is most unlikely that the capitalist will spend all their profits, the immediate effect of the increased profits, Kalecki explained, will often be an accumulation of money reserves in the hands of entrepreneurs and in the banks. Nonetheless, the goods, which are the equivalent of the increased profits, will remain unsold. The accumulating unsold stocks, Kalecki noted, will sound the alarm for a new price reduction of goods, which do not find any outlet. Thus, the effect of the cost (wages) reduction in a competitive market will be cancelled. On the balance, Kalecki remarked that only a price reduction would have occurred, offsetting the advantage of the cost reduction to the entrepreneur.

On the other hand, however, when cartels are in existence (i.e. when there is a degree of monopoly power in the system), in contrast, to cut throat competition, Kalecki explained that wages reductions, which induces diminished demand by the workers, often do not have repercussions on price – since they are maintained by cartels at a stable level. Kalecki remarked that even with the improved price-wage relation, which produces high profits that cartels are rather unlikely to invest profits derived by wage reductions more

promptly than the entrepreneurs under conditions of free competition. Instead, the opposite is what he remarks that is the case (i.e. the cartels spend less of their profits).

In other words, in a cartelized system, the proceeds of industry, just as under competition, will diminish as much as their costs. However, as prices remain unchanged in the cartelized system, the sales of goods will drop in the same proportion as the proceeds have shrunk. Thus, while wages reductions do not cause any increase in production in the case of a competitive economy (but a fall in price), in a fully cartelized system they lead, as a result of 'rigidity of prices', to shrinkage of production and a rise in unemployment.

Kalecki's analysis attained their most complete expression in the works of Josef Steindl. According to Steindl (1976), the giant corporations (the centralised firms) which tended to maintain widening profit margins (due to the 'degree of monopoly') are also constantly threatened by a shortage of effective demand: with wage reductions and price rigidity, wage-labourers reduce their consumption of the produced goods thus constituting to the general decline of effective demand.

Steindl explained that giant corporations tend not to invest if a large portion of their existing productive capacity is already standing idle. He noted that the giant corporations, when confronted with a downward shift in final demand, will not lower prices (as is obtainable in competitive systems) but would instead rely mostly on cutbacks in capacity – particularly of the labour force (Steindl, 1976). In this way, the giant firm under monopoly capitalism, Steindl remarked, would maintain its existing prices and prevailing profit margins. However, the falling demand, due to wage reductions and cutbacks in the labour force, will also further undermine accumulation of capital in the economy.

As a result, Steindl also concluded that monopoly capitalism is prone to wider profit margins and larger amounts of excess capacity than was the case for a freely competitive system. Overall, the contradiction that emanates from the centralisation process was what Kalecki and Steindl concluded that generates a strong tendency towards economic stagnation.

Though Kalecki and Steindl could be argued to be the first to examine, extensively, the contradiction of the centralisation process of capital accumulation and its impact on the wider economy, Hilferding did also write on the crisis of accumulation, though from a different perspective.

Firstly, Hilferding (1910: 239) remarked that the general possibility of a crisis arises from the dual existence of the commodity, as a commodity and as money: this duality, Hilferding explained, creates the possibility of an interruption in the process of commodity circulation if money is hoarded instead of being used to circulate commodities⁴¹.

For Hilferding, what contributes to hoarding of money is the fall in the rate of profit (drawing from Marx's explanation of the equalisation of profit, this also means capital will flow slowly into [be hoarded from] those branches of production with low profitability). The low profit, in turn, arises from the centralisation process: according to Hilferding (1910: 233-234) cartelization brings exceptionally large extra profits in the short-run, but at the same time tends to slow down capital investment in the longer-run; because the first concern of a cartel is to restrict production (in order to maintain a high

⁴¹ C_1-M-C_2 comes to a halt because M, which had previously realised the value of C_1 does not go on to realise the value of C_2 . As a result, C_2 cannot be sold and so a glut develops – which generates low prices and profits.

price). On the other hand, the actions by the cartels tend to affect the non-cartelised industries, by precipitating declines in the rate of profit (due to the high cost of production brought about by the high organic composition of capital). This also discourages further capital investment.

In essence, according to Hilferding (1910: 241), the contradiction that develops into crisis stems from the fact that the conditions of realization (i.e. the possibility of realising the value of commodities, including profit) cannot be reconciled with the expansion of consumption: under capitalist conditions, expansion of consumption means a reduction in the rate of profit. For an increase in consumption by the broad masses of the population depends upon a rise in wages, which would, in turn, reduce the rate of surplus value and hence the rate of profit. Generally, Hilferding concluded that the narrow basis provided by the consumption relations of capitalist production constitutes the general condition of crises since the impossibility of enlarging this basis is the precondition for the stagnation of the market.

Overall, according to Hilferding's explanations, a crisis is generally a disturbance of circulation: it manifests itself as a massive unsaleability of commodities – as the impossibility of realising the value of the commodities (the price of production) in money.

So, given the inherent purpose of capitalist production, which is to realise an increase of profit (*ibid*: 240), the narrow basis provided by the consumption relations of capitalist production, therefore, constitutes to the stagnation of production, which then leads to crisis and underdevelopment.

Secondly, Hilferding further observed that the development of the function of money (as a means of payment) also contributes to the crisis. He remarked that under simple

commodity production (for example in the pre-capitalist commodity production) there are no crises. The breakdowns in the economy during those periods, he noted, are not crises, which conform to some economic law, but catastrophes arising from particular natural or historical circumstances such as poor harvest, drought, pestilence and war.

However, given that the capitalist production generalises commodity production, and allows all possible products to be sold and bought with money (and also makes the sale of produced commodity a precondition for the resumption of reproduction), a slump in sales, therefore, makes it impossible to meet previously contracted debts. In addition, if one person cannot meet its obligations, then others also become unable to pay. Therefore, the chain of debtors resulting from the use of money as a means of payment breaks the production process. A slump at one point, Hilferding concluded, is transmitted to all the others, thus becoming a general crisis.

Overall, Hilferding concluded that periodic crises are a distinctive feature of capitalism. They are, he noted, a disturbance of circulation that manifests as a massive unsaleability of commodities, and which then constitutes the impossibility of realising the value of commodities in money.

In their book *'Monopoly Capital'*, Baran and Sweezy also documented the causes of stagnation in the economy. Under 'monopoly capitalism', Baran and Sweezy explained that there is a strong, persistent, and growing tendency for more surplus value to be produced than can find profitable investment outlets later in the economy. Because of these tendencies, they remarked that there will be a decline or a slowdown in the rate of growth of output and as a result in income, thus triggering rising unemployment and increasing under-utilized productive capacities. The main contradiction that actually engenders the tendency to stagnation, according to Baran and Sweezy, is, therefore, the

inability of the dominant monopoly capitals to absorb the enormous surplus already generated within their production. Overall, they concluded that more monopolistic the economy, the stronger the tendency to stagnation (Baran and Sweezy, 1966).

Generally, the centralisation process is conceived to produce a paradox. Given that it is a natural tendency for the processes of accumulation to centralise, the centralisation, nevertheless, is argued to also contribute to the underutilisation of capacity and the over-accumulation of surplus value, which then engenders stagnation in the long-run. This inconsistency is why many Marxian analysts argue that the capitalist system is inherently contradictory and prone to crisis (see Hilferding, [1910: 243], for instance).

The inherent tendencies of the capitalist system, which gravitates the economy towards crisis, have been used to explain the underdevelopment in many economies. In many cases, the centralisation process has been argued to constitute the unequal development witnessed in the interconnected global system – with the poor countries categorised as the peripheries (those unable to capture sufficient surplus including profit from the production process) and the rich countries categorised as the core (those with the centralised firms – quasi-monopolies).

Paul Baran was among the first, in the 1950s, to use the *crisis of accumulation* theses to explain the economic underdevelopment of periphery countries. He argued that the manner in which capitalism was brought to the backward countries, which was characterized by undisguised looting by imperial (centralised/Western) corporations which sought wider markets beyond their already conquered domain, served to smother fledgling industries in the colonized societies, and thus caused them to be underdeveloped (Baran, 1957).

He argued that European conquest and the plundering of the rest of the globe generated a great divide between the core and the periphery – which have persisted during the course of modern history. To illustrate this, he highlighted the different ways in which India and Japan were incorporated into the world economy. India, he explained, was incorporated as a dependent social formation that, as a result, has carried the unfortunate legacy of perennial underdevelopment. While, on the other hand, Japan, he remarked, stands as an exceptional case that was not colonised nor subject to long unequal treaties and that by retaining control over its own economic surplus was free to develop along the auto-centric lines of the core European powers.

Baran concluded that the failure of development in Third World countries is neither the result of ‘original underdevelopment’ or a ‘lack of capital’ nor a ‘vicious circle of poverty’. The key to underdevelopment, he remarked, lies rather in the fact that the ‘potential surplus’⁴² that could be utilised for productive investments are to a large extent wasted away by the combined actions of –

- a. A semi-feudal landed oligarchy addicted to luxury consumption on the most extravagant scale
- b. Large parasitical strata of merchants, money-lenders and intermediaries of all kinds (comprador bourgeoisies)
- c. A small industrial bourgeoisie forced to subordinate itself to the interests of foreign capital

⁴² This term was defined by Baran (1957) as the difference between the output that could be produced in a given natural and technological environment with the help of employable productive resources, and the actual output being produced. Potential surplus therefore includes actual surplus plus (i) the society’s excess consumption (ii) loss of output due to the existence of unproductive workers (iii) loss of output due to irrational and wasteful organisation of production and (iv.) the loss of output due to open and disguised unemployment.

- d. Foreign multinationals geared mainly to the expatriation of profits
- e. An overgrown state apparatus compelled to maintain a 'praetorian' guard of hired mercenaries.

Overall, Baran argued that the real difficulty lay in the existence of an 'imperialist' structure of power in the world economy that places the periphery societies in a situation of 'dependency'. The solution, he concluded, is for underdeveloped economies to delink themselves to some degree from the capitalist world economy.

Raúl Prebisch of the United Nations Economic Commission for Latin America (ECLA) and Hans W. Singer of the United Nations advanced, independently in the 1950s, the other key thread of argument that contributed to the intellectual development of dependency theory in the 1960s. Their arguments, widely referred to as the Prebisch-Singer hypotheses, proposes that the terms of trade⁴³ between developing and industrialised countries have declined over time so that the former must export an increasingly larger volume in order to purchase a constant volume of imports (Singer, 1950; Prebisch, 1962).

Prebisch and Singer offered several theoretical arguments to support their contention that the price of the developing countries' exports has been falling instead of rising relative to the price of their imports. First, they argued that increases in labour productivity in the industrialised countries' export industries were reflected in higher incomes rather than lower export prices, whereas productivity increases in the developing countries' export

⁴³ A country's terms of trade (referred often as the country's net barter terms of trade) is the price of a unit of a country's export divided by the price of a unit of its import. So a declining terms of trade, from the viewpoint of the exporting country (for instance Nigeria), implies that an ever increasing volume of exports from Nigeria must be sold to purchase a constant volume of imports.

industries result in lower prices for their exports. These contrasting effects of productivity in these economies, they argued, arises from the different market structures in those economies. More organised labour and the lack of market competition in the industrialised countries, they remarked, keeps wages and prices high, whereas the lack of labour organisation and highly competitive markets for primary products in the developing countries keeps wages and prices low for those countries' labour and outputs.

Equally, given that most of the exports of the developing countries are primary produce such as food, they argued that their demand in the industrialised countries often does not rise as fast as incomes in those countries. In contrast, the demand for manufactured goods in developing countries, they observed, often easily exceed the rate of growth of incomes in the developing countries. Therefore, the slow rate of growth of demand for primary products, Prebisch and Singer concluded, would mean a slow rate of growth in their prices relative to the rate of growth of the prices of manufactured goods.

Secondly, the high rate of population growth in the developing countries, combined with limited employment opportunities in their industrial sectors, they observed, often generates a surplus of labour that also pushes the wages of workers in the export sectors down. This labour surplus and the highly competitive nature of primary product export markets, Prebisch and Singer concluded, contributes to declining terms of trade for developing countries.

The declining terms of trade argument put forward by Prebisch and Singer called into question the rationale of the central tenet of some classical economic theory, such as the comparative advantage theory of David Ricardo: which held that countries would benefit most by exporting those products in which they had a relative cost advantage (Ricardo, [1821] 1971). It was this Ricardian theory that led most economists to argue that

developing countries would benefit most by exporting primary commodities in which they held a comparative advantage and by importing manufactured goods in which the industrialised countries held a comparative advantage. However, the Prebisch-Singer hypotheses countered such tenet and argued that it leads to unfavourable terms of trade and subsequently to underdevelopment in developing countries.

Andre Gunder Frank also espoused some elements of the crisis of accumulation and Prebisch-Singer theses in his arguments. Frank's main contention was that continued participation by Third World countries in the same world capitalist system with developed countries could only mean continued development of underdevelopment in Third World countries. He argued that underdevelopment was because of dependence, and is the opposite side of the coin of development within a single world capitalist system. He was of the view that if the Third World countries continue to participate in the same world system that there would be neither equity nor efficiency and economic development in those countries (Frank, 1978, 1979).

Andre Gunder Frank's works also commented on the theories of stages of development propounded by Rostow. He rejected the notion of original underdevelopment, that is, the traditional society constructs in Rostow's stages of growth. His argument was that this theory wrongly asserted that underdevelopment was original and traditional and that development would result from gradual reforms in dual economies in which the modern sector would expand and eliminate the traditional one. Rather, he posited that world economic cycles and crises of capital accumulation (both of which derive from the centralisation process) shape dependence and underdevelopment in Third World countries.

Amin (1977) also observed that development in Third World countries, particularly in Sub-Saharan Africa, took a different pathway to those of East Asia and Arab regions. This he noted was because, unlike in the East Asia for instance, European imperialism met with comparatively weak societies in Sub-Saharan Africa, in terms of human population and the degree of their state organisation (this was largely due to the debility the region suffered as a result of the slave trade, which included ethnic fragmentation, break-up of large states and reduction of the population). Therefore, under these circumstances, Amin argued that the colonial power assumed direct control of the social life of the people conquered, giving less importance to its alliance with their ruling classes.

What Amin noted was that in Sub-Sahara Africa, the colonial administrators fulfilled the economic and social functions instead of local propertied classes (the ruling classes) that assumed such roles in places like East Asia. Through the imposition of money taxes and a host of other administrative measures, the colonial administrators, he remarked, introduced forced labour and ‘compulsory crops’ which subsequently led to the establishment of what he called ‘*économie de traite*’ (trading economy) in those regions.

Overall, Amin concluded that the genesis of underdevelopment of Africa goes back to the period of European monopolisation of the triangular trade. He remarked that it was during this mercantilism epoch that the two poles (capital and proletariat) essential for capitalism to achieve its completed stage were completed in some parts of the world (they were monopolised by the Western world). It was in this period, Amin commented, that the commercial bourgeoisie of Atlantic Western Europe amassed wealth from its monopoly of the triangular trade, which later aided its industrialisation – it had monopolistic extortion of the slave surplus labour from Africa and feudal rents from America. This

monopoly by the Western Europe was what Amin noted that consequently impeded the ability of some of the dominated regions to develop in subsequent years.

Amin was also critical of international trade. He remarked that international trade links countries characterised by different social relations of exploitation (different rates of surplus-value), involves goods whose production requires a vast consumption of natural resources (raw materials, oil, agricultural products) and pits monopolies against each other both within and beyond their national borders. He viewed the world system not as a juxtaposition of societies reduced to the capitalist mode, but as a system of capitalist formations (industrialised and agrarian) which produces unequal exchange, reflected in the differential rates of exploitation of labour, and which also subordinates the peripheral (particularly agrarian society) to the domination of the monopoly capital in the core (Amin, 2012, 1977).

By 1960-70, Marxian economics had developed, from the centralisation scheme originally propounded by Marx, three distinctive but inter-related strands of theories that attempt to explain the different tendencies centralisation of capital accumulation precipitates in the modern capitalist system. These complementary theories could be categorised as the theory of monopoly capital (i.e. the centralisation schemata), which is argued later leads to crisis. There is also the theory of imperialism, which also derives from monopoly capitalism and that of dependency, which is occasioned by the tendencies of imperialism.

Indeed, the methods used to formulate these theories involved a materialistic conception of history (interpretation of historical tendencies). The same methods (i.e. a materialistic conception of history) could also be seen to have shaped various contemporary

approaches, now used by several Marxian scholars, for studying the modern capitalist economic system in recent times – take for instance the world-system concept⁴⁴.

The concept classifies economies according to their degree of expropriation of economic surplus in the global system. Broadly, world-system analysis refers to the substitution of the unit of analysis, formerly the nation-state, with the world-system (which uses a multiple of the inter-state system) as the standard unit of analysis: in that, states should not be studied in isolation, but rather in juxtaposition with the world-system.

The central theme of world-system analysis, largely similar to the Prebisch-Singer theses, is based on the notion that international trades are often not trades between equals. According to the accounts by Wallerstein, some countries are economically stronger (the core) than some (the peripheries), and as such, the cores are therefore able to trade on terms that allow surplus-value to flow from the peripheries to them (Wallerstein, 2004). For Wallerstein, the modern world economy is marked by an axial division of labour between core-like production processes and peripheral production processes which then results in an ‘unequal exchange⁴⁵’ that favours those involved in the core-like production processes. The core-like processes, he noted, are relatively ‘monopolised’ whereas periphery production processes are relatively competitive.

The monopolised (core-like) processes, Wallerstein explained, obtain their quasi-monopoly power mostly by engaging the support of the machinery of a relatively strong state, one that can enforce the quasi-monopoly status. These quasi-monopoly statuses,

⁴⁴ The world-systems concept, developed by Immanuel Wallerstein, an American sociologist in the early 1970s, serves as a coherent framework for historically studying the developmental trajectory of economies (see Wallerstein, 1974, 1979, 2004)

⁴⁵ A term coined by Arghiri Emmanuel in his book, *Unequal exchange: A study of imperialism of trade*, published in 1972.

according to Wallerstein, are enforced often through the systems of patent right issues to the capitalist agent, state restrictions on imports and exports, and through subsidies and tax benefits. Similarly, the ability of strong states to use their muscle to prevent weaker states from creating counter-protectionist measures, he remarked, also enforces quasi-monopoly statuses for producers that those policies favour.

In general, the core-periphery (world-system) concept could be viewed as using the degree of profitability of the production process present in each country to categorise those countries. The core-like production processes are viewed as those that are controlled by quasi-monopolies (centralised firms), and are seen to be able to earn high rates of profit, whereas the peripheral processes are those that are competitive and often earn a smaller rate of profit.

Additionally, Wallerstein observed that the core-like processes tend to group themselves in few states (core states) and tend to constitute the bulk of production activity in such states. The peripheral processes, on the other hand, tend to be scattered among a large number of states (mainly developing states) and these processes tend to constitute the bulk of the production activities in those states.

In conclusion, Wallerstein observed that when exchange occurs in international trade between the competitive processes from peripheral states and the quasi-monopolistic processes from the core states, the competitive processes are in a weak position compared to the quasi-monopolistic processes. Based initially on extracted profits accruing to

respective processes⁴⁶ and because there is a constant flow of surplus value, including significant profit, from the peripheries to the core⁴⁷. The unequal exchange that ensues from the unbalanced trade between the core and the periphery, Wallerstein commented, is, therefore, a way accumulated capital is moved from politically weak peripheral regions to politically strong core regions. This process of unequal exchange, he concluded, contributes to the underdevelopment of peripheral economies.

In addition to Wallerstein's world-system analysis, many other recent analyses of the transformations of the modern capitalist system over the years can also be seen to have been influenced by the various Marxian analyses. For example, Brenner (2006), likewise Fouskas and Gokay (2012), espoused the crisis of over-accumulation theory to explain the turbulence in the global economy since the end of World War II, and the cause of the 1960/70s global stagflation respectively.

In his work, Brenner remarked that the starting point for the rate of profit to fall derives from the anarchy and the competitiveness of capitalist production in the world-system. Just as Marx had posited, Brenner explained that the need for capitalists to acquire competitive advantage requires them to cut costs, which they often pursue by introducing ever-efficient technology (that is constant innovation – which could be seen as an increasing employment of organic capital). However, by pursuing this innovation

⁴⁶ Amin (1977) based the unequal exchange in the core-periphery productive system on the rewards to labour in both societies. He posited that the reward to labour in the core is higher compared to labour in peripheries (who are mostly engaged in agricultural produce/primary commodity exports)

⁴⁷ This derives from the subordination of periphery agrarian economy to the domination of monopoly capital in the core. The dominant capital primarily belongs, for instance, to those food industries and trading concerns in the core linked with agricultural producers in the periphery. So through the centralisation of industrial food processing and the concentration of networks for collection and marketing in the core, the agricultural producers' production plan is subjected to control by the dominant capitals. The incomes of the peasant farmers in the periphery are thus controlled by the prices the dominant capitals pay for the agricultural produce.

strategy, Brenner argued that the outcome embodies two separate effects on the wider economy. On the one hand, these constant innovations bring about unprecedented development of the productive forces but on the other they prevent firms with higher-cost methods of production (frozen in their already-existing plant, equipment, and software) from realizing their fixed capital investments; because these new low-cost technologies allow their owners to sell at cheaper prices that undermine high-cost processes. Consequently, the effect of the unprecedented development of the productive forces, which includes increased productivity, also prevents the reproduction of capitals with higher costs. The result, therefore, is the manifestation in over-capacity and reductions of profitability respectively in the global system.

These increasing over-production and reductions of profitability, Brenner observed, is further worsened by intense competitions of economies in the world-system. These contradictions in the capitalist production process were what he remarked that precipitated the decline of United States' firms, and which consequently led to the stagnation in the country in the 1960s-70s. According to Brenner, the ability of Japanese and German firms to adopt lower-cost technologies and to employ cheaper labour caused them to be able to usurp a significant market share of the earlier blocs of capital from the U.S.; given that these lower-cost technologies allowed the later developing blocs of capital to sell their products cheaper. This, he remarked, undermined many U.S. firms and subsequently led to the country's balance of payment problems, given that they were importing more than they were selling.

To conclude, Marx's analytical method can be seen to address both the internal contradiction of the capitalist system and the international contradiction, which many have argued are pertinent to understand if one is to comprehend the forces that determine

the pace of capital accumulation in the modern capitalist system. This method of analysing the internal, historical and international contradictions of the economic ecosystem simultaneously, without a doubt, distinguishes heterodox theories of capital accumulation and growth from mainstream's analyses of economic growth.

2.5 Contemporary heterodox perspectives on the finance-led growth debate

2.5.1 *Origin and overview*

Opposing views on the traditional arguments regarding the relevance of deepening of the financial system⁴⁸ may perhaps be said to have regained wider attention in academic discourse in the late 1990s and early 2000s. The increased recognition could be viewed to have emerged due to the several financial crises that menaced many countries that had implemented some of the neoliberal (free market) reforms – such as the deregulation and liberalisation of the financial system. According to most of the antithetical (referred to here as heterodox) views, the globalised financial structure that reached its full expression in the 1990s, as a result of the several economic liberalisations in the 1980s, contributed extensively to the turbulences in the global financial and economic system. The interlinked financial systems are seen to allow crisis in one country to spill over to another, easily. For example, the collapse of the Mexican peso in 1994-95 was contended to have prompted further substantial outflows of capital from a number of other countries in Latin America, which was seen to have contributed to the financial and economic crises in the region (Wade and Veneroso, 1998; Payne, 2005; Kindleberger and Aliber, 2011; Palma, 2013). Similarly, the devaluation of the Thai baht in 1997 was also seen to have

⁴⁸ Deepening in the financial system is generally seen as a by-product of financial system deregulation and liberalisation.

led to other currencies in neighbouring countries to come under speculative attack, which many argued consequently led to a full-blown ‘Asian financial crisis’ (Wade and Veneroso, 1998; Payne, 2005; Kindleberger and Aliber, 2011; Chandrasekhar and Ghosh, 2013).

These reoccurring financial crises certainly helped heterodox views to gain widespread audience in academic dialogue and even in several policy institutions. What most scholars generally argued was that the deregulation and liberalisation of the financial sector and the subsequent increase in international capital flows precipitated, what is now termed, *financialisation* – a phenomenon whose consequences are seen by many as detrimental to both the development of the real productive sector and the wider economy.

The term financialization, as defined by Palley (2007: 2), is a process whereby financial institutions and markets gain greater influence over economic policy. Krippner (2005: 174) defined financialisation as a pattern of accumulation in which profits accrue primarily through financial channels rather than through trade and commodity production. According to Epstein (2005), financialisation means the increasing role of financial motives, financial markets, financial actors and financial institutions in the operation of the domestic and international economies. Tabb (2013) described it as the dominance of the financial sector in the totality of economic activity: such that financial markets dictate non-financial companies’ behaviours and significantly shapes the overall economy. For Tabb, therefore, financialisation represents the increased power of abstract (finance) capital as opposed to productive (industrial) capital. Stockhammer (2013), on the other hand, referred to financialisation as the aggregate broad change in the relation between the financial and the real sector.

In this thesis, the term is simply viewed as the stage in the capitalist accumulation process in which a larger proportion of economic outputs are predominantly in financial assets – stocks, bonds, derivatives – and where these financial assets are also becoming more concentrated in the non-financial sectors’ current assets portfolio (i.e. the financial assets are being increasingly accumulated by the NFCs in place of real inventories). In other words, the concept depicts the gradual erosion of real material production with an accumulation of fictitious (non-real) financial assets; what Foster and Magdoff (2009) aptly described as the shift in the gravity of the economy from production to finance.

To understand the financialisation phenomenon and its implications fully, attention is again turned to the Marxian and Keynesian tradition, where the focuses are respectively on exposing the social relation of the accumulation process and on illuminating how a capitalist economy with sophisticated, complex and evolving financial institutions behave.

To begin with, in view of the natural tendency of the capitalist process to centralise, it is generally argued that the traditional private-consumption channels are often then insufficient (at the peak of the capitalist development) of absorbing the excess surplus that emanates from the centralised and highly productive processes⁴⁹. As a result, the economy, as Magdoff and Foster (2014) explained, often, therefore, becomes increasingly dependent on stimuli external to the private consumption channel for its advance. In most cases, the economy, Magdoff and Foster explained, becomes largely driven by state

⁴⁹ Given that the army of ‘pauperised’ population, which arose as a result of the centralisation process, are now unable to consume their share of the excess stock of produce the centralised firms churn out (which has also increased tremendously as a result of the increased productivity achieved by the centralised firms who now employ more organic capitals in their production process).

spending, and/or major technological innovations, which mop the excess surplus that the traditional private-consumption channel could not effectively absorb.

In similar stance, Minsky (1986) noted that the existence of a large, increasing proportion of disposable income that is independent of employment or of the profitability of business (referring to transfer payments by the government) becomes pertinent for the subsistence of the accumulation process; because it sustains demand in the event of the contraction of the private consumption channel.

Overall, what Magdoff and Foster, and Minsky, simply implied was that in most cases government spending (both fiscal expenditure and transfer payments) and some external forces (such as technological advancements) becomes necessary to drive the accumulation process.

Aside these two main external stimuli, there are also other factors that have been as essential for driving the accumulation process. These were catalogued by Sweezy and Magdoff (2009a). These various other external stimuli that came to propel the economy since after the Second World War, they observed, includes the rise of unrivalled U.S. economic hegemony – which they posited set the stage for the expansion of world trade and capital movement; the enormous consumer liquidity that had been built up in the United States during the war period; the rebuilding of the European economies that were shattered by war; the emergence of new technologies – which arose out of the wartime experience (these include electronics and jet aircraft); the second wave of auto-mobilization of the U.S. economy in the 1950s, with the construction of the interstate highway system; and the acceleration of militarization and imperialism during the cold war – including the two major regional wars in Asia. All these elements, including

massive government spending, Sweezy and Magdoff conceded, acted as the external driving force that helped propel the accumulation process in the 1940s-70s periods.

However, these external stimuli were, as Magdoff and Foster (2014) later remarked, like the private consumption process, and were also necessarily subject to a sort of diminishing returns. Minsky (1986) must have conceived of this diminishing return of transfer payments (deficit spending) when he mentioned that although the combined behaviour of the government and the central bank prevents deep depressions in the face of declining income and financial disarray, that these efforts also sets the stage for a serious and accelerating inflation to follow. Minsky argued that deficit spending does not prevent ‘disequilibrating’ forces from operating. Rather, what it does, he noted, is to re-shape the business cycle; inflation, he remarked, often replaces the deep and wide trough of depressions.

The only other major potential source of economic stimulus, after these historical external stimuli ran their course, Magdoff and Foster (2014) observed, was an expansion of finance⁵⁰, insurance and real estate (termed FIRE). These new stimuli, according to Magdoff and Foster, could stimulate the economy, just like the historical external stimuli, by also partially soaking up the excess values produced by the *monopolised* production processes.

The fundamental logic behind the FIRE stimulus derives from Marxian’s exposition of the capitalist accumulation process. It derives, in particular, from the abstraction of the

⁵⁰ As we can recall from Hilferding’s explanations, the centralisation of the accumulation process precipitates the concentration of capital – i.e. the excess liquidity released by the collapse of many small enterprises now rests with banks. The centralised enterprises, with excess surplus value and diminishing investment potential also lodge their unused capital in banks. Overall, the banks now control a vast pool of capital. By creating other forms of accumulation through which wealth can be expanded, the banks often help to maintain the accumulation process in the short-run.

circulation process of capital, which implied that the capitalist, when faced with a shortage of investment, often channels his excess capital into financial speculations – i.e. that accumulation often proceeds from $M-M^1$ instead of the usual $M-C-M^1$ when there seems to be no profitable proposition. This alternation, as Arrighi (1994) later explained, following Braudel's (1982) earlier observations, reflects the alternation between periods of material expansion, characterised by profit making by real production processes, and phases of financial expansion, characterised by low-profit making by the real productive processes. In phases of material expansion (industrial expansion), Arrighi remarked that money capital sets in motion an increasing mass of commodities (raw materials and labour [i.e. the 'C' in the accumulation cycle]) production. Whereas, in phases of financial expansion, an increasing mass of money capital sets itself free from its commodity form and accumulation proceeds mainly through financial deals (i.e. from $M - M^1$).

Wallerstein (2004) also remarked these gyrations (that is the alternation from $M-C-M^1$ to $M-M^1$ and vice versa) as inherent characteristics of the capitalist world-economy. According to Wallerstein, the alternation between periods of material expansion and phases of financial expansion are both historical and inherent features of the capitalist economic structure. Wallerstein explained that major leading industries (with core-like production processes) at evolution will be the major stimulus to the expansion of the world-economy and will lead to a considerable accumulation of industrial capital. This expansion in the accumulation of industrial capital, Wallerstein noted, will also lead to increased employment in the world-economy, which will thus induce higher wage level and a general sense of relative prosperity.

However, since firms are only able to continually accumulate industrial capital (that is, continually induced to invest) mainly because of the large profit they are able to

extrapolate from the production process (which they are able to draw as a result of their ability to create a quasi-monopoly status [degree of monopoly] from patent rights), and given the natural tendency of ‘ebb and flow’ of capital, Wallerstein explained that there will thus reach a point where there will be decreases in prices (equalisation of profit). This, coupled with falling demand, he noted, will lead to a build-up of unsold products and subsequently a slowdown of further accumulation of industrial capital in the world-system. The normal evolution of these quasi-monopolies and their subsequent dissolution is what Wallerstein explained that accounts for the cyclical rhythms of the world economy (often referred to as the *Kondratieff* cycle⁵¹). The boom periods in the Kondratieff cycle are noted to embody the material expansion phase (where capitalist agents are able to amass huge profits and consequently employ labour and other materials in real production). The stagnation periods, on the other hand, embodies the finance expansion phase (where the capitalist production processes are unable to reproduce sufficient rates of profit and, as a result, uses less labour in the accumulation process and have idle vast amount of capital in banks).

Braudel (1982) did observe that the cyclical transitions from material phase to financial phase and vice versa have been a historical phenomenon. He remarked that the withdrawal of the Dutch from commerce in the middle of the eighteenth century to become the bankers of Europe is synonymous with the assertion that the capitalist agents when faced with declining profits from the productive process, tend to revert their capital to money forms. The same, Braudel observed, had earlier been evident in the fifteenth

⁵¹ The Kondratieff waves or cycles consist of alternating intervals between high sectoral growths and intervals of relatively slow growths. Nikolai Kondratiev was the first to highlight this observation in his book *The Major Economic Cycles*, first published in 1925.

century Italy when the Genoese capitalist oligarchy switched from commodities to banking in the latter half of the sixteenth century. The English, Braudel also contended, replicated these same tendencies in the nineteenth and early twentieth century. After the venture of the '*Fordism-Keynesianism*' epoch in the late 20th century in the United States, Braudel also conceded that the United States followed a similar path of going into a financial phase of capitalism. It is these transitional phases in the world economy that Braudel termed the '*Longue durée*'. Arrighi (1994) referred to the transitions as the '*systemic cycles of accumulation*'. He posited that the financial expansion phase indicates the closing phase of capitalist development and the industrial expansion phase indicates the beginning of a capitalist development phase.

So, the reason for the oscillation in the accumulation process, as was expertly explicated by these scholars, hinges on the profitability of the capitalist accumulation process. They implied that accumulation proceeds mainly through financial deals in the financial expansion phase chiefly because if there is no expectation on the part of the capitalist agents that their profit will increase from the production processes, they (the capitalist agents) tend to resort to holding more flexible forms of investment, primarily the money form of capital which yields higher returns in the financial market.

In sum, Marx's general abstraction of the circulation of capital can be interpreted, therefore, as depicting not just the logic of individual capitalist investment but also the recurrent pattern of historical capitalism in the modern world-system. What most heterodox studies essentially infer is that the expansion of the accumulation of financial assets is distinctly the opposite of the expansion in the accumulation of industrial capital – capital that passes through all the steps in the M-C-M¹ production process. The expansion in financial accumulation, in other words, is seen to depict declines in real

capital accumulation. Hilferding (1910) summed this contradiction succinctly. He observed that the contraction of production sets free more money, which was previously used to effect reproduction. These superfluous money capital, he remarked, are now instead used for speculative purposes (accumulation of fictitious financial assets). According to Hilferding therefore, it is a misconception to perceive the scarcity of money capital as the cause economic crises, and that it is wrong to believe that money liquidity is significant for overcoming recessions.

Overall, the excess accumulation of financial assets, which has come to characterise the economic system (and which is often used to stimulate it) since the ‘other’ (government and technological advancement) external stimuli and the private consumption channel ran their course is remarked to actually reflect the natural tendency of the capitalist system. The deceleration of the real sector is posited to be invariably contributing to the explosion of financial activities. In turn, the burgeoning financial activity may drive the accumulation process (due to the ephemeral wealth effect and debt-driven consumption that it produces [see Magdoff and Foster, 2014]), albeit in the short term. However, such short-run reprieve is altogether argued to be inconsequential compared to the instability such financial explosion often precipitate in the longer run. For example, Sweezy and Magdoff (2009a, b) remarked the excess accumulation of financial assets in the 1920s was what eventually led to the 1929 crash.

It was because of the instability that often arises from financial explosion that notable economists such as John Maynard Keynes advocated for the regulation of financial activities in the aftermath of the crisis in early 1940. Keynes was of the view that if the tendency to holding speculative financial assets could be curbed that sustainable real capital accumulation could be achieved, which will then contribute to the overall

improvement in economic well-being: this is reflected in his oft-quoted statement that *'speculators may do no harm as bubbles on a steady stream of enterprise. But the position is serious when enterprise becomes the bubble on a whirlpool of speculation'* (Keynes, 1936: 159). Overall, Keynes concluded that excess accumulation of financial assets was anti-social to enterprise and that the speculative frenzy actually does little to spur growth in real capital accumulation.

In all, the new external stimuli provided by FIRE, which has come to characterise the accumulation process in most economies since the deregulation and liberalisation of the financial system is what many scholars argue that embodies current tendencies that mitigate, in the longer-run, the advancement of the real economy.

The deregulation and liberalization that was pursued in the 1970s without regards to the underlying tendency of the capitalist system have been argued by many scholars to underpin the intensified stagnation in the capitalist economy and to cause financial crisis (Minsky, 1986; Stiglitz, 2000; Epstein, 2005; Jarsulic, 2013; Magdoff and Foster, 2014).

Minsky remarked that the 1970s institutional changes contributed to the transformation of the financial structure, which birthed fringe banking institutions and practices (for example the issuance of commercial paper by Real Estate Insurance Trusts [REITs] and lending by finance companies). These institutions and practices, he observed, have grown relative to other elements in the financial system. As fringe institutions have grown, member banks, he remarked, have become their de facto lenders of last resort through relations that are often formalised by lines of credit. However, Minsky explained that these hierarchical banking relations could be a source of weakness for the financial system as a whole. This is because fringe-banking institutions draw upon their lines of credit at the core banks when alternative financing channels become either expensive or unusable

because of some perceived weakness of the fringe banks. Inasmuch as banks hold assets that are not similar to those in the portfolio of fringe institutions, Minsky remarked that some assets held by banks also weakens when the losses and cash-flow shortfalls of the fringe institutions become apparent to the market. In other words, the already weakened portfolios of some banks are made even weaker when these banks act as the proximate lender of last resort to failing fringe institutions.

Overall, Minsky noted that a succession of episodes in which giant money-market banks bail out fringe banks is likely to result in a cumulative debilitation of the giant banks; hence the potential of a domino effect, which can cause a serious disruption. For Minsky therefore, the introduction of additional layering in finance (caused by the liberalisation and deregulation of the financial structure) is evidence of the increased fragility of the system (Minsky, 1986: 76-87).

Furthermore, Minsky (1986) added that the crisis also emanates because of the multiplicity of instruments now used by banks for position making⁵². He explained that the instruments used by commercial banks in position making in the beginning were the Treasury bills; banks, he remarked, sold assets (Treasury debt) in order to increase cash holdings and bought these assets when they had excess cash. However, over time, beginning with the periods of deregulation and liberalisation, the banking system, he observed, has developed a wide variety of money market instruments that is now being used for position making. He noted that the greater number of alternative position making techniques available for banks and for other financial institutions, the slower the reaction of the supply of finance to monetary policies instituted by the monetary authorities. This,

⁵² Defined by Minsky (1986) as the act of acquiring cash to finance the assets that are essential to a unit's business

Minsky noted, is because the lag between restrictive actions by the monetary authority and a supply response by banks and financial markets will now take longer than when a tight and invariant relation exist. The consequence of this, he explained, is that the policymakers' impatience to get results will tend to make for serious excesses and overshoots. Thus, the likelihood that policy actions will result in the economy going to the threshold of a financial crisis, he concluded, increases with the number of markets used for position-making, and the proportion of bank assets bought through the various markets. Therefore, as the financial system evolves so does the potential for instability of the economy.

Crotty (2005), like Minsky, was also critical of the renewed role of finance in the economy. He remarked that the financial institutions, with mountains of money, often pile households with debt, which may prop the private consumption process and may help counteract stagnation in real production. Therefore, for a while, the financial explosion, he asserted, may lift the economy. Like Crotty, Sweezy and Magdoff (2009a), also remarked that the boom of the financial superstructure also creates the 'wealth effect', which also drives the private consumption channel due to the appreciation of financial assets held by the consumer. The artificial boom of the underlying financial assets, they also contended, also allows for enhanced spending even in the face of stagnating real income for most workers.

However, Crotty (2005) and Sweezy and Magdoff (2009a) observed that these systems of sustenance in the economy (i.e. the debt-driven consumption and the wealth effect induced consumption) are prone to crisis because the crash of financial assets (which is largely caused by the inability of the capitalist agents, due to falling profits, to validate their debt obligations – which underlie the financial assets) will undermine the economy,

and increases in the rate of interest will also undermine the economy by burdening consumers with huge debts, which in the long-run increases the rate of defaults by households, thus leading to greater instability in the economy. Overall, they concluded that these external stimuli are often not sustainable in the end.

Overall, financial liberalism, as a tool for combatting stagnation, Crotty, Sweezy and Magdoff, Minsky, and many others remarked, has rather served to intensify the structural crisis of the system without removing the root cause. Though the globalised financial superstructure might work to counteract stagnation in the real sector in the short-term, the process is altogether argued to be too volatile to sustain development in the real economy in the long-run.

Generally, the distinct difference between Marx's, Marxian's, Keynes', and neo-Keynesians' theories of capital accumulation and economic growth and those of mainstream's lay on their contrasting views of the causes of stagnation in the capitalist production and economic growth. According to classical mainstream economics, the shortage of production credit, often seen to be the result of low savings, is the main mitigating factor to increasing capital accumulation in developing countries. Marxist/Keynesian theorists, on the other hand, implicitly argue the continual decline in the rate of profitability, which dampens the expectation of the capitalists and causes them to be pessimistic about the future constitutes to the economic crisis. The decline in the rate of profit itself is argued to derive from the consequences of the centralisation of capitalist production processes, which produces monopoly capitalism, the crisis of accumulation, imperialism, and dependency – all of which is seen to be undermining development in a capitalist economy in the long run.

In essence, the entire debate on financialisation by most Marxist economists could, therefore, be seen to be predicated on the understanding that this new form which finance has taken since the reform of the financial system in the 1980s (i.e. a globalised superstructure) has not resolved the underlying structural problems inherent in the capitalist system. Rather, the new form of finance capitalism is seen to add to the already contradictory tendency of the capitalist economy by engendering financial bubbles and busts, which tend, in the longer-run, to undermine real capital accumulation in the economy. For many heterodox scholars therefore, the root of the recent 2007 crisis, which caused one of the biggest economic crisis since the Great Depression, lay in the ‘new’ economic structure that emerged in the late 1970s and early 1980s, which, they claimed, did not resolve the inherent structural problems in the capitalist system. Silvers (2013), Fouskas and Gokay (2012), like many other heterodox scholars, all concluded that the 2007 financial crisis stemmed from the financial landscape that was significantly different from that which had existed during the post-war years. They contend that the recurrent financial crises should be seen as a systemic crisis of neoliberalism.

In addition, many heterodox studies have also concluded that financialisation increases the widening of inequality. Crotty (2005), Dumenil and Levy (2005), Epstein and Jayadev (2005), Foster and Magdoff (2009) and more recently Foster and McChesney (2012), Palma (2013), Lapavitsas (2013a), Jayadev (2013), and several others have concluded along this line.

Equally, continual misallocation of resources in the economy has also been noted as one of the end results of financialisation (Tabb, 2013). Arguing with regards the separation of ‘finance’ from ‘real production’, as occasioned by deregulation and liberalisation, Gowan (1999) concluded that the newly formed ‘global capital market’ is, in fact, asserting

mitigating 'charges' upon the productive system, and is far from being a source of funds for new production. Gowan even contended that it is totally erroneous to believe that the new global financial market, in which trillions of dollars are bouncing back and forth across the globe, are in some ways assisting the development of the productive sector in the economy.

Just like Gowan, Crotty (2005) also contended that the stock market was never an important source of funds for corporate firms, especially those in the U.S. He maintained that the stock market exists to aid entrepreneurs in cashing out their investments – that is to trade their illiquid assets for money – and that the stock market rarely often supports new investment in the United States. This view is similar to what was originally expressed by Keynes, who contended that the actual private objective of the most skilled investment financiers/bankers was to 'beat the gun' – that is simply to outwit the crowd – and to pass the bad or depreciating half-crown to the other fellow. This battle of the wits, according to Keynes, is rather to anticipate the basis of conventional valuation of few months than the prospective yield of an investment over a long-term of years (Keynes, 1936: 156). In other words, the increased speculative frenzy could scarcely be argued to be beneficial to capital accumulation. For Crotty therefore, the deregulation and liberalisation of the stock market are far from been an efficient mechanism for accelerating capital accumulation in the end.

2.5.2. Review of some contemporary views on the finance-led growth debate

The study by Crotty (2005) contended that Non-Financial Corporations' (NFCs') performances were actually adversely affected by the 'impatient' financial system that

raised real interest rates and also coerced⁵³ NFCs into paying an increasing share of their cash flow (as dividends) to financial agents. This, he observed, drastically changed managerial incentives and shortened NFCs' planning horizons. The profits of NFCs, which are traditionally lowered by increasing interest rates and global competition – which mitigates price increases – he argued, were further reduced by the increasing dividends paid out to shareholders. All these, Crotty noted, culminated to a slower rate of accumulation in the economy. Most NFCs, he remarked, were thus often forced to switch from the long-term strategy that had labour relations at its core to short-term strategies that involved an attack on labour relations⁵⁴.

Overall, what Crotty meant is that many NFCs are often faced with an impasse. First, due to global integration, which precipitates intense market competitions and as a result inhibit the ability to affect price increases, most NFCs are often unable to generate a commensurate rate of profit, in the face of the ever-increasing production costs. And on the other end, due to the increasing outlay of their cash flow to finance (viz. interest payments and dividends), they are also forced to stagnate wages and in some cases retrench workers, thus further squeezing aggregate demand for their products. Therefore, based on these factors, many economies often lack the ability to produce adequate profits and often experience excess unused capacity, excessive debt burden on NFCs, and a shift in corporate strategy that will eventually further exacerbate the original demand deficiency. This cycle is what Crotty (2005) termed the '*neoliberal paradox*'.

⁵³According to Crotty (2005), the coercion derives from speculators that tend to short securities that do not pay an increasing share of dividend. So the general market behaviour tends to coerce NFCs into paying dividends if they wish to maintain a relatively higher share value in the market.

⁵⁴Such as decreasing or stagnating wages and in some cases relocating the industry and/or reducing the number of workers employed.

In sum, what Crotty and some other analysts (see Epstein and Jayadev 2005 also) concluded was that neoliberalism principally induces the rise of *rentier-capitalist*, given that it undermines the ability of NFCs to earn a commensurate level of profit. He, like Epstein and Jayadev, remarked that the values of financial assets and finance-based income, as a ratio of the GDP in the United States, have increased tremendously over the last decade, at the detriment of those of non-financial corporations. For example, Crotty showed that the ratio of profits of financial corporations to the profits of NFCs rose from about 15% in the early 1950s through the early 1960s to almost 50% in 2001. So, while the income of the financial capitalists (*rentier-capitalist*) are rising (deriving from income from interest payments and dividend payouts by NFCs), those of the NFCs and wage labourers, Crotty concluded, have stagnated/deteriorated over the same periods, thus contributing to the widening of income inequality in the economy.

Similarly, Dumenil and Levy (2005) argued that the structural transformations that took place in the 1970s (the collapse of the Bretton Woods agreement in 1971 and the turn to neoliberalism in late 1970s) created the conditions for the reassertion of the hegemony of finance. The defining moment, they noted, was the change of monetary policy in the U.S. in 1979 (what they termed the ‘Volcker coup’), which they remarked explicitly targeted price stability (inflation rate) in place of full-employment. Coupled with other neoliberal policies such as privatisation and liberalisation, Dumenil and Levy argued that these reforms ultimately elevated the dominance of finance by subduing the labour relations.

The increase in the flow of international finance and interest rate, both arising from the breakdown of the fixed exchange regime and the subsequent deregulation of capital account controls, they asserted, ultimately increased the flow of income towards lenders, even in a period of low profitability. The new unfettered finance, they explained, easily

moved from one country to another and from one process to another and were still able to reproduce gains by itself.

The consequence of this hegemony of finance capital, Dumenil and Levy opined, is the slow growth in real accumulation, increasing unemployment, and the rising debt of Third World countries. The actual outcome, they noted, was that a particular class and a sector of the economy (especially the financial capitalists) benefited more at the detriment of a large proportion of the population and the real sectors. For Dumenil and Levy (2005), the rise of real interest rates (permeated through interest rate control deregulation) clearly favours the lenders, who in most cases are the financial institutions that are these days direct creditors or the largest shareholders of most Trans-National Corporations (TNC) and even local manufacturers. Given that managers of most TNCs are nowadays compelled to target their activity toward maximization of the market value of their corporations (i.e. their stocks), and to also distribute a large fraction of their profits as dividends, Dumenil and Levy thus argued that it is the lenders (the financial institutions) that are most favoured at the detriment of wage labourers.

Dumenil and Levy distinguished two sub-periods, which they used to characterise the two distinctive channels through which the financial class appropriated huge benefits from the real sector. The late 1970s and early 1980s they classified as the first sub-period, the transition years, characterised by low-profit rates and very large interest rates. They contended that the financial class appropriated huge flow of income in this period mostly through the payments of interest made by firms.

The second sub-period was from the late 1980s onwards. This period was characterised by the rise of profit rate, with declines in real interest rates. The financial class, they argued, appropriated huge income in this latter sub-period more from dividends paid out

by corporate firms. Overall, the two channels of the transfer of income to finance, according to Dumenil and Levy (2005), were fundamentally modified between these two sub-periods of neoliberalism.

In general, they concluded that the political and social implications of neoliberalism are prolonged and increasing unemployment⁵⁵: which is because of slower accumulation/ lower investment, and which are due to high-interest payments and increasing disbursement of profit via dividends payments. These, in turn, increases the burden of indebtedness for a certain fraction of households and the Third World countries, while increasing profits to the financial corporations. Overall, financial liberalisation and deregulation, they concluded, have largely contributed to inequality in the economy.

According to the accounts by Stockhammer (2013), deregulation and financial liberalisation have also not fulfilled the neoliberal promise of generating investment-based growth. Instead, Stockhammer argued that this neoliberal financialisation has given rise to a series of financial crises. He contended that financialisation gave rise to two distinct growth models – credit-financed-consumption growth model (pervasive in Anglo-Saxon countries) and export-driven growth model (peculiar to Germany, Japan and China). These two growth models, he remarked, suffer from a structural demand deficiency due to wage suppression – because financialisation had had a profound effect on income distribution; this profound effect, he argued, derive from the fact that there

⁵⁵ Dumenil and Levy pointed out that the entire crisis cannot be blamed on finance alone. They remarked that technical change, which they claimed were the main causes for the prosperity within major capitalist countries during the decades after World War II, was non-existent in the 1960s and 1970s. As a result, the downward trend of the profit rate was inevitably established.

have been rises in rentier incomes (through interests and dividends income) and not on wage incomes.

Stockhammer (2013) went on to explain that neoliberalism shifted the power balance between capital and labour in various ways, ranging from the increased range of possibilities opened to firms by financial globalisation. These increased new opportunities open to financing capital, he observed, increased international capital mobility (a transformation many also argue constitutes volatility of exchange rates which often tend to end in exchange-rate crisis [see Palma, 2013]). Through this new opportunity for international capital mobility, he noted that firms are thus able to batter down or freeze wage increases by often threatening to relocate their factory abroad.

Overall, as a result of the new opportunities open to capitalists (in the form of international capital mobility) which enables firms to reduce wages, Stockhammer contended that many economies often therefore suffer from a structural demand deficiency: since the opportunity to relocate industries affords the capitalist the leverage to batter down high wage, which then leads to low demand.

As a consequence of demand deficiency, Stockhammer explained that in order to boost aggregate demand in Anglo-Saxon economies, households are often deluged with credit; given that most financial institutions are themselves sitting on an ever expanding financial base with limited investment opportunities in the real economy.

However, the credit-financed consumption model, Stockhammer contends, is often not sustainable in the longer run because they are not backed by any strong growth in labour wages: he argues that this credit-financed consumption pattern often overheats, and leads mostly to crises of debt and stagnation in the long-run.

Stockhammer (2013) also noted that the new financial landscape that emerged in the 1970s, which included the phasing out of controls on international capital flows, the deregulation of the types of transactions that banks are allowed to engage in and the lifting of interest ceilings, all paved the way for the new financial institutions that emerged. These new institutions, such as money market funds, private equity and hedge funds, he observed, led to ever-newer financial instruments that have transformed the traditional role of financial intermediaries. Consequently, banks are now engaged, more and more, in dealing with financial assets than in financing new production.

On the other end, Stockhammer (2013) noted that non-financial businesses are now also entrenched in the financialisation frenzy. He remarked that most firms' goals now prominently feature the rate of return on equity, that is, their emphases are now more on their stock market price performance; this, he attributed to the increasing emphasis laid on shareholder value maximisation (SVM) by many economists. Non-financial corporations, he observed, are now engaged in increasing shareholder value through increasing dividends payouts, which has, as a corollary, lower rates of re-investments.

In addition, most firms, he noted, often take out loans to buy back stocks, in a bid to boost their stock performance. This latter act alone, he argues, leaves the firm with higher debt ratio, which the social cost includes downsizing of employment and increasing pressures on wages; a phenomenon O'Sullivan described as 'a shift from retaining and investing to downsize and distribute' (O'Sullivan, 2000 [cited in Stockhammer, 2013]).

Overall, Stockhammer concluded that the deregulation and liberalisation of financial systems have led to frequent exchange rate crises due to the volatile capital flows that create long lasting international imbalances. Also, contrary to neoliberal assertion that financial liberalisation would induce capital flows from rich to poor countries, he

contended that on average, capital has actually flown from poor countries to rich countries.

Lapavitsas (2013b), just like Stockhammer, also noted that capital has flown from poor to rich countries due to the ‘globalisation of finance’. Furthermore, he explained that financialisation in developing countries has had a subordinate character – which is derived from the hierarchical and exploitative nature of interaction in the world market – and has, in turn, constituted mediocre growth in investments and overall economic growth in developing countries.

To begin with, Lapavitsas contended that the reverse flow of capital, from poor to rich countries, derive more from the actions taken by public agents in both developed and developing countries. He noted that the accumulation of reserves is the main reason why the net global flow of capital has been reversed.

Initially, the traditional idea of holding foreign reserves, Lapavitsas explained, was to protect domestic economies from the potentially disastrous implications of sudden private capital flow reversals: he noted that the World Bank and the International Monetary Fund, who monitor the levels of reserves relative to imports and domestic monetary growth, have also actively enforced this ‘self-insurance’ euphemism. However, this policy of reserve accumulation, he remarked, has amounted to developing countries storing dollars (which is the world reserve currency) in order to be able to participate in international trade (given IMF’s and the World Bank’s mandatory regulation), and because of the need to be able to absorb the vicissitudes of financial flows in the world market.

Nevertheless, in view of this world money being nothing more than state-backed central money resting on the U.S. government security, and which does not yield additional

value, Lapavitsas remarked that most developing countries that accumulated dollar as a reserve currency tend therefore to purchase U.S. treasury securities with their reserves. This process of acquiring U.S. treasury securities with foreign reserves is what Lapavitsas noted as embodying the flow of finance from poor to rich countries.

This flow, he asserted, entails significant costs for developing countries, which resembles the imposition of an informal tribute paid by developing to developed countries, above all, to the U.S. The costs of this subsidy, Lapavitsas noted, can be seen from focusing on countries that have received significant inflows of private short-term capital and are thus obliged to keep sizeable reserves in order to offset the risk of sudden reversal of flows. This group of countries, he explained, have received significant borrowing from abroad; mostly incurred by private enterprises that have borrowed from the international market at the going market rate. In most cases, the developing countries' public agents (the Central Banks) proceeds to 'insure' the private debts by advancing official loans (by using the accumulated foreign reserves to purchase U.S. treasury securities).

Therefore, while private borrowings occur at the prevailing high market rate of interest, the 'insurance' (accumulated treasury securities) earn a much lower official U.S. interest. So while firms in the U.S. earn a high rate of return on the funds they lend to private firms in developing countries, the central banks of these recipient developing countries, on the other hand, earn a paltry rate of return on the funds lent to the U.S. government (through the purchase of its Treasury security). In the end, these international capital transactions, he remarked, entails a significant cost for developing countries, who are worse off at the end of the whole cycle.

In addition, Lapavitsas (2013b) also observed that because private firms in these developing economies have been able to borrow abroad at rates that were relatively lower

than the domestic rates obtainable in their economies, these private capitalists often tend therefore to use those funds to invest in mainly domestic financial assets that yield higher interests. This form of ‘carry trade’, he argued, also allows for direct appropriation by private borrowers of the benefits of interest rate spreads, and also contributes to the strong growth of domestic financial markets for the developing countries – all of which reflects in the widening of inequality and increasing domestic financialisation in the recipient economies.

Overall, Lapavistas concluded that the wave of financialization, which was induced by the financial liberalisations of the 1970s, have resulted in the growing accumulation of reserves by developing economies who wish to insure themselves from the disastrous implication of sudden private flows reversals. However, this increased reserve accumulation, he remarked, has resulted in some significant social costs to these developing countries and has also induced internal differentiation in their economies (with regards to income inequality and domestic financialisation) - processes which he concluded have resulted in declining growth in the non-financial sector and a growing personal indebtedness of most developing countries.

Tabb (2013), remarked that the phenomenon of financialization provides some important insights into financial crises and the trajectory of contemporary capitalism. In the context of financialisation, Tabb noted that companies are seen as ‘portfolios’ of financial assets to be bought and sold, reorganised, merged, spun-off, or closed down for short-term profits and tax benefits. Also, in the era of financialisation, Tabb observed that corporate behaviour changed from the ‘retain and invest’ model of corporate behaviour in the earlier period to ‘downsize and distribute’ model, thus creating the ‘financialised corporation’, in which the incentives of executives are geared to extracting rents for shareholders.

This paradigm shift, Tabb (2013) argued, has led to a gigantic misallocation of resources, which, in turn, has contributed to economic instability and to the worst crisis since the Great Depression (referring to the 2007/08 economic crisis). Furthermore, he noted that the inflows and outflows of foreign capital have not followed patterns that mainstream theory had predicted. Rather, the foreign capital flows, he contended, have resulted in highly volatile exchange rates, trade imbalances and financial crises. In fact, Tabb concluded that financial integration, unlike the neoliberal assertion, is essentially unrelated to investment growth. He remarked that the implications of the dramatic increase in financialization, for instance, the extremely leveraged debt positions of non-financial firms, have been to increase system fragility and economic instability.

Similarly, Palma (2013) remarked that the neoliberal economic reforms, which included financial liberalisation, have not been able to reproduce even the relatively low investment rates of the state-led industrialisation period. Instead, he noted that neoliberalism unleashed the predatory and rentier instincts of developing countries' capitalist elites. He remarked that the neoliberal policy of privatisation served to enrich a few private capitalists (used the case of Carlos Slim in Mexico as an example) to the detriment of a vast majority of the population.

Furthermore, Palma argued that huge inflows of capital into developing countries' economy led to a chronic deficiency of effective demand for locally manufactured goods. This, he explained, was because the domestic exchange rates for the recipient countries of the huge capital inflow became over-valued, and this worked against local exports because the domestic goods became expensive in the foreign market. Similarly, these huge inflows, he observed, induces high-interest rates; because the domestic government will be forced to reduce the excess liquidity by increasing interest rates. All these

contradictions, he argued, makes it uncondusive for the accumulation of real capital in many developing countries

In addition, Palma contended that the reversal of capital flows was at the core of the financial crises in Latin America (Mexico) in 1994, and the East Asia crisis in 1997/1998. He noted that the countries involved in these crises had recently opened up their capital accounts to foreign markets and that they had done so at a time of high liquidity in the international financial markets, and slow growth in most OECD economies. Therefore, given the slow growth in developed economies, the financial capitalists there were thus anxiously seeking new high-yield investment opportunities abroad. Moreover, since many believed that developing economies presented an uncorrelated portfolio with that of the developed world and thus has the potential to yield a higher return, many finance capitalists in developed countries subsequently diverted their funds to developing markets. However, with the slowdown in the developing markets, the foreign financial capitalists pulled their funds, thus deepening the crisis in those regions.

Overall, Palma (2013) argued that the crises were thus the outcomes of economies opting to integrate fully and often indiscriminately into international capital markets via open capital account, and then being unable to absorb the subsequent surge of inflows and outflows. He observed that the most likely source of the financial crisis is a sudden surge (in or out) of liquidity. Palma noted that the regulated path followed by countries such as China and India, in the form of a more selective path of participation in international capital markets, was a far more effective way of avoiding the pro-cyclical dynamics of unrestricted capital flows.

In general, the increasing phenomenon of financialization, which was generally precipitated by economic liberalisations, is seen to be mostly counter-productive, and to

have left disastrous footprints on real economies of many developed and developing economies. In fact, many analysts now conclude that in the era of embedded liberalism, when the exuberances of finance were significantly constrained (i.e. when the governments used active fiscal policies to dampen business cycles and to ensure reasonably full employment in the system), that the real economy enjoyed tremendous growths. However, the neoliberal policies, which dis-embedded finance from the 'presumed' constraints, they contend, have left disastrous impacts on most economies.

So, the ideas of 'Neoliberalism', 'Efficient Markets' (EM theory), and the 'Shareholder Value Maximization' (SVM), as propounded by Friedrich Hayek, Milton Friedman, Robert Lucas, Eugene Fama and Thomas Sargent – which underpin the neoliberal policies, which, in turn, have generally precipitated financialisation – Wolfson and Epstein (2013) remarked, simply contributed to increased crisis and stagnation in the real economy. The deregulation and liberalisation of the financial sector advocated by these scholars, which contributed to the abandonment of financial regulation, and the countercyclical macroeconomic policies envisaged earlier by Keynes, Wolfson and Epstein concluded, transformed the banking institutions from their traditional relational banking to speculative and trading banking, and also paved the way for the rise of parallel or shadow banking system that were poorly understood and virtually unregulated. All these, Wolfson and Epstein contended have contributed to growing instability in the global system.

2.6 The role of the 'rate of profit' in the capital accumulation process

A crucial exposé from Smith's, Marx's and Keynes' works is that the 'rate of profit' determines the level of fluctuation in the accumulation of capital wealth in an economy.

The writings of Hilferding, Michal Kalecki, and Hyman Minsky and, more recently, Robert Brenner, also supported this crucial point.

Generally, the decision of putting together all the factors of production into productive work (which is the role of the entrepreneur) is remarked to be motivated ‘primarily’ by the pursuit of personal ‘gain/profit’ by the entrepreneurial group. This sacrosanct role of profit to further capital accumulation was aptly summed in Smith’s famous quote that ‘*it is not as a result of the benevolence of the butcher, the brewer or the baker that we expect our dinner, but rather from their regard for their own self-interest*’ (Smith [1776] 2005: 75).

Indeed, Smith observed that the consideration of his (the capitalist’s) own private profit is the sole motive which determines whether the capitalist employs his capital either in agriculture, in manufactures, or in some particular branch of the wholesale or retail trade. Like Smith, Marx ([1867] 1990) also noted that the basis of the circulation of capital is the expansion of value (i.e. expansion of profit).

Likewise, Keynes (1936: 144) also concluded that the succession of boom and slump in an economy can be described and analysed in terms of the fluctuations of the level of profit in that economy. This was also remarked by Sweezy and Magdoff (2009a). They noted that the level of profit is a good predictor of the cyclical and general structural crises that is inherent in the capitalist system.

According to Hilferding (1910: 240), the inherent purpose of capitalist production is the realization and increase of profit: for Hilferding therefore, it is not consumption and its growth, but the realization of profit that determines the direction in which production – including its volume, and its expansion or contraction – takes. Overall, Hilferding

concluded that the level of profit determines the branches of production in which the capitalist invests his capital.

Kalecki (1954: 259) also remarked that profits in the preceding periods are one of the most important determinants of capitalists' consumption and investment. In a similar stance, Minsky (1986) noted that for a capitalist system to function well, prices must 'carry profits'⁵⁶. More recently, Brenner (2006) also remarked that the realised rate of profit is the 'fundamental' determinant of the rate at which an economy's constituent firms will accumulate capital and expand employment and their outputs. He noted that the rate of profit is not only the determinant of the relative attractiveness of productive commitment but is also a good measure of the health of an economy.

On the other end, the decline of profit has also been attributed as the cause of the structural crisis. Hyman Minsky explained this crucial link between profit and cyclical structural crisis. He noted that economic instability is not due to external shocks or the incompetence or ignorance of policy makers (as have often been argued by the mainstream). The instability, he maintained, is due to the internal process of the capitalist economy, which has complex, sophisticated, and evolving financial structures that lead to the development of conditions conducive to incoherence – i.e. to runaway inflations or deep recessions (Minsky, 1986).

⁵⁶ Minsky concluded that if the economy is to be coherent, prices must accomplish, not only the resource allocation and output rationing functions, but must also assure that – (i) a surplus is generated (ii) incomes are imputed to capital assets (iii) the market prices of capital assets are consistent with the current production costs of outputs that become capital assets and finally (iv) obligations of business debts can be fulfilled.

According to Minsky, relations among profits, capital asset prices, financial market conditions and investment determine the fundamental cyclical properties of the modern capitalist economy. Minsky explained that in a capitalist economy, profits motivate and reward business. They, he also noted, function to validate the past (i.e. for payment of past debt obligations) and induce the future (that is draw forth financing for investment).

In essence, given (under normal conditions) that profit constitutes the upper limit of interest (since interest is a fraction of profit), the financing terms (the rate of interest) thus affects the profit level, which in turn has implications for the effective demand for investment (inducement to invest), and subsequently the supply price of investment outputs (prices of goods produced). According to Minsky therefore, for a capitalist system to function well, prices must carry sufficient profit that meets the above conditions (of inducing investment and validating the past, including payment of interest).

However, Minsky noted that the unregulated competition in the markets for goods produced by capital-intensive processes is incompatible (given the propensity of the competition to produce downward pressure on prices that often reduce profit margins) with the uncertainty attenuation required by financiers and bankers before they hazard substantial funds in the financing of such processes. According to Minsky, commitments to pay are made based on anticipated revenues (profits), and if such revenues are not forthcoming (given the unregulated competition), then cash on hand either decreases or short-term bank debt increases. If the latter, then payment commitments in subsequent periods increases. Such increases, Minsky remarked, raises the cost curves that define the prices and outputs needed for a firm to meet payment commitments, and in some cases invalidate the financial assets that back the underlying debt. Hence, the financial effect of a current shortfall in profits raises future prices (by increasing the cost of capital) and the

subsequent outputs needed to validate the firm's capital assets, liability structure, and business style: so today's profit shortfalls make it more difficult to achieve validating cash flows in the future.

In sum, Minsky argued that a shortfall of validating cash flows relative to payment commitments sets off an interactive and cumulative downward process, including financial instability, which in turn produces a sharp decline in investment and in wage and profit incomes – all of which accelerates the reduction in employment. Brenner, Sweezy and Magdoff must have had these in mind when they concluded that the health of an economy is reflected in the levels of profit earned in the economy (Brenner, 2006:6; Sweezy and Magdoff, 2009a).

Based on these logical narratives, it is perhaps more reasonable therefore, when discussing issues that might be primarily inhibiting the growth of real capital accumulation, to actually construe such as those affecting the capability of capitalist enterprises of earning a sufficient rate of reward (profit) that will induce the owners of the capitals (the capitalists) to hazard their capitals to the risky production processes. In other words, to understand why real capital accumulation is not growing in an economy (that is to understand the cyclical and general structural crises undermining development), we could perhaps logically infer from the analysis of the elements undermining the ability of capitalists in that economy of earning a commensurate level of return on their invested capital assets. This is because it is rational to assume that any factor that causes the expectation of the capitalist not to be validated to be essentially the reason for his pessimism, and thus the cause of his refraining from furthering investments in the economy.

Equally, analysing the elements inhibiting profitability, as a means of understanding factors undermining capital accumulation cum development in an economy, could also be seen as a more viable approach for studying why countries do not attract foreign investments. This is because, given that capital accumulation is by nature prone to ‘ebbs and flows’ (according to the account by Marx ([1867] 1990), it is only logical therefore to assume that capital will only flow into processes where much profit could be earned, and will ebb in processes with declining returns. As such, if the rate of profit is low in a given economy, capital is prone to ebb in such economy and capital accumulation will inevitably tend towards stagnation⁵⁷.

In general, understanding what decimates the rate of profit accruing to the real productive process in a given economy certainly will help us understand why foreign direct investments do not flow into some countries as expected. Therefore, the ‘rate of profit’ not only helps to determine the pace of capital accumulation in a country, it also helps to measure the attractiveness of an economy.

Therefore, to understand what has been undermining real capital accumulation in Nigeria, and to comprehend why the country does not attract much foreign direct investment to its

⁵⁷ Hilferding did make this argument in his writings. He explained that the precondition for the export of capital is the variation in rates of profit: in that, capitalists are only inclined to branch out abroad if only there is a probability that their capital can breed more surplus value than they can attain locally (Hilferding, 1910). In similar stance, Smith ([1776] 2005) did originally remark that upon equal, or nearly equal profits, most men will choose to employ their capital rather in the improvement and cultivation of land than in manufactures or foreign trade because if he employs his capital in land, he has it more under his view and command and his fortune is much less liable to accidents than that of the trader, who is obliged frequently to commit it, not only to winds and the waves, but to the more uncertain elements of human folly and injustice. Similarly, upon equal or nearly equal profits, Smith further noted that manufactures are naturally preferred to foreign commerce: for the same reason that agriculture is naturally preferred to manufactures. The moral here is that unless profit is high, above that which could be earned in agriculture or in manufactures, the capitalist will not endeavour to hazard his capital to the riskiest ventures abroad. In other words, the level of profit is a central determinant of the rate at which an industry/sector or a country attracts foreign investment.

real sectors, we could easily infer from what have been mitigating the ability of capitalists in the country to earn sufficient rate of profit.

Overall, in line with the finance-investment-growth debate, the rate of profit could thus be argued to be the ‘fundamental’ factor that determines the rate of investment, which influences economic growth and development in a country. In other words, mainstream’s fixation on the shortage of savings, government ineptitude, land-lock conundrum and, adverse weather and administrative incompetence, as the main reasons for the deterioration in real capital accumulation in developing economies could be argued to be short-sighted because of their neglect of this vital determinant.

For example, Keynes’ lucid critique of ‘supply-side’ economics could be seen as exposing the inherent inadequacies of viewing savings accumulation as the panacea to the declining rate of real capital accumulation in developing countries such as Nigeria. According to Keynes (1936: 22), there is no distinctive nexus that unites decisions to abstain from present consumption (savings) with decisions to invest. Rather, he argued that the ‘real savings’ that actually stimulate investment are principally determined by the ‘returns/profits’ earned by the investment. This point was also keenly observed by Smith, who posited that the process of growth of capital accumulation ‘depends’ on the continuing appearance of net savings out of successively higher levels of income – which is derived from the employment of ‘productive’ (output- and capacity-creating) labour (Smith [1776] 2005: 495). In other words, real growth-inducing savings derives from profits earned on invested capital assets.

This, by no means, asserts that individual savings (government workers’, doctors’, lawyers’, academicians’ and a host of other liberal professionals’ savings) do not, in some way, add to further accumulation: Smith did remark that some proportion of income

devoted to savings (by the liberal professionals) often also provide or contribute to the capitals used by the entrepreneur for productive purposes. However, it is flawed (as Keynes argued) to arbitrarily assume the savings by the liberal professionals to equal capital (as Lewis, Rostow, Solow, Shaw and several mainstream economists have often arbitrarily assumed). For savings by the liberal professionals to contribute to capital accumulation, the rate of profit, Smith remarked, also plays a decisive role.

In the modern economy, according to Smith, the financial institutions intermediate between savers and borrowers. The savings, which the financial institutions accumulate, he explained, are lent at an interest to borrowers. Considering that the capitalist only wants to borrow at a rate in which the returns he gets for employing the borrowed funds will be enough for him to pay back the capital and the accumulated interests, and still have something left to compensate his efforts (including associated risks, payments to other factors of production and to himself); and the financial institutions (on the other hand) are only willing to lend at a rate sufficient to compensate the occasional losses to which lending, even with tolerable prudence, is exposed to; Smith opined that it thus becomes clear then that savings accumulated by financial intermediaries cannot automatically equate to further accumulation of capital unless the conditions of the lender (reflected in the price of the capital) and that of the borrower (reflected in the expected rate of return) are sufficiently adequate to induce both to engage in the transaction.

In other words, in the modern capitalist system, mobilised savings by the financial intermediaries cannot automatically equate to capital unless the rate at which it is being lent to the capitalist is less than what the capitalist will make from employing such funds in any productive process.

From the above discussions, it is thus clear that the rate of profit plays a decisive role both in determining the ‘real’ savings that stimulate further investment in the economy and in how much capital is borrowed from the financial intermediaries for investment purposes. The rate of profit could, therefore, be said to be the ‘carrot’ that induces the capitalist to transform all his savings (and to even borrow from others) to further accumulate capital assets.

Despite the apparent legitimacy of the role of profit in capital accumulation *cum* the procyclicality of the capitalist system, only a few studies have cogently examined the turbulence in the global system by way of analysing the role of the rate of profit.

The study by Brenner (2006) is one of such few studies that articulated the role of the rate of profit in economic crisis. He argued that the major decline in the profit rate throughout the advanced capitalist world in the 1960/70s was the basic cause of the parallel major decline in the rate of growth of investment, and output over the same period. The sharp declines in the rate of profit, he concluded, were the primary source of the decline in the rate of growth of productivity, as well as a major determinant of the increase in unemployment in many countries.

Profit, as was used in the discussed literature (Smith’s, Keynes’, Minsky’s and Brenner’s, particularly), was simply conceived as a form of compensation which accrues to those capitalists who undertake the strategic role of combining the factors of production: according to Smith ([1776] 2005: 46), it is simply the return on an invested capital. Smith explained that it is the excess value the capitalist agent receives after discounting the original capital he previously advanced for the purchase of the production process (including labour, the original capital and its costs, and other material inputs), and the allowance for the depreciation cost of production tools. Keynes defined it as the excess

of the value of the resulting investment output over the sum of its factor and user costs – referred to it as the ‘*income of the entrepreneur*’ (Keynes, 1936).

The rate of profit (r), on the other hand, was defined as the ratio of profits, designated as P , to the capital stock, K . That is, $r = P/K$ (Brenner, 2006: 6). This definition could also be interpreted as the ratio of profit to capital employed (ROCE) – that is, it is the percentage return on invested capital after discounting all associated production costs (including taxes). In this text, all mention of profit (or the rate of profit) is construed as defined above, unless otherwise stated. It is taken to reflect the proportion of the invested capital the investor receives as a compensation after repaying the principal capital and its rental cost, the labour wages, material costs, rent, depreciation and corporate tax⁵⁸.

To conclude, it is the level of ‘profit’ earned on an invested capital that is generally remarked that actually induces the capitalist to continually invest in a given production process. Keynes (1936: 24) concluded that in a given situation of technique, resources and factor cost per unit of employment, the amount of employment, both in each individual firm and industry, and in the aggregate, depends on profit. That is, the volume of employment (of both labour, raw materials and other means of production in a given production process) is fixed by the capitalist agent purely under the motive of seeking to maximise his present and prospective profits.

In this thesis, the central argument put forward to explain the persistent low rate of real capital accumulation cum underdevelopment in Nigeria is that the possibility of capitalist enterprises in the country of earning a commensurate rate of profit that could sustain their

⁵⁸ All profit rates given shall be post-corporate tax, unless otherwise specified. In essence it refers to net profits; as defined by Kalecki (1942: 258)

continual existence from their invested capital assets has been diminishing drastically, and the profits they eventually extract are often insufficient at inducing them to expand. In essence, it is argued that the main problems hampering Nigeria's development derive more from the factors undermining the ability of capital blocs in the country to extract sufficient level of profit from their productive processes. The factors that undermine the ability of capital blocs in the country to extract commensurate profits are argued to derive largely from the contradiction of the political-economic arrangement and from the historical tendency of the rate of profit to fall – which is a natural contradiction of the capitalist system.

2.7 Conclusion

In the 1950s-70s, the growth theories of Evsey Domar and Roy Harrod and later on by Robert Solow, Arthur Lewis and Walt Rostow – all embedded in the Keynesian demand management model – shaped the economic policies pursued by many governments in both the developed and developing countries. After the embedded model ran out of steam in the 1970s, government intervention in the economic process was widely blamed for the persistent underdevelopment in many poor countries, although the fundamental reason for the global stagflation that persisted in the late 1970s arose primarily due to the inherent contradiction of the capitalist system via the uneven development contradiction. The subsequent political-economic arrangement, which espouses free-market ideology, emerged as the dominant framework for economic management, after the demise of the Keynesian demand-management model. The foundations of the neoliberal principles were planted by the economic philosophies of Friedrich Hayek and Milton Friedman; Shaw and McKinnon and several other economists later advanced their economic theories. The political backing needed for the take-off of this new arrangement was

initially provided by the administration of Ronald Reagan and Margaret Thatcher but was later advanced to developing countries through the IMF and the World Bank Structural Adjustment Programmes.

Broadly, the distinctive difference between this new form of economic arrangement (the free-market ideology) and the embedded model (the Keynesian demand-management system) hinged on the degree of government intervention in the economic process.

Nonetheless, despite the widespread belief in this new arrangement, seen as the panacea to the calamities that befell the economic system in the 1970s, economic performances in many countries that implemented several of the neoliberal reforms have varied, with many economies actually experiencing stagnation, and deterioration in some sectors.

Given the varying outcomes in several economies that implemented some of the neoliberal reforms, scepticisms regarding the validity of the logic underpinning both the established growth theories and the 'neoliberalised' system of accumulation became ubiquitous. Most significantly, the orthodox growth theories were argued to have elided the significant consequences of the inherent contradictions of the capitalist system – such as the impact of the centralisation process – and the effects of some external and historical elements on the abilities of economies to develop.

Additionally, many heterodox scholars argued that the globalised financial structure (a by-product of the neoliberal reform) merely served to intensify the structural crisis of the economic system without removing the root cause of the crisis in the system. For instance, contrary to traditional neoliberal view that a deregulated capital account will ensure the massive inflow of capital from developed economies, which is believed will plug the savings gap in most Third World countries, it was contended that these volatile inflows

precipitated incessant financial crisis (inflation crisis, currency crashes, the bursting of asset price bubbles, banking crisis, external and domestic debt crisis), which have further contributed to instabilities in many economies. Furthermore, due to the relaxation of capital controls, potential capital is argued to have also flown out from poor regions into developed countries. In a similar stance, the liquid inflow of capital into developing countries (which has been particularly for speculative purposes) is seen also as merely contributing to the increased speculative frenzy and the widening of the income gap in the recipient country.

Based on these pieces of contradictory evidence, therefore, the neoliberal reforms are generally argued to have done little to engender development in most Third World countries. The associated persistent financial crises have been posited to have occasioned severe economic crises, and to have led to the deterioration of socio-economic factors such as employment, and income equality in most of the Third World countries that embraced the core precepts of the Washington Consensus vis-à-vis deregulation and liberalisation of the rate of interest, the financial system, capital accounts and trade.

Overall, the neoliberal-financialisation is contended to have failed to ameliorate the internal and external contradictions that undermine economic development. Instead, it is posited to have merely benefitted a few: while the financial sectors and the few financial capitalists have seen their investments grow over these years (due to the massive interest and dividend payments by the NFCs), a large segment of the economy, and a vast majority of the populace (especially the working class) are argued to have seen their rewards stagnate or grow at an anaemic rate. In other words, the growing tide of financial development could be argued therefore to have, contrary to neoliberal expectations, also failed to lift all boats in the economy.

On the other end, despite the apparent relation between the rate of profit and capital accumulation cum growth, few mainstream literature have tried to inculcate the fluctuations in the rate of profit in their discussions about the factors undermining capital accumulation; whereas the rate of profit features prominently in the analyses of many heterodox studies.

Based on the theoretical and empirical evidence, it is now clear that profit is the vital link in the investment-growth chain. The internal and external/historical factors cited by many Marxian scholars as having a significant influence on the pace of capital accumulation cum economic development mostly relate to the ability of capital assets to extract sufficient levels of profits in the global economy. In many cases, the neoliberal financialisation is claimed to be actually contributing to the lowering of the ability of capitalists to earn commensurate rate of profit by causing an increase in the cost of capital, which, in effect, contributes to the deceleration of development. In essence, most of the neoliberal reforms, which induced huge liquid inflows and in turn high interest rates, are seen by many heterodox scholars as also contributing to the internal contradiction of the capitalist system.

In conclusion, Marxian's analyses could be seen to address both the internal contradiction of the capitalist system and the international contradiction (the political-economic arrangement), which Kotz (2008), like several other scholars, argued are pertinent to understand if one is to comprehend the diverse forces that determine the pace of capital accumulation cum economic development in the modern capitalist system.

PART TWO

THEORETICAL AND EMPIRICAL INVESTIGATION OF THE NIGERIAN
ECONOMY

Chapter three: An overview of Nigeria's political-economic arrangement from 1945 to 2013

3.0 Introduction

This section provides an overview of the transition of Nigeria's economy from an embedded capitalist system to a neoliberal 'free-market' structure. The section also discusses some of the varying economic instabilities witnessed in Nigeria during these periods. In addition, this chapter will also attempt to elucidate the peculiar feature of the neoliberal transition in Nigeria and the atypical economic activities that it precipitated.

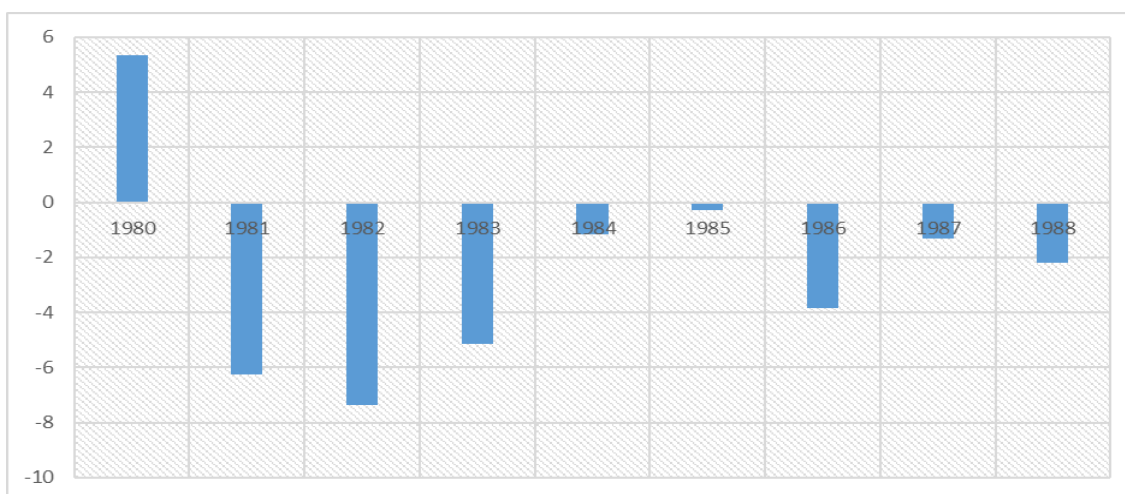
The chapter is structured as follows. Section 3.1 discusses the transition of the political-economic arrangement from the embedded capitalist system to a neoliberal system. This discussion highlights some of the contradictions associated with each economic arrangement, including the peculiar trajectory the neoliberalization exercise took in the country and how the unusual path resulted in some atypical inclinations that have also contributed to underdevelopment in Nigeria. In section 3.2, the main monetary policies implemented in the country since its independence are summarily examined. The conclusion to the chapter is contained in section 3.3.

3.1 From embedded-capitalism to a neoliberal system

The slowdown of economic activity in several industrial countries in the 1970s/80s did produce a fall in global demand for oil, which in turn induced declining oil prices. The falling oil prices meant dwindling export revenue for oil exporting countries like Nigeria: this contributed to the deterioration of Nigeria's balance of payment – given the country's over-dependence on oil revenue, and because of the relative decline of the country's agricultural sector which had been the mainstay of the economy.

Overall, the falling oil price – the root cause of the dwindling oil revenue – and the declining revenue from the agricultural export caused the severe current account deficits experienced in Nigeria during the early 1980s. In 1980 for instance, the country recorded almost six billion U.S. dollars in current account surplus. However, this dramatically changed for the subsequent years. By 1982, just under two years, Nigeria’s current account deficit eclipsed seven billion U.S. dollars. Up until late 1980, the country was mired in varying proportions of current account deficits (see Figure 7 below).

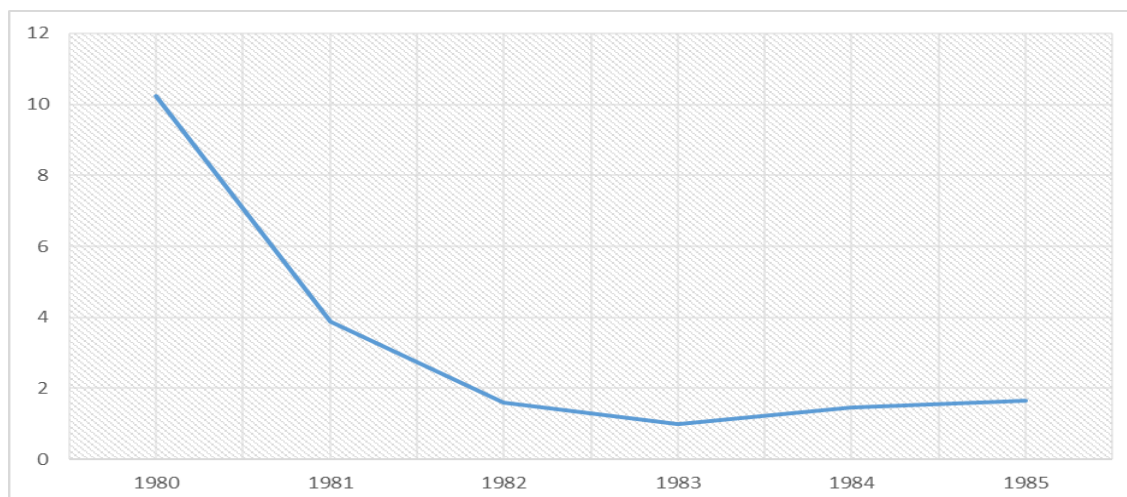
Figure 7 - Current account balance (in billions of US\$)



Source: Own elaboration based on data from the 2014 IMF world Economic Outlook Database, available at <http://www.imf.org/external/pubs/ft/weo/2014/01/weodata/index.aspx>

With persistent deficits in the current and budget accounts (which were mostly because of the declining oil revenue), the country serviced its rising debts and its burgeoning interest arrears mostly by depleting its foreign reserves: from 1981-85, the foreign reserve fell from a peak of over ten billion U.S. dollars to less than two billion U.S. dollars.

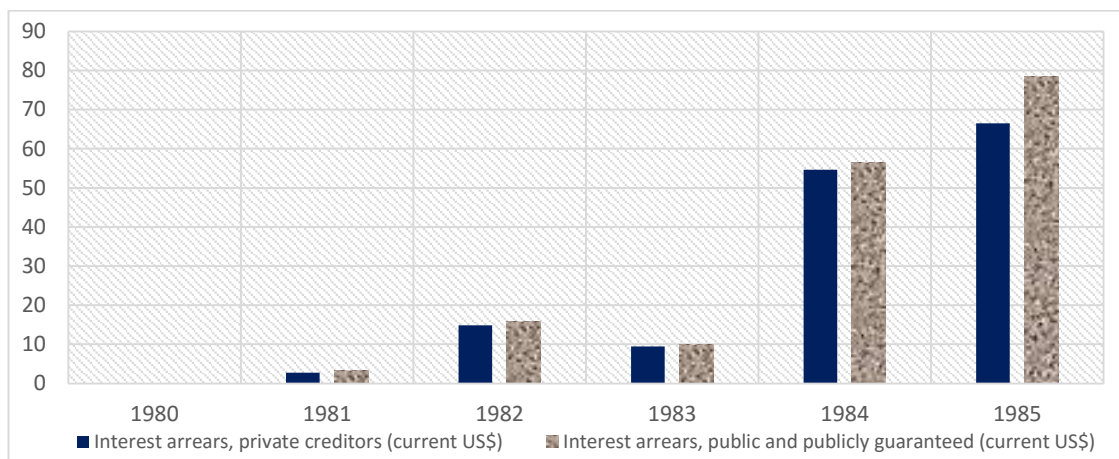
Figure 8 - Total reserves minus gold (from 1980-85, in billions of US\$)



Source: Own elaboration based on data from the World Bank's Development Indicators database, available at http://databank.worldbank.org/data/views/variableSelection/selectvariables.aspx?source=world-development-indicators#c_n

In addition, the interest rate increases by the U.S. Federal Reserve chairperson, Paul Volcker, in early 1980 also contributed to the worsening of the country's economic misfortunes by increasing its debt burden (see Figure 9 below); this was mostly because of the country's external debts that were generally linked to institutions in developed countries such as the U.S. From the diagram below, it can be seen that in 1980/81, the interest arrears on Nigeria's external debt were, at least, manageable (with 1980 arrears in thousands). However, after the interest rate increases that occurred in the U.S. around 1979-1981, the interest arrears on the country's debt stock rose tremendously (owing also to more debts being accumulated by the country). The interest arrears, which were around five to fifteen million U.S. dollars in 1981-83, shot up to over 50-70 million U.S. dollars in 1984-85 respectively (an increase of over 200% from the preceding periods); these increases were recorded for debt obligations to both private and public creditors.

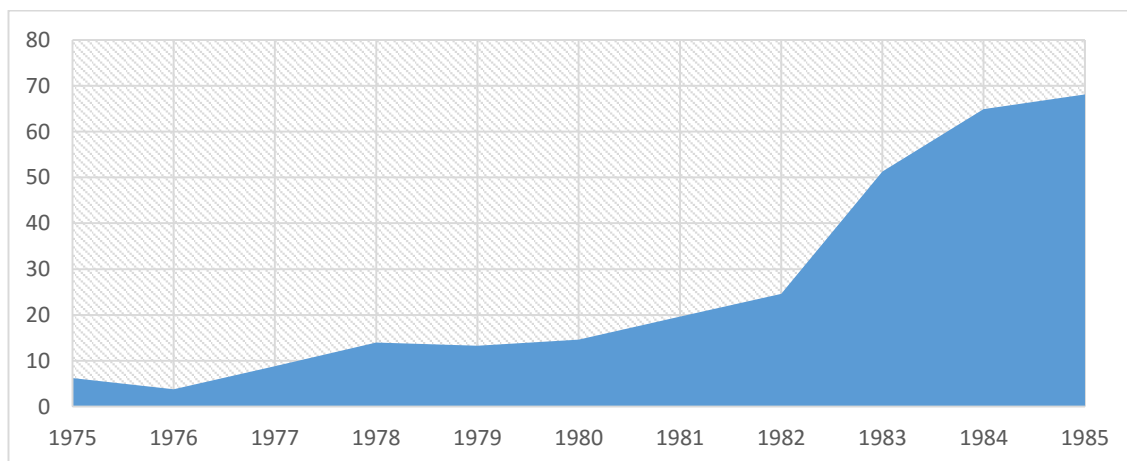
Figure 9 - Interest arrears (in millions of US\$)



Source: Own elaboration based on data from World Bank's Development Indicators database, available at http://databank.worldbank.org/data/views/variableSelection/selectvariables.aspx?source=world-development-indicators#c_n. The interest arrears, private creditors for 1980 are in thousands hence zero in the chart.

The interest rate increases caused bigger debt burden on the country (see Figure 10 below): the external debt stock (the external debt including the outstanding interest arrears) jumped from less than 20% of the country's gross national income (from 1975-80) to over 60% by 1984.

Figure 10 - External debt stocks (% of GNI)



Source: Own elaboration based on data from the World Bank's world development indicators database, available at http://databank.worldbank.org/data/views/variableSelection/selectvariables.aspx?source=world-development-indicators#c_n

In sum, the consequence of the falling oil revenue and the rising interest rate, in the face of deteriorating agriculture exports, was the burgeoning external debt burden and the

balance of payment deficits, both of which undermined investors' confidence in the country.

The main cause of these deteriorations in the Nigerian economy then is attributed mostly to the conscious macroeconomic policies pursued by the policy makers earlier in the 1960s. Most of these policies are claimed to have precipitated the over-valuation of the exchange rate, which, in turn, indirectly undermined the country's traditional export sector, the agricultural sector, in the 1970s-80s thus contributing to the country's economic turmoil. In essence, Nigeria's real economy (especially the agricultural and the commercial sectors) could be said to have shown signs of stagnation and deterioration earlier (especially in the 1970s, at the wake of the increasing windfalls from oil revenue that came as a result of the increased prices that resulted from OPEC's oil embargo in 1973), even before the interest rate hike in the U.S. in early 1980, and also before the fall in oil prices in that period.

- *Contradictions of Nigeria's 'regulated' regime*

Prior to 1973, Nigeria's exchange rate policy was in consonance with the fixed exchange system of the Bretton Woods agreement. The country's exchange rate then was also largely passive, due to it not been actively traded. However, following the breakdown of the Bretton Woods agreement in 1971, the country's exchange rate policy was consequently re-adjusted. Immediately after the collapse of the fixed-exchange-rate regime, the country adopted an adjustable pegged policy (which lasted from 1974-78), and a managed float regime (from 1978-85) before adopting the current flexible regime which started in 1986.

In all, during the period from the collapse of the pegged system in 1971 to mid-1980, the exchange rate policies adopted by the policy makers were mainly geared towards the preservation of the value of the external reserves and the equilibration of the balance of payment. Both of these objectives were pursued through the maintenance of a stable, albeit high exchange rate (Obadan, 2006). The objective of maintaining a high exchange rate, Obadan observed, was based on external and internal macroeconomic objectives pursued by the Nigerian government at that time. In the 1970s, the Nigerian government placed a huge emphasis on development projects, mainly through the encouragement of domestic industrialisation. It adopted the import-substitution industrialisation (ISI) growth strategy and this policy encouraged heavy reliance on the importation of industrial inputs and the discouragement of importation of finished industrial goods (see the Enterprise Promotion Decree, 1972). So throughout the 1970s and early 1980s, with some few exceptions, Nigeria's nominal exchange rate was stable or appreciated, owing firstly to the increasing oil revenue (the external factor) and also to the deliberate exchange rate policy (the internal factor) – which was aimed at helping domestic industrialists to source inputs cheaply from abroad.

The exchange rate policy of maintaining the appreciation of the naira, however, did undermine non-oil exports. This was because of the effect over-valued exchange rate invariably has on a country's outputs; it caused Nigeria's agricultural exports to be relatively expensive compared to the same produce from other countries. As a result, there was an inevitable deterioration of the agricultural sector, which had previously been the mainstay of the economy. The annual production of the major cash crops such as cocoa, rubber, cotton and groundnut, which had been Nigeria's major export, fell by 42, 29, 65 and 64 per cents respectively between 1970 and 1985.

With the deterioration of the real economy (the agricultural and the commercial sector⁵⁹), Nigeria's revenue was thus exposed to the whims and caprices of oil prices in the world market. With the price crashes in the 1980s, the country's domestic economy unsurprisingly experienced severe setbacks. It was due to the deteriorating economic circumstances in the early 1980s that the country's policymakers heeded to the World Bank's advice to deregulate and liberalise its economy, and to devalue the currency.

- *Neoliberalism as the 'panacea' to the contradiction of regulated capitalism*

The 1983 World Bank report on the necessary reforms that are needed to accelerate development in Africa projected neoliberal views of a minimalist state, and the pre-eminent role of the private sector in Africa's development (see World Bank, 1983). The report blamed domestic policy factors, especially the policy of maintaining over-valued exchange rate, as the main cause of the economic deterioration in Sub-Saharan Africa. It singled out the conscious efforts by the government to maintain over-valued exchange rate as triggering the decline in the agricultural sector in the region.

Also, heavily protected manufacturing industries and excessive state intervention were singled out as the 'bad' policies most responsible for the African crisis. Substantial currency devaluations, dismantling of industrial protection, price incentives for agricultural production and exports, and substitution of private for public enterprise – not just in industry but also in the provision of social services – were singled out as the

⁵⁹ The commercial sector deteriorated largely due to the indigenisation policy prescriptions, which included import quotas and tariffs restrictions on finished industrial imports, which had been the forte of many Nigerian merchants.

contrasting ‘good’ policies that would rescue Sub-Saharan Africa from its woes (World Bank, 1983).

The proposed Structural Adjustment reforms, the World Bank argued, will enhance efficiency, achieve equity and expand the stock of physical and human capital in the region. Particularly, the bank advocated for reforms in three core areas namely:

- i. Trade reform – it noted that Sub-Saharan countries, such as Nigeria, should move toward the adoption of an outward-oriented trade strategy. Such a strategy, the bank noted, means removing the bias against exports, replacing quantitative restrictions with tariffs, and adopting exchange rates that are more realistic.
- ii. Macroeconomic policy – many governments in developing countries, the bank noted, need to reduce their budget deficits and to provide incentives for greater savings by ensuring positive real interest rates, competitive exchange rates and low inflation. These, the bank remarked, will not only increase the supply of domestic financial resources but will also help to support trade reforms.
- iii. Domestic competitive environment – in addition to reforming trade and macroeconomic policies, the bank also remarked that these governments need to improve the supply response of the economy by especially removing price controls, rationalising investment regulations, and reforming labour market regulation. These policies, the bank argued, will complement trade reforms and promote the adoption of cost-minimising technology (World Bank, 1983, 1987: 5).

The World Bank’s increasing emphasis on these reforms was reflected in changes in its lending programme. Although project and sector investment activities continued to absorb the largest portion of the bank’s loans and credit, it introduced new instruments

such as the Structural Adjustment and the Sector Adjustment loans and credits – which focused directly on supporting developing countries’ programmes and policies of structural reform. The size of the Bank’s lending programme then (in the early 1980s) depended primarily on the recipient country’s adoption and implementation of the adjustment (neoliberal) prescriptions. The Structural Adjustment loans focused on macroeconomic policies and institutional change at the country level; they also emphasised reforms of importance to particular sectors in which adjustment is most urgently needed, according to the Bank’s assessment. The purpose of the sector adjustment loans, on the other hand, was to promote the introduction and effective implementation of sectoral policies deemed necessary by the bank for sustained economic growth (World Bank, 1987).

In sum, the bank supported several neoliberal reforms that it remarked were appropriate then for accelerating capital accumulation along with economic development in developing economies. According to the bank, domestic savings could be better mobilised through the proposed neoliberal reform of fiscal and financial policies. Public sector efficiency, it argued, can be better achieved by rationalising public investments. The efficiency of private sector investment, it also remarked, can be achieved by reforming trade and domestic policies.

In 1986, during the military regime of General Ibrahim Badamosi Babangida, the Nigerian government eventually negotiated a standby agreement with the World Bank and IMF and subsequently implemented the Structural Adjustment Programme (SAP). In line with the financial deregulation and liberalisation policies embodied in the Structural Adjustment Programme adopted in 1986, there was thus a policy shift from the

‘interventionist’ direct monetary control methods to a ‘liberal’ indirect approach, anchored in the use of market instruments in economic management.

- *Contradictions of the neoliberal reforms*

By the end of 1989, due to the easing of bank licencing restrictions, the total number of commercial banks operational in Nigeria jumped from just 29, with a total of 1,360 branches nationwide (as at 1986), to about 47 banks, with an additional 489 local branches. By 2002, the number almost doubled; it increased to about 90 banks⁶⁰. The neoliberal reform also saw the liquidation of government’s stake in the ‘big three’ banks (First Bank, United Bank of Africa, and Union Bank)⁶¹ that had dominated the financial landscape in the country. Overall, the neoliberal reforms saw an explosion of competition in the financial sector.

However, despite these increases in the number of banks and other financial institutions that became operational in Nigeria after the liberalisation exercise, not much changed; with regards the growth of the rate of capital accumulation in the economy. As we saw earlier (shown in Figure 2), the level of capital stock in Nigeria has declined tremendously

⁶⁰ These huge increases were in some part due to the adoption of Universal banking in 2001, which saw the conversion of Merchant banks to Deposit Money Banks (DMB).

⁶¹ These banks had their origin in the colonial era. The African Banking Corporation (which withdrew its operation in 1893 and its assets subsequently sold to the Bank of British West Africa) was the first to be established in Nigeria, followed by the Bank of British West Africa (now known as First Bank) in 1892, and Barclays Bank (now known as Union Bank) in 1917, and later the British and French Bank (Banker’s Trust and Banque National de Paris, now known as Union Bank) in 1949. Although there were other indigenous banks established alongside these dominant banks – such as the Industrial Commercial Bank, established in 1929, the Nigerian Mercantile Bank, in 1931, National Bank of Nigeria, in 1933, Agbonmagbe (later known as WEMA Bank), in 1945, and the African Continental Bank, in 1948 – most of these indigenous banks failed within a few years of their establishment. It was the widespread failure of these indigenous banks that was highlighted as the main reason the ‘Big Three’ dominated the financial landscape in those periods (see Lewis and Stein, 1997).

since early 1980; this is despite the emergence of a significant number of financial institutions. In fact, the average rate of growth of the gross capital stock in the country from 1961 to 1980 was 8.19% whereas the average rate of growth for the variable from 1980 to 2010 was just 0.61%.

This dismal performance was not just restricted to the Nigerian economy. For instance, Easterly (2001) showed that a significant ‘improvement in policy variables’ among developing countries since 1980 – that is, greater adherence to the agenda of the ‘Washington Consensus’, the neoliberal policies – has been associated, not with an improvement, but with a sharp deterioration of their economic performance. For example, the median rate of growth of the per capita income of most of these countries, Easterly observed, had fallen from 2.5% in 1960-70 to 0% in 1980-98.

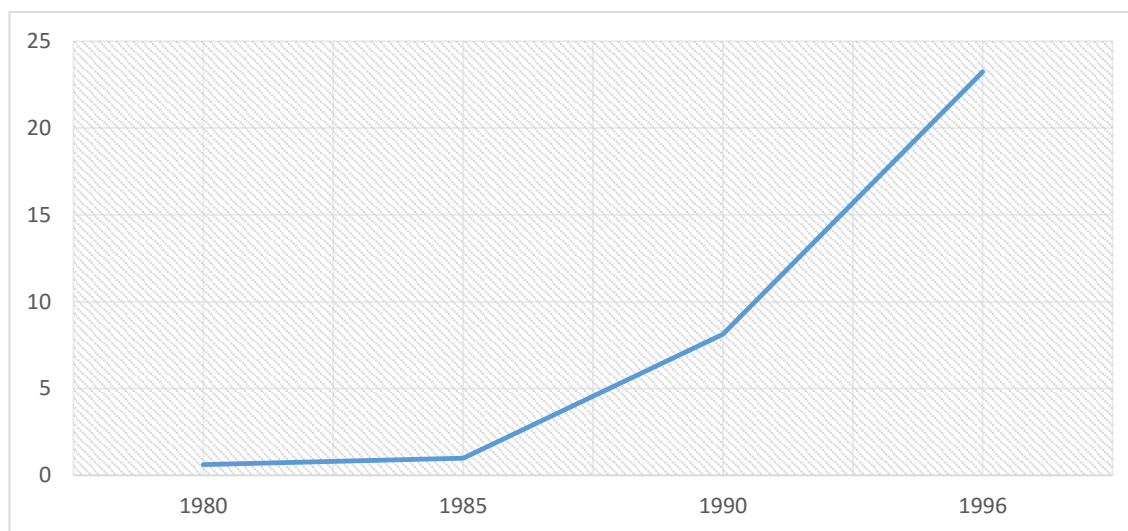
Parallel to the liberalisation of the financial structure was also the deregulation of the rate of interest. In 1987, the regulation (ceiling) on the interest rate for lending was removed (deregulated) and market determined price setting was permitted on inter-bank lending (CBN, 2011). Similarly, the foreign exchange market was also liberalised in the same period and the capital account controls removed.

As have been pointed out earlier, the exchange rate policy adopted prior to the Structural Adjustment Programme encouraged the overvaluation of naira – as was reflected in the exchange rate appreciations in the 1970s. For instance, up until 1984, the naira was valued at an average of ₦0.802555 per one unit of US\$, however, under the SAP regime, the exchange rate strategy was to float the naira. Accordingly, a market-determined exchange rate was established and the exchange rate policy objectives were pursued within the institutional framework of the tiered foreign exchange market system. Under this new exchange regime, during 1986-87 in particular, there existed a two-tiered foreign

exchange framework – the official first tier exchange rate and the second tier or free market exchange rate. The primary objective of this two-tiered system was basically to allow the value of the naira to be dictated by the actions of supply and demand in the second-tier or the free exchange market, while at the same time the monetary authority would continue a deliberate adjustment of the first-tier rate until the two rates converged to produce a realistic exchange rate (Obadan, 2006).

This strategy, as Obadan pointed out, was chiefly to avoid a runaway depreciation of the naira in a freely determined foreign exchange market. However, as can be seen from the chart below, the naira nevertheless depreciated persistently: from the previous high of ₦0.803 per unit of US\$ in 1980-84, the naira depreciated to ₦1.76 per unit of US\$ in 1986. By 1987, the naira had depreciated to ₦4.07 per one unit of US\$. By 1996, the naira had depreciated by over 2500% of its original value in early 1980.

Figure 11- Historical exchange rate of the Naira per unit of the US\$ (1980-1996)



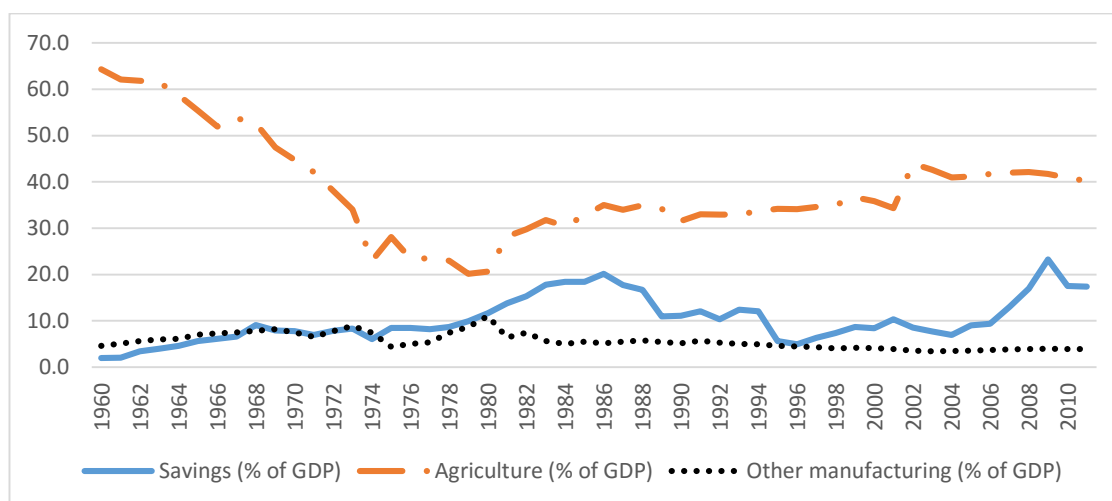
Source: Own elaboration based on data from Fxtop historical exchange rate database, available at <http://fxtop.com/en/historical-exchange-rates>

After 1987, the first and second tier markets were merged to form a foreign exchange market (FEM). The FEM had two components to it also – the official foreign exchange

market auction sessions; which operated as an auction market instead of the previous official tier and which was under administrative controls; and the autonomous foreign exchange market, which operated under a free market system (CBN, 2011). The values traded at in the auction sessions were used, as a policy tool intended to act as a guide to the level the policy makers wants the currency to be traded at in the free autonomous market.

Overall, despite the deregulation of controls on the rate of interest the financial intermediaries were permitted to charge, and the floatation of the foreign exchange rate, which has precipitated substantial devaluation of the naira, the actual impact of these reforms on Nigeria’s macroeconomic variables, could also be said to have been dismal. For example, the rates of savings, agricultural and manufacturing output have mostly stagnated or fallen, despite the increases in the rate of interest and the heavy depreciation of the naira (see Figure 12 below).

Figure 12 - Ratio of agricultural output, other manufacturing output and national savings to GDP



Source: Own elaboration with data from the CBN’s 2011 statistical bulletin

To conclude, Nigeria’s main economic problems in the early 1980s almost certainly were because of the fall in the prices of oil, which was becoming a dominant proportion of the

country's earnings. The interest rate increases in the U.S. also exacerbated the country's debt burden. However, it was the misaligned economic policy of maintaining a relatively high exchange rate that undermined the country's main export and foreign exchange earner then. Nonetheless, the deregulated foreign exchange and interest rate and the liberalised financial structure did fail, to a significant extent also, to correct the decline in the agricultural and industrial sectors.

- *Some peculiar features of Nigeria's financial reforms, and the atypical trends they occasioned*

It is crucial at this point to highlight some peculiar features that dominated the neoliberal reforms in Nigeria in the 1980s, and how they differed with those in other countries. These subtle features, it is contended, underpin the reason why the resultant financial structures and activities that emerged in Nigeria after the liberalisation exercise differed from those in many countries that also implemented the neoliberal reforms.

To begin with, only a few studies have so far examined the relationship between the ways neoliberal reforms were administered and their actual economic impacts. Secondly, these few have often constrained their analyses to the level of fiscal discipline in the country, in their attempt at explaining the subsequent effect of neoliberal reforms. As a result, many of these studies have concluded that where there is poor fiscal discipline, the actual outcome of the neoliberal policies would be disappointing (see Roubini and Sala-i-Martin, 1991; McKinnon, 1993; Fry, 1993).

However, it is posited in this study that the *politicisation* of the neoliberal process, particularly of bank licencing, is the defining characteristic that sets Nigeria's neoliberal reform processes apart from similar reform processes. This distinctive characteristic is

also advanced as largely responsible for birthing the unique economic activities many financial capitalists in the country were engaged in during those periods; which, in some way, is argued here to have contributed to undermining economic development in Nigeria over the years.

The politicisation of the banks' licencing processes broadly derives from the fact that it was the political authority (in Nigeria's case, the non-democratically elected military government) that was in-charge of issuing banking licences during the liberalisation reforms, instead of an independent central bank or a financial authority. Earlier in 1969, during the military regime of General Yakubu Gowon, a decree which ceded authority over the Central Bank of Nigeria (the CBN) to the central government was enacted (FRN, 1969). Traditionally, as is usually the case in most developed economies⁶², the central banks or designated financial authorities are often allowed certain autonomy in the economy to oversee the issuance of banking and other financial institutions' licences, with less interference from the government.

However, in Nigeria's case during the liberalisation period, the CBN did not enjoy such autonomy. Instead, the military government completely oversaw the issuance of banking licences during the neoliberal reforms in the 1980s. In fact, applications and permissions for new banks were exclusively reviewed and granted by the office of the president together with the Federal Executive Council, which consisted of past head of states (Lewis and Stein, 1997).

⁶² For instance, in the U.K. and the U.S.

This procedure for granting banking licences is what is remarked to have contributed to the widespread crony alliances that became prevalent in the financial industry at that time. In most cases, several elite civilians in the country who had some close connections to the government and retired military officers – most of whom were hugely instrumental, due to their connections to the government, in securing permissions and favours for their various affiliated banks – dominated the executive boards of most of these newly formed banks.

Furthermore, given that the process was not entirely democratically driven, it somewhat maligned talented individuals – especially those without any privileged connection to the ruling circle. The talented individuals that could have managed the financial structure towards the effective development of the real economy were inadvertently cut-off. A consequence of such exclusion was the slow innovation in the financial sector: the activities of most of the newly created banks in Nigeria at that time were starkly uneventful and uninventive. In fact, the activities carried out in most of the newly created banks were mostly asymmetrical to those carried out by the same newly liberalised financial institutions in developed and other parts of the world. For instance, unlike in developed economies, such as in the U.S. where several parallel/shadow financial institutions emerged (for example hedge funds, mutual funds, pension funds, etc.) and created diverse sophisticated and advanced financial instruments (such as Collateralized Debt Obligations [CDOs], Credit Default Swaps [CDS], and other advanced tradable derivatives which were used to prop the real economy for a while), Nigeria's financial institutions, largely Commercial and Merchant banks, on the other hand, were rather mainly involved in trading of foreign exchange (Lewis and Stein, 1997) and treasury bills (Soludo, 2004).

In addition, whereas the U.S. financial institutions, for instance, deluged households and private firms with debt (as was observed by Crotty, 2005; Sweezy and Magdoff, 2009b; Stockhammer, 2013), which, even though short-lived, drove the accumulation process for a while, Nigeria’s financial institutions, on the other hand, were rather mainly engaged in lending to other financial institutions, the central, state and local governments (see Table below).

Table 1 - Banking system credit to the economy (1987-93)

Year	Growth of credit to the Economy	Growth of credit to the private sector	Growth of credit to the public sector
1987	27.4	46.7	10.3
1988	22.2	16.9	28.4
1989*	-14.1	3.9	-33.5
1990	17.1	18.4	14.9
1991	45.3	23.7	82.9
1992	65	4	136.7
1993	74.7	19.7	103.2

Source: Own elaboration based on CBN’s *Annual Reports*, various issues. Note*: in 1989, public sector accounts were withdrawn from banks as such the reversal witnessed in the credit allocated to the public sector and even to the private sector.

Additionally, most of these financial institutions were also seriously engaged in various malpractices: some of these institutions operated as conduits through which their unscrupulous owners (and their government allies) laundered money. Lewis and Stein (1997) noted in their research that some finance house operators in Nigeria used company funds mainly for real estate investments, and in some cases, for personal consumption. They noted that fraud in the Nigerian financial system reached an epidemic proportion in the 1990s, on the heels of financial deregulation and liberalisation. In 1993, within a space of two months alone, they noted that the police documented over 70 cases of malfeasance in finance companies that accounted for losses in excess of \$46 million.

In sum, the growth of financial activities, particularly banking in Nigeria, after the neoliberal financial reforms of deregulation and liberalization was largely propelled by foreign exchange speculation and interest rate arbitraging, and in some cases, plain simple fraud; there existed weak linkages between the activities of these financial institutions and real production. This predisposition of the financial structure in Nigeria after the neoliberal reform is posited to be mostly because of the politicisation of the neoliberal reform. In turn, the politicisation is contended to have favoured a few wealthy and connected elite and to have side-lined the legion of innovative individuals that could have occasioned a real change in the real economy.

3.2 Overview of some major monetary reforms in Nigeria from 1959 to 2013

Pre-SAP era (1959 – 85) Direct control regime	Post-SAP era (Short-term regime from 1986 – 2001)	Post-SAP era (Medium-term regime from 2002 to date)
<p><i>1959/74</i> – exchange rate targeting policy framework adopted</p> <p><i>1960/62</i> – policy regime was passive, focusing mainly on developing & maintaining a sound domestic currency</p> <p><i>1962/63</i> – switched focus to dev. Issues. Adopted selective credit control</p> <p><i>1964/65</i> – also focused on balance of payment equilibrium through adopting ceilings on the rate of credit expansion</p> <p><i>1966/72</i> – lifting of credit control primarily to enable banks to provide credit to the govt. to prosecute the civil war</p> <p><i>1972/76</i> – implemented policy to expand</p>	<p><i>1986</i> – Adoption of deregulation and liberalisation policies (Note: some repressive policies were still retained such as the requirements of banks to deposit in a non-interest bearing deposit account at the CBN and also the reduction in the rate of credit expansion by banks). These policies were utilised to stem the pressure of excess liquidity in the economy during that period.</p> <p><i>1986/87</i> – rationalisation of sectoral credit controls. Banks were given larger discretionary measures in regards to credit allocations. The formulation of the two-tiered foreign exchange market.</p> <p><i>1989</i> – Public sector accounts were withdrawn from the banks.</p>	<p>Under this regime, the monetary policy guidelines were now subjected to half-yearly review. The OMO, reserve requirements, discount window operations, foreign exchange market intervention and in/out movement of public sector deposits from banks were all combined by the CBN in implementing its policies under this regime.</p> <p><i>2004</i> – Increment from N1bn/2bn minimum paid-up capital to N25bn was implemented. This saw the reduction in the number of banks from 89 to 24.</p> <p><i>2005</i> – Introduction of a tight exchange rate band of +/-3% and the two-week maintenance period of cash reserve requirement.</p>

<p>domestic aggregate output & curtail inflation through re-adopting selective credit control</p> <p><i>1976/85</i> – a combination of repressive policies such as direct credit ceiling, prescription of the sectoral allocation of banks’ loans and advances to preferred sectors of the economy, selective credit controls, mandatory cash reserve requirement, and use of stabilisation securities, interest rate controls and the re-introduction of pre-shipment inspection & the imposition of pre-import deposits (use of tariffs and quotas) were all adopted by the CBN.</p>	<p><i>1992</i> – Enhancement of commercial banks’ minimum paid-up capital from N20m to N50m.</p> <p><i>1993</i> – Shift to the use of OMO (Open Market Operations)</p> <p><i>1996</i> – Abolition of all mandatory credit allocation mechanisms. Subsequent deregulation of interest rates.</p> <p><i>1999</i> – Further enhancement of commercial bank’s minimum paid-up capital from N50m to N500m. Unification of the official and inter-bank exchange rates.</p> <p><i>2001</i> – Introduction of Universal banking and further enhancement of the bank’s minimum paid-up capital from N500m to N1bn for existing banks and N2bn for new banks.</p>	<p><i>2006</i> – Adoption of Standing Lending and Deposit facilities measures.</p> <p><i>Post-2006</i> – Gradual run-down of CBN holding of NTBs (Nigerian Treasury Bills) and increased deregulation of Forex markets.</p> <p><i>2007</i> – Global financial crisis started in the US deriving from the sub-prime mortgage-lending crisis.</p> <p><i>2008/10</i> – replacement of the chief executives/executive directors of the banks identified as the source of instability in Nigeria’s banking industry. The injection of N620 billion into banks in an effort to prevent a systemic crisis. The government guaranteed all foreign credits and corresponding banking commitments of the worst affected banks. The Asset Management Corporation of Nigeria (AMCON) was established to soak the toxic</p>
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		<p>assets of troubled banks. To further engender public confidence in the banking system and enhance customer protection, the CBN established the consumer and financial protection division to provide a platform through which consumers can seek redress. Proposed adoption of the international financial reporting standards (IFRS) in Nigeria by the end of 2010.</p>
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3.3 Conclusion

The oil windfall, the interest rate hike in the U.S. and the misaligned economic policies pursued by the Nigerian government all conspired to undermine Nigeria’s real economy in the 1970s/80s. To alleviate these problems, neoliberal policies of deregulation and liberalisation were extensively adopted in the mid-1980s. However, since the late 1980s, there have been mixed results with regards the actual outcome of the neoliberal policies – in most cases, the results have been disappointing.

Additionally, while many analysts have argued that the economic deterioration experienced in some of the developing countries like Nigeria that implemented the neoliberal policies derive primarily from the inability of these countries’ governments to plug their budget deficits, and several others, on the other hand, have remarked that the neoliberal policy itself was a flawed policy that was based on unfounded logic and as

such was not right for addressing the several structural problems existent in developing economies, it is further argued here that the politicisation of the deregulation and the liberalisation exercise also shaped the impact the neoliberal reforms had on Nigeria's real economy.

Chapter four: Financialisation, capital accumulation and economic development in Nigeria

4.0 Introduction

The sudden explosion of financial activities in Nigeria was certainly triggered by the liberalisation of the financial system, the abolition of import licencing, the removal of subsidies, deregulation of interest rate and the adoption of a floating exchange rate. These policies, to a significant extent, undermined the already committed high-cost real capital assets in Nigeria and given the high returns that could be earned from financial activities, accelerated the outflow of both human and physical capital from the real sectors.

To be sure, prior to the neoliberal reforms of mid-1980, the main sources of income in Nigeria were from agriculture and commercial (wholesale and retail) trading. The outputs from these two sectors were averaging around 68% of the total national output from 1960 to 1970, while the outputs from the industry sector, which comprises the oil and natural resources industries, and the manufacturing industries, averaged just about 11% of the total national output in the same period. The outputs from the services sector, which comprises the financial, communication and transport industries, averaged just around 15% of the total GDP from 1960 to 1970.

However, during the periods of import-substitution industrialisation in the 1970s, the government actively intervened in the product market. It subsidised commodities for the domestic industries, maintained an appreciated exchange rate and regulated imports through the issue of licences and quotas. Consequently, there were declines in commercial activities, and in agricultural production, as resources were channelled to industrialisation. The oil windfall in the 1970s (due to the embargo by OPEC that

consequently doubled the prices of oil) further eroded the attractiveness of agricultural activities; the appreciation of the naira that resulted from the conscious exchange rate overvaluation and the oil windfall caused the agricultural produce to be expensive in the international market. As a result, the outputs of agriculture to the gross domestic output declined by almost half from 1971 to 1980. Nonetheless, these declines were compensated by the increases in outputs recorded in the industry sector, especially from oil exports – the industry’s outputs increased from an average of 11% to over 30% of total GDP between 1971 and 1980. From 1981 to 1985, the outputs from the industry sector were contributing almost an average of 42% to the total GDP⁶³. However, the eventual withdrawal of commodity subsidisation and import quotas, coupled with the deregulation of the rate of interest and the exchange rate, due to the implementation of the Structural Adjustment Programme, subsequently curtailed access to some of these sources of accumulation in the economy⁶⁴.

Overall, the economic problems suffered by Nigeria prior to the neoliberal reforms could be argued to have been self-inflicted to some extent. In particular, the misaligned economic policies, especially the negligence of the agricultural sector, which had been

⁶³ The industry sector had a strong average output ratio of 1:3 between real manufacturing and crude petroleum & natural gas extraction from 1971 to 1980. That is for every one-unit contribution from real manufacturing to the industry sector, the crude petroleum and natural gas industry was contributing thrice. However, this figure changed immensely from 1986, after the implementation of SAP policies. From 1986 to 1995, average ratio of output between these two industries increased to 1:6. For every unit of output from manufacturing to the industry sector, the crude petroleum & natural gas contributed six units. This reflects the deterioration of real manufacturing and at the same time the explosion of the oil sector. Since then, the output from the manufacturing industry has been on the decline coupled also with the declines in agriculture and commercial trading; thus causing over-dependence on oil since the mid-1980s.

⁶⁴ More especially to real manufacturing which was beginning to boom based on the subsidies and the relatively strong exchange rate that afforded the industrialists cheap foreign inputs.

the mainstay of the economy, contributed to the exposure of the country to current account deficits as soon as oil prices fell in the global market.

Nonetheless, the impromptu withdrawal of subsidies and the elimination of import controls, in an attempt to ameliorate the stagnation in the economy, rather worked against the growth of the nascent industries that were beginning to find their feet in those days. These developing blocs of capital were, as a result of the neoliberal reforms, exposed to the vicissitudes of global competition which consequently impeded their ability to reproduce sufficient returns which would have ensured their continual subsistence. And as a result, immediately after the neoliberal reforms, Nigeria's real sectors, instead of growing, actually stagnated, and even declined in some quarters – the output from real manufacturing which excluded extraction and natural resources industries declined from a height of 9% of the total national output in 1980-84 to less than 6% by 1990-94. Since the 1990s, the output has continued to decline. By 2010-11, the output from non-extractive manufacturing to total national output stood at a measly one and a half percent.

In general, since the implementation of neoliberal reforms in mid-1980, the agricultural sector and the manufacturing industry, instead of growing, have actually been declining. However, while some of these leading sources of real capital accumulation have been on the decline, other sources of accumulation have simultaneously emerged in the country. The compensation for the declining fortunes of real economic activities can be seen to have emerged mainly from opportunities for arbitraging, especially in the liberalised multi-tiered foreign exchange market. The prospective huge gains that could be garnered from currency trading and financing could be seen to have deepened the accelerated flight of capital (both human and physical) from the already weakened real sectors: while the contributions from the real sectors (agriculture, commercial trading and real

manufacturing) to the overall GDP were declining, the number of operational financial intermediaries (measured by the number of operational banks) was on the increase. Therefore, instead of the deregulated and liberalised financial system contributing to the growth of the real sectors, what we have witnessed are rather continual decline of the real sectors and the exponential growth of the financial sectors and activities.

To summarise, the impact of neoliberal reforms in Nigeria can be viewed in two perspectives. First is the impact on the real productive sectors, and the second is on the increased financial activities in the economy, which is virtually unrelated to real productive activities and which, in some way, is also undermining the real productive process in the long run.

4.1. Neoliberalism and capital accumulation

Smith, Marx, Hilferding and Keynes remarked that capital tends to flow into sectors where sufficient profit could be earned, and that when much could not be made from a particular capitalist production process that capital will often tend to flow out from such processes and will seek refuge in processes that have the tendency to earn substantial returns, especially in financial speculation. In line with this view, it is argued in this essay that to understand the underlying reasons why Nigeria's economy, instead of experiencing accelerated economic development, stagnated and declined, one should first understand why the possibilities for the capitalists to earn a sufficient rate of profit on their real productive processes in the country have been very low. This is because given that when there are not much to be gained from real capital accumulation, capital will continually flow out of real production and capital accumulation, the workhorse of development, will in effect stagnate.

Also, following the observation by Hilferding (1910) that the precondition for the ‘export of capital’ (i.e. the export of value which is intended to breed surplus value abroad [Foreign direct Investment]) is the variation in rates of profit, it is further contended that the low possibilities for earning a commensurate rate of profit in Nigeria is also the primary reason why the country have attracted less real long-term foreign investment, which can help accelerate the pace of capital accumulation along with development in the real economy.

Furthermore, it is also argued that the neoliberal policies implemented in the 1980s, instead of resolving the deceleration of capital accumulation in the country, have somewhat exacerbated it. The reason is that these neoliberal strategies have mostly engendered factors that inhibit the ability of real capital assets in the country of earning sufficient profits that could ensure their continued existence. For example, the neoliberal reforms inadvertently facilitated uneven development, and conditioned financial speculation (which is more profitable) in the economy, both of which have tended to undermine the real productive processes by undercutting profits and incentives.

To develop these points further in this thesis, a critical, materialistic and dialectic approach to analysis is adopted. Emphasis will thus be on critically studying the contemporary social structure of accumulation, with the use of historical data and seminal theories.

- *Classification of Nigeria’s capital accumulation process*

Before we delve into how neoliberal reforms have affected the accumulation process in Nigeria, and what the elements are that have been undermining capital accumulation in the country, it is imperative we first classify the country’s predominant accumulation

process. For it is by first understanding the dominant accumulation processes in the country that we can then effectively articulate the actual implications of the neoliberal reforms.

To begin with, based on the core-periphery concept, Nigeria can be classified as a periphery economy: due to the proliferation of competitive production processes in the economy and the zero number of patented processes belonging to indigenous capitalist enterprises (see Table 2 below). In fact, Micro, Small and Medium Scale Enterprises (MSME) dominate Nigeria's industrial landscape, according to a recent survey by the Federal Ministry of Industry, Trade and Investment (FMITI). These MSMEs, the survey observed, currently represent around 96% of the businesses in Nigeria and contributes over 75% of national employment. A majority of these MSMEs, it was noted, often concentrate on oil exports/imports, trade (merchandise export, import, wholesale and retail) and in agriculture-related production (crop production, livestock, forestry and fishing), with a few actually in manufacturing.

Table 2 - Selected countries' macro data for 2013

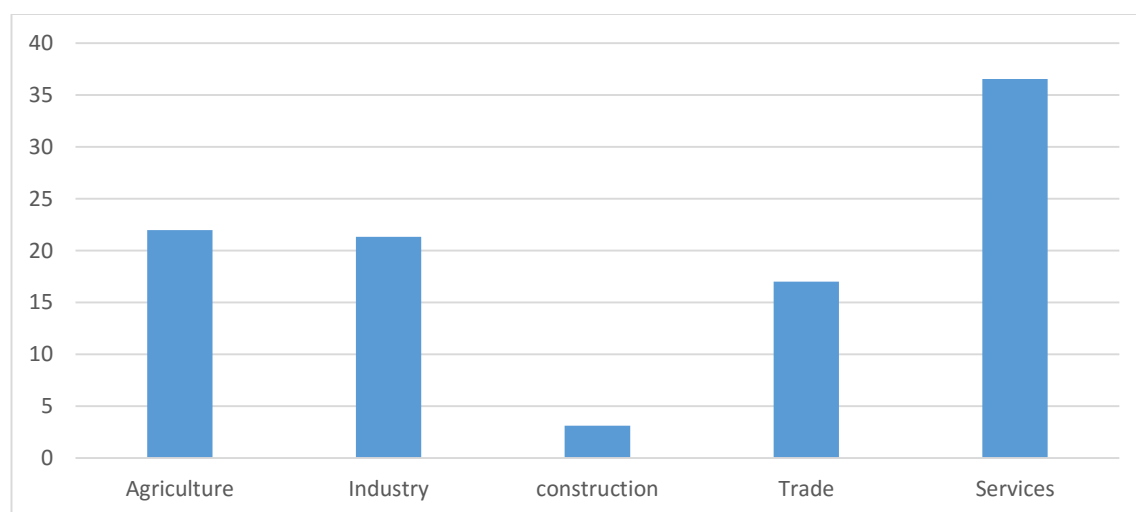
	Nigeria	Indonesia	South Africa	US	UK
Patent rights (total)	Nil	1,811	4,756	224,505	7,173
% of exports made up of agricultural produce	7.9%	25%	12.5%	11.1%	7.1%
% of imports made up of agricultural produce	11%	12.5%	7.2%	6.1%	10%
% of exports made of manufactured goods	2.5%	40.2%	46.5%	71.3%	71.3%
% of imports made of manufactured goods	86.5%	58.8%	60.7%	69.3%	63.4%

Source: Data available on the World Trade Organisation's (WTO) database. Available at <http://www.wto.org/english/ress e/statis e/statis e.htm>

Although these MSMEs, on aggregate, contribute extensively to the growth of employment, only a few, however, could be said to be actually contributing immensely

to the growth of employment in the country; because a one-man enterprise, largely engaged in trade, for instance, could hardly be said to be contributing significantly to the overall pool of employment. In fact, evidence has shown that the most important firms for employment growth are often the small number of ‘high-growth’ small businesses, and not a majority of small businesses (Mazzucato, 2011): so while many ‘high-growth’ firms are small, not many small firms are ‘high-growth’. The ‘high-growth’ firms, Mazzucato explained, are often those that promote innovation – that is the knowledge-based enterprises. They, she remarked, create the bulk of employment in an economy. Interestingly, however, these sets of small high-growth firms have been particularly low in Nigeria. A careful study of the country’s economic landscape highlights this deficiency.

Figure 13 - Gross Domestic Output by industries (2013)



Source: Central Bank of Nigeria’s 2013 statistical bulletin.

The industry sector in Nigeria, which should, in practice, include the *high-growth* small firms, is actually dominated by crude petroleum and natural gas industries (67.5% of the output from this sector comes from the extraction industry), followed by real manufacturing (which contributes around 32% of the sector’s total output). The manufacturing industry is in turn largely engaged in non-advanced (i.e. less knowledge-

intensive) competitive goods. This sector is also dominated by few large transnational firms, which are predominately interested in producing for the large domestic market. Most of these imperial firms (e.g. Unilever, PZ, Guinness, Cadbury, Nestle, 7up, UTC, British-American Tobacco, etc.) focus on Food, Beverage and Tobacco (outputs from these multinationals alone account for over 68% of the total manufacturing output in the country), with the rest coming from the MSMEs.

The services sector, on the other end, is dominated by the information and communication industries (they produce around 29.9% of the total output from this sector) followed by the real estate sector (which contributes around 21.9%) and finance and insurance (9%). The information and communication industry, which may also include growth-inducing *high-growth* small firms, is however also largely dominated by few oligopolistic information and telecommunication companies (MTN, Airtel, Globacom, and Etisalat). Therefore, although 96% of businesses in Nigeria are MSMEs, the total output from these businesses are substantially below those from the few imperialist firms (which make up less than 5% of businesses in the country).

In sum, it is clear that the accumulation processes that are predominant in Nigeria's real economy are largely competitive, given that the MSMEs, which represent around 96% of the businesses in the country, are mostly engaged in often non-advanced processes). In fact, a majority of the MSMEs in the country are mostly engaged in basic textile, apparel and footwear production, and in wood and wood products, basic metal, iron and steel fabrication, and plastic and rubber products. The potential high-growth (knowledge-intensive) sectors, on the other hand, are dominated by a few centralised multi-nationals, which represent less than 5% of the businesses in the country. In essence, since the MSMEs provides up to 75% of national employment in the country, it could be thus

deduced that the majority of wage-labourers in the country are invariably engaged in low-paying peripheral activities.

- *Profit extraction in periphery (less knowledge-intensive) accumulation processes*

Firms, almost certainly, go into business to make a profit. Many scholars have noted this view to be true in most circumstances. For example, while Luxembour (1913) 1972: 49), remarked that the capitalist form of production is governed purely by the profit motive, Minsky (1986: 142) concluded that the price system of a capitalist economy must carry the carrots (i.e. profits) that induce the production of the physical resources needed for future production: that is, the present cash-flow (from today's profits) must validate the past (yesterday's debt obligations) and today's debt obligations must also be validated by future profits before one is induced to invest in the underlying accumulation process. Minsky even stated that unless the past is being validated and the future is expected to validate present investment and financing decisions, none but pathological optimists would invest.

To begin with, economic theories have taught us that to extract profits the firm has to ensure that the price-cost margin is high enough to guarantee the returns to the production process is sufficient to replace the initial invested capital, compensate its cost, and other associated costs encountered in the production process including the payment of the wages of the labourer and provision of income for the entrepreneur, and still have a commensurable excess left for further accumulation (Smith, [1776] 2005; Marx, [1867] 1990; Keynes, 1936; Minsky, 1986). In other words, to guarantee a favourable profit, a firm has to maintain a reasonable price-cost margin.

However, as Minsky (1986: 160) observed, firms in competitive (periphery) industries, such as the MSMEs in Nigeria, who are mainly price takers are often unable to maintain a reasonable price-cost margin because they are regularly forced to respond to the direction of the market prices for their goods, unlike firms in the 'monopolistic' market that can set their prices. The price-taking firms, Minsky remarked, react to changes in demand by adjusting output along their marginal cost curve. Even though such firms own and operate capital assets and have debts, he explained that they do not have the power to set their prices according to what they need to satisfy their costs. Instead, he noted that they are forced to accept what they can get; i.e. they take price as a parameter and set output along their marginal cost curves. Minsky posited that a modest decline in demand might often make cash flows too small to enable the price-taking firm to fulfil all of its commitments and debt.

On the other hand, the fixed-price variable output firms (the monopolised entities), Minsky observed, have market power that enables them to construct a complex cost structure upon the base of technologically determined costs, which they use to set their prices. Therefore, the firm with market power offers to supply what the market is willing to take at a price that, for a significant range of outputs, covers the full per-unit costs and leaves a margin for safety.

In essence, the only other alternative often then available for firms engaged in competitive products to maintain a favourable price-cost margin in the vicious competitive global market is to either minimize their production costs (adopt a cost strategy) or enhance the perceived benefits of their products (benefit or differentiation strategy), which can then allow them to earn a reasonable price-cost margin for their produce.

However, given the lack of advanced technology and technical know-how, which could be accumulated from extensive research and development⁶⁵, Nigerian firms are often not capable of exploiting the benefits leadership strategy in order to attain a competitive advantage in the highly competitive global market. In fact, statistical evidence has shown that, on average, most Nigerian firms operate antiquated machinery (Tyler, 2002). Furthermore, the level of human capital development in the country is also very poor, given the low number of students registered in tertiary education⁶⁶, which is not helped by the decaying educational system. Given these deficiencies, therefore, it is very unlikely that Nigerian capitalists will be able to produce high-tech goods or engage in knowledge-intensive processes (such as nanotechnology and biotechnology) that can command high prices, and which can easily be differentiated in the international market based on quality.

In view of these, the only alternative often left for peripheral blocs of capital, such as those from Nigeria, is to exploit their 'perceived' cost advantages, in the form of exploiting cheap labour power that is abundant within the economy. This was exactly what countries like China did during their initial capitalist industrialisation phase in the 1970s/1980s⁶⁷.

However, the later-developing blocs of capital from Nigeria are markedly constrained by distinctive problems, which cause them to be unable to follow the paths several other emerging economies took in the past.

⁶⁵ The number of patented processes easily captures this, which unfortunately is zero in Nigeria.

⁶⁶ In 2003-05 for instance, eligible students enrolled into tertiary education in each academic year were on average only around 1000 per 100,000 eligible students.

⁶⁷ The East Asian development process was expertly elucidated by Schuman, 2009

In this study, four ‘main’, often unobtrusive factors, which their constellation are fundamental in explaining why firms in Nigeria are often unable to earn sufficient returns that will ensure their continual existence are discerned. These impeding factors are argued to explain, largely, why the pace of capital accumulation along with economic development in Nigeria has grown sluggishly over the years.

These main inhibiting factors include, among several other elements⁶⁸ - the uneven competition between Nigerian capitals and those from the core and semi-peripheries; the high internalised ‘external ‘costs, particularly for electricity generation and transport; ineffective demand for domestic products, which is exacerbated by the increasing cost of unsubsidized medical care; and finally, the increasing cost of capital that arises from the exorbitant rate of interest charged by moneylenders.

It is argued in this study that it is the impacts of these factors on the ability of Nigerian capitalists to reproduce sufficient surplus value, including profit that fundamentally causes the decline in the rates of real capital accumulation, which in turn accelerates the growing unemployment, and causes the household income in the country to fall. Although individually distinctive, these factors are however complementary. To resolve Nigeria’s economic problems, therefore, these factors need to be collectively, and not individually, addressed.

4.1.1 Low profitability as the bane of capital accumulation in Nigeria

In this study, the contradictory economic outcomes been observed over the years in Nigeria are argued to mainly derive from the narrowing ability of real capitalist

⁶⁸ Such as bureaucracy, weak institutions, lack of innovation, inept and corrupt government and civil unrest including political/economic uncertainties

enterprises in the country of extracting a sufficient rate of profit from their productive processes. This inability is contended to be the reason for the declining rate of capital accumulation⁶⁹, which in turn precipitates increasing unemployment, deepening poverty levels and widening income inequality.

For most developing economies, the possibility of their peculiar peripheral accumulation processes to earn a commensurate rate of return have often been very low primarily because of dilapidated infrastructures that cause high production costs. In addition, low effective demand, which is exacerbated by unsubsidized medical costs, and the abundance of cheap foreign substitutes further narrow the possibilities of earning a commensurate rate of profit in many peripheral countries.

In essence, liberalising trade in these regions, instead of accelerating the pace of capital accumulation rather exposed these high-cost backward peripheral processes to intense global competition that produces falling prices, which causes the prices earned by the peripheral processes not to carry enough profits that can validate their business' lifestyle.

Few mainstream studies that have somewhat considered the relevance of the rate of profit to economic growth (Fry 1978 for instance), have often assumed that the rate of return on invested capital in developing economies is usually higher than those obtainable in developed economies. As such, the rate of profit is naturally assumed high, and not viewed as possibly a factor that is undermining growth in developing economies.

This assumption, as Lucas (1990) observed, is however fundamentally flawed because the assumptions on technology and trade conditions that gave rise to the Cobb-Douglas

⁶⁹ Low possibility for profitability constitutes the main reason why most capitalists often abstain from hazarding their capitals to the risky productive processes

function, which implies that the marginal product of capital is higher in less productive (poorer) economies are, as Lucas puts it, inconsistent. This flawed premise, Lucas remarked, explains why capital has not flown from the US and other Wealthy countries to India (which, according to the Cobb-Douglas function, has a marginal product of capital that is 58 times that of the U.S.).

This inconsistency of the Cobb-Douglas model could be argued to be because the real productive processes in most developing economies are still populated by many capital enterprises endowed with inefficient or obsolete equipment. This endowment, as a result, tend to cause the millions of workers employed in such processes to produce a substantially lower rate of surplus value, compared to those from the workers in the industrialised countries. The reason for the low surplus value, Amin (1977) succinctly explained, is because the outputs of both societies are sold at a world price which is governed by the conditions of production in the industrialised countries (where cost of capital and for production are relatively lower). Consequently, therefore, the world (social) value resulting from the production of the workers of the ‘backward’ capitalist enterprises in dominated countries (like Nigeria) is proportionally lower (given the high cost of production and low productivity). This, in turn, results in a lower rate of surplus value, and eventually in an equally lower rate of profit.

The above could be said to be true with Nigeria, even as at today. This is because, first, the country could be seen to be still dominated by peripheral industries – it lacks quasi-monopolistic industries – given that as of 2013, it had zero patent rights registered with the World Trade Organisation (WTO), and that the majority of its exports are made up of primary/raw produce. Secondly, most of the real processes in the country still use obsolete equipment, due to the insufficient supply of electricity that causes the use of modern

technologies unappealing. These twin issues could be seen to conspire to cause most of the MSMEs in the country to be unable to extract commensurate rate of profits from international trade. Since they are largely engaged in the exports of primary or mainly competitive consumer goods whose prices are determined by low-cost technologies abroad, and have significantly lower productivity because of the obsolete equipment.

In sum, given that the prices of competitive produce are mostly determined by the dominant capitals (such as high-tech food processing industries, and the various advanced marketing companies) in the core and that competitive firms are price-takers, the level of profit accruing to the high-cost agricultural and competitive processes in Nigeria could be seen therefore as significantly less compared to those accruing to the advanced processes in the core. The unequal exchange between advanced and peripheral processes is what is contended to be contributing to the uneven development in Nigeria⁷⁰.

The persistent economic stagnation ensuing from the unequal exchange in international trade have also been replicated within Nigeria's domestic economy. Within the domestic context, it is the large foreign multinationals, with access to vast amount of capital, advanced technologies and patented processes that have dominated the Nigerian market and have, in turn, caused the decline or stagnation of many Micro, Small and Medium Scale Enterprises (MSME).

Overall, in line with Marx's economic proposition on the processes of centralisation/concentration and its tendencies, what we have witnessed (and are still witnessing) in Nigeria is the haemorrhaging of the soon-to-be *high-growth* local

⁷⁰ This could also be seen from the compensation perspective: the compensation of labour in Nigeria, from the subordinated agrarian process will certainly be lower than the compensation to labour in the core (with quasi-monopolistic processes that earn substantial level of profit).

enterprises who do not yet have the resources to compete with the large centralised foreign multinationals. For instance, since 2003, the number of registered medium/large-scale firms on the Nigerian stock exchange (NSE) has been on the decline while the stocks of foreign multinationals⁷¹ - mostly engaged in consumer goods – are the only actively traded shares (including as well those of financial institutions) on the NSE’s mainboard.

Furthermore, the low probability of capitalist enterprises in the country of earning sufficient rate of return is also reflected in the decline in the number of foreign direct investment in Nigeria’s real sectors: the volume of long-term capital that flows into the country easily captures this trend. Since 2007, for example, capital inflows into Nigeria have been mostly for accumulating financial assets (see Table 3 below): in 2013 alone, over 87% of the total capital inflows into Nigeria were channelled to accumulation of financial assets. The proportion of total capital imports that goes to real manufacturing has fluctuated since 2007. It peaked at 14% of the total inflow in 2010 but has since declined to an abysmal 1.7% in 2013. Of all the sectors of the economy, only inflows into financial activities (portfolio investment) have witnessed increases since 2007.

⁷¹The top 20 most traded firms in the NSE’s mainboard includes Unilever, PZ, Guinness, Cadbury, Nestle, Dunlop, International breweries, 7up, Vitafoam, and UTC. Many of these companies are under managerial ownership by foreign firms (with a controlling stake of over 70%) while others are subsidiaries of TNCs.

Table 3 - Capital importation by nature of business (US\$ - millions)

Yr.	Agric.	%of total	Production/ manuf.	%of total	Oil & gas	% of total	Finance	% of total	Total*
2007	2.50	0.31%	46.87	5.86%	12.62	1.58%	590.07	73.80%	799.60
2008	0.43	0.05%	42.01	4.43%	53.44	5.64%	737.81	77.86%	947.61
2009	0.30	0.05%	29.98	5.37%	11.44	2.05%	418.58	74.95%	558.50
2010	0.48	0.09%	71.18	14.00%	8.13	1.60%	353.75	69.59%	508.33
2011	1.78	0.27%	46.80	7.10%	1.91	0.29%	550.69	83.61%	658.65
2012	6.39	0.45%	45.76	3.25%	13.06	0.93%	1,212.4	86.21%	1,406.32
2013	9.15	0.48%	32.61	1.70%	11.78	0.61%	1,683.17	87.67%	1,919.92

Source: CBN Statistical database. *includes also the flows to other businesses (such as trading, hoteling etc.)

In conclusion, the low and unattractive rate of return that could be earned in productive activities in Nigeria could be said to have dragged the rate of real capital accumulation and to be one of the main reason the flow of foreign capital to real production in the country has been declining over the years.

4.1.2 Main factors undermining profitability in Nigeria

i. High internalised 'external' costs

In a study carried out in Nigeria in 2002, over 90% of the firms surveyed complained that the dilapidated infrastructural facilities in the country undermine their ability to remain profitable and productive (Tyler, 2002). According to the survey conducted by the Central Bank of Nigeria recently in 2013, high cost of production, deriving from inadequate infrastructure supplies (especially of electricity supply), was still bemoaned by over 70% of the firms that responded to be high on the list of the major constraints to doing business in Nigeria (CBN, 2013).

In the survey by Tyler in 2002, 97% of the 232 firms surveyed was noted to operate privately owned electricity generators. Furthermore, the study observed that the cost of acquiring these private generators and their components, and the subsequent annual cost

of maintaining them, amounts to a combined total of 25%, of the total value of machinery and equipment needed for a full production. A recent article published by the *Financial Times* in 2014 estimated this cost to be around 40% of the total cost of a full production.

In essence, the insufficient supply of electricity, which causes the internalisation of the process and as a result an increase in the cost of production, undermines the ability of real assets in Nigeria of earning a commensurate rate of profit that could provide for their subsistence in the long run. As Keynes (1936: 67) explained, the larger the financial provision which it is thought necessary to make before considering net income (that is if there will be high depreciation and maintenance costs to be always made), the less favourable to further investment and therefore to employment will a given level of investment prove to be. In the case of Nigeria, the inadequate electricity supply often causes fast depreciation and damages to equipment (and also causes firms to resort to private electricity generation), so there is always a provision that needs to be made for the continual maintenance of damaged equipment, and for generating independent electricity and for servicing the generators. These provisions unarguably eat deep into the profit (cash flow) of the capitalist agent and as such makes further investment in the production process less favourable.

Only a few studies have actually examined the impact of rising costs of production on a firms'/nations' aggregate possibility for earning sufficient rate of profit comprehensively. Prominent amongst those few is that by Immanuel Wallerstein in 2004. He lucidly articulated how increasing production costs affects the rate of profit. Wallerstein (2004) attributed the falling rate of profit in the world system particularly to the rising costs of production. He noted that because producers cannot arbitrarily raise their sales prices to just any level because of various constraints – such as the existence of competitive sellers

and the level of effective demand – that the producers are, as a result, inherently faced with falling rate of profit when their costs of production increase.

According to Wallerstein, the following three typical costs are the main costs of production that firms usually incur in their operations. These are –

- i. The costs for labour power
- ii. The cost of other means of production
- iii. And the taxes that are levied by all governmental authorities.

Wallerstein remarked that each of these costs has been rising over the years and that they have posed serious threats to the profitability of many capitalist firms. The costs of labour, he remarked, are influenced by the trade union power, which is intensified by ‘effective labour organisations and level of education’. The counter strategy most firms have often employed to offset this creeping rise in the cost of labour power, Wallerstein observed, is to relocate their factories to areas (mainly periphery countries) where there are weak labour organisations and cheap labour costs.

However, this cost could be said to be marginal (or have been fully exploited) in Nigeria’s case. Owing largely to the abundance of ‘low-skilled’ workers and the ‘ineffective’ labour organisations that are easily trampled by both private and public authorities in the country: the weak judicial system in Nigeria causes there to be no stringent enforcement of labour laws, thus affording private firms the liberty to exploit the labour force without fear of any serious legal repercussions. On the other hand, advanced capitals from the core have also benefited from shifting their production to periphery countries with cheap work force, weak judicial system and ineffective labour organisations: this, coupled with advanced marketing strategies and technologies, enable the Trans-National Corporations to expropriate significantly higher surplus values than the periphery industries. In

essence, although the periphery firms have access to cheap labours, they do not have the same access to advanced technologies, excellent innovation, capital and technical expertise that could enable them to extract huge surplus values from their processes. Consequently, the quasi-monopolistic imperialist firms still have the competitive advantage over the periphery processes regardless.

The second rising cost affecting the profit of the capitalist agents mentioned by Wallerstein is the costs of other means of production. Wallerstein classified these costs into two broad categories –*internalised* and *externalised* costs. The internalised costs are the costs the producers must pay for in the market, which includes the costs of machinery and materials of production (from raw materials to semi-finished and finished products, which the producer must employ in the production process). The externalised costs, on the other hand, are those costs of production that firms are able to shift from their balance sheet to an external entity. These externalised costs include the cost of toxicity; the cost of exhaustion of raw materials, and; the costs of infrastructural amenities.

Wallerstein noted that primarily in the past that organisations have been dumping their toxic waste in some public spaces with minimal or no treatment in order to save some costs. However, in recent times, the public spaces for dumping, he remarked, have been potentially exhausted worldwide, and it has come to be perceived globally as a social problem that needs serious addressing by all stakeholders. Similarly, the problem of renewal of exhausted raw materials, he explained, could also be seen to be contemporaneous to the problem of disposal of toxic industrial wastes. Overall, Wallerstein concluded that these two intertwined issues – dumping of toxic waste and replenishment of natural resources – have emerged as the theme of several major social movements by many environmentalists and Green campaigners in recent years. The

subsequent impact, therefore, is that, through the campaigns by various pressure groups, firms are now collectively held accountable, mostly through taxation and levies, for taking care of the environment and the natural resources they use for their production. This, Wallerstein remarked, is the *internalisation of external costs*. He concluded that the internalised external costs have inherently increased the costs of production for the capitalist agents over the years.

These costs, for toxicity and exhausted raw materials, could be argued to be relatively proportional across economies; that is, the weight of these costs could be said to bear no significant differences on the production line when compared amongst those incurred by similar firms in different economies. Take for instance in Europe, the carbon emission tax is relatively proportional across states in the union.

However, the third part of the externalised costs that firms are forced to internalise, which includes the costs for the provision of infrastructural amenities such as transport networks, communication networks, security systems, water supply and electricity supply are not relatively proportional across the world system. These weigh disproportionately across economies.

According to the account by Wallerstein (2004), wherever the government subsidises costs by providing these amenities to the producers, the costs borne by the firms are minimal. However, when these infrastructures are continually being privatised and not subsidised at the same rate across economies and are not of equal supply across societies the chunk of the costs is borne by the capitalist producers. This means that firms in countries like Nigeria where the infrastructure supply is both inadequate and privately provided are therefore faced with increasing costs of production that are not relatively

proportional to those incurred by firms in economies where the infrastructures are in adequate supply and are not privately provided.

It is this part of the externalised costs, the cost of infrastructure supply which firms are forced to internalise, that is argued here as essentially narrowing the possibilities for capitalists to earn sufficient rate of return, and, as a result, mitigating the growth of real capital accumulation in Nigeria. The significant impact of the costs for the supply of essential amenities can be seen from the differences in the cost levels for the provision of these amenities borne by similar firms operating in different countries. For instance, many of the firms surveyed by Tyler (2002) noted that the costs of privately providing electric power double, and in some, treble their costs of production as compared to the cost of production borne by similar firms in other countries. One of the firms interviewed in the study, that produces pharmaceutical goods, noted that it had to stop local production of one of its drugs when it observed that it costs higher to produce in Nigeria than to import the same drug from India.

In a newspaper article published recently (*Financial Times*, 05 May 2014), it was remarked that the production costs in Nigeria are significantly higher not only than South Africa's but also than the neighbouring country, Ghana. The main culprits for the high costs of production the article revealed were, unsurprisingly, the cost of securing a reliable alternative supply of electricity and the cost of distribution; according to the *Financial Times* report, the cost of distribution across Nigeria's strained and inadequate transport network have risen more than 15% in the past two years.

These high costs of production that are prevalent in Nigeria certainly underscore, to a large extent, why there are stagnating levels of real capital accumulation in the economy despite the abundance of both human and physical capitals. Nigerian firms are, at most

times, at a cost disadvantage due to these crippling additional costs of production, and are thus not able to compete equally in a competitive global market; where intense competition produces a downward pressure on prices thus making high-cost production processes that are prevalent in the country unable to earn sufficient returns. The social cost of inadequate electricity supply alone was recently measured to be costing Nigeria around three and half per cent of its GDP per annum (Foster and Pushak, 2011). These authors noted that developing Nigeria's power sector to the level of the African leader, Mauritius, would effectively boost annual per capita growth rates by an average of two percentage points. The study also observed that infrastructure constraints are responsible for about 40% of the productivity handicap faced by Nigerian firms. A recent article in the *Financial Times* noted that most retailers in Nigeria have scaled back expansion mostly because of difficulties with electricity supply and distribution (*Financial Times*, 05 May 2014).

The table below shows how extensive inadequate electricity supply is in Nigeria compared to Mauritius ('Africa's leader in electricity generation') and Indonesia (a country that had great economic similarities with Nigeria in the 1960s-80s).

Table 4 - Electricity supply indicators

Outcome	Nigeria	Indonesia	Mauritius
Average duration of a typical electrical outage in a day (hours)	8.2	3.3	3.2
Losses due to electrical outages (% of annual sales)	8.5	0.6	0.5
Number of electrical outages in a typical month	25.2	0.9	1.2
Percent of firms identifying electricity as a major constraint	75.9	13.8	42.9
Percent of firms owning or sharing a generator	85.7	6.4	24.5
Average proportion of electricity from a generator (%)	60.9	27.6	3.4

Source: World Bank's Enterprise Surveys database, <http://databank.worldbank.org/data/views/variableselection/selectvariables.aspx?source=enterprise-surveys>. The figures for Nigeria are for 2007 and that for Indonesia and Mauritius are for 2009.

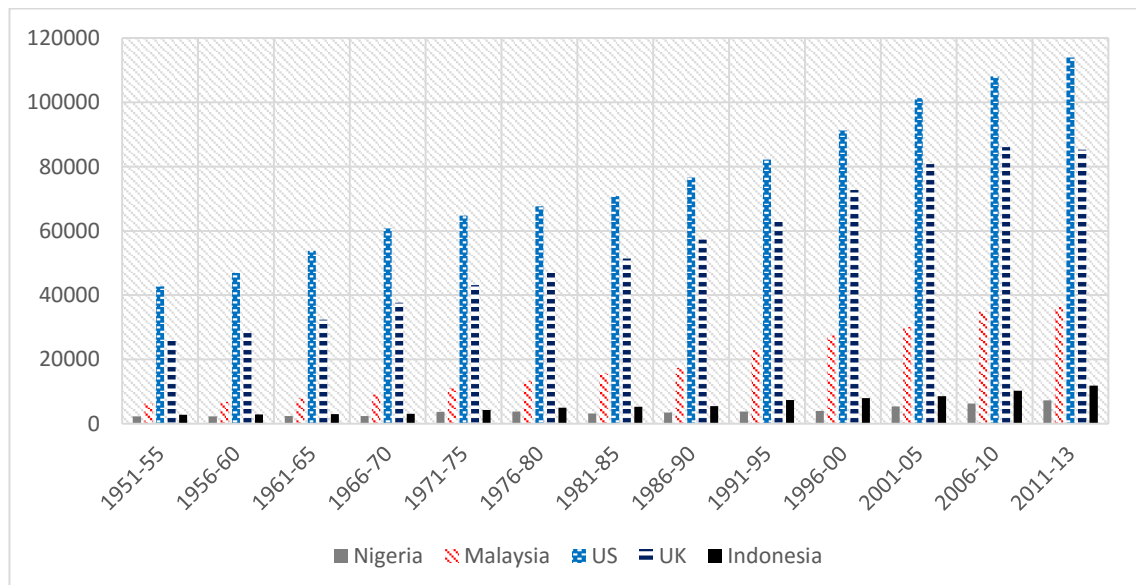
From the table above, the depth of inadequate supply of electricity in Nigeria is quite glaring. With the cost of privately providing electricity amounting to 25% of the total cost of production of a typical firm (using the conservative estimate observed by Tyler in 2002), and the power outages further costing an average loss of eight and half percent of a firm's annual sales – mostly due to the amount of time wasted rebooting machines, or the materials spoilt in the midst of the power outage – a typical Nigerian firm's potential return is essentially therefore reduced, on average, by around 33.5% per annum. And with over 85% of firms in Nigeria generating their own power most often (in a twelve-hour work period, a typical power outage in Nigeria is over eight hours long), it is thus clear that most firms in Nigeria are not spared from these constraints that seriously undermine their ability to earn a sufficient rate of return on their capital assets.

The few firms that are still operating in Nigeria are forced to restructure constantly, either by reducing output or by cutting wages, cutting down their labour force or changing businesses altogether. Many of the firms surveyed in the study by Tyler (2002) reported that they often had to reduce output by up to 30%; a particular manufacturer noted that its steel sheet machine is constrained by the lack of power and by increased wear and tear

caused by constant power interruptions. The manufacturer remarked that its installed base has the capacity to produce 480 sheets per day, but because of constant power interruptions, it often takes five days to produce similar quantity; because it takes some 20 minutes to start-up each time power is restored and often needs repairs because of improper shutdowns caused by outages.

The overall impact of inadequate infrastructural amenities can be seen on the level of productivity in the economy. From the figure below, it could be discerned that the increased inadequacy of infrastructural amenities in Nigeria has greatly occasioned the stagnation in the level of output per labour employed in the economy per hour (see Figure 14 below).

Figure 14 - Labour productivity per person employed, in 2013 US\$



Source: Own elaboration based on data from the Conference Board Total Economy Database (TED), January 2014. <https://www.conference-board.org/data/economydatabase>.

To conclude, the high internalized ‘external’ costs of production that is persistent in Nigeria could be seen to cause, to a very large extent, the declining probability of capitalist enterprises in the country of earning sufficient level of profit from their productive processes. This inability, in turn, inhibits expansion of capital accumulation,

along with growth in employment and real income in the country. In essence, the high cost of production could thus be said to be exerting an influential cost on the developmental propensity of Nigeria.

The cost could also be seen from the falling rate of foreign direct investment in Nigeria. Foreign direct investment has been declining while portfolio investments have been rising. In this era of supply-chain industrialisation, countries that can grab pieces of Global Production Networks (GPNs) are often argued to be quickly rewarded with lots of employment, knowledge diffusion, local firm stimulation and capital injection (Dicken, 2013; 430-452)⁷². However, to grab those pieces, a country, Dickens (2013) noted, has to have the necessary infrastructural base to attract the manufacturers: according to Dickens, entry barriers – such as high cost of production – impedes the integration of economies into the GPN.

Therefore, given the inadequate infrastructures, which in a way amplifies the cost of production in Nigeria, it could be said that the necessary condition that must be fulfilled before an economy is inserted into the Global Production Network has been lacking in Nigeria. This, to a significant extent, explains the low rate of real foreign direct investment and manufacturing in the country.

⁷² According to Dickens, the non-insertion into GPNs affects the developmental prospects of that community because such exclusion hinders the ability of communities to capture and retain the investments (especially the jobs) of the component parts of the GPNs.

To conclude, it could be said that no appropriate solution can remediate the underdevelopment in Nigeria without first addressing the problem of inadequate supply of infrastructural amenities in the country.

ii. High cost of capital

Since the deregulation of the rate of interest in mid-1980 in Nigeria, the interest rate has risen tremendously. The prime lending rate, which averaged 7% from the 1960s to mid-1980s, increased to over 19% from mid-1980 to 2011. Similarly, while sub-prime chargeable rates (i.e. the maximum chargeable rate of interest) in the pre-reform era were around 11-13%, the equivalents in the post-reform era have averaged around 27-36%.

With the intensifying decline in the rate of profit, due to increasing costs of production, there is surely a limit that an entrepreneur can afford to pay for borrowing any external capital⁷³. This means therefore that given the high cost of production that inhibits the sufficient reproduction of profit by real capital assets in Nigeria that the cost of capital in the country should be sufficiently lower to compensate for the low profits earned.

In the Nigerian case, however, though little is often made from the capital invested in the real economy, much is still expected – from the rising interest rate – to be given for it. In essence, most capitalists in the country, already blighted by high production costs, which decimates their profits substantially, are further burdened with exorbitant interest charges: since the late 1980s, the rate of interest on loans has rarely dropped to a single digit (see

⁷³ Smith did note that wherever a great deal can be made by the use of money, a great deal will commonly be given for the use of it and wherever little can be made by it, less will commonly be given for it (Smith, [1776] 2005: 78).

Table 5 below), while the profits that could be earned from employing such capitals have been, most times, below the cost of borrowing such capitals (see Table 6).

Table 5 - A cross-section of the rate of interest in some select countries (2000-09)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Avg.
Nigeria	26.76	28.45	30.19	22.88	20.82	19.49	18.41	18.36	18.7	22.62	22.67
Malaysia	7.67	7.13	6.53	6.3	6.05	5.95	6.49	6.41	6.08	5.08	6.37
UK	5.98	5.08	4	3.69	4.4	4.65	4.65	5.52	4.63	0.63	4.32
United States	9.23	6.92	4.68	4.12	4.34	6.19	7.96	8.05	5.09	3.25	5.98
China	5.9	5.9	5.3	5.3	5.6	5.6	6.1	7.5	5.3	5.3	5.78

Source: Figures are from the IMF's International Financial Statistics database, <http://elibrary-data.imf.org/DataExplorer.aspx>

Table 6 - Average return on capital employed (ROCE) and the rate of interest in Nigeria

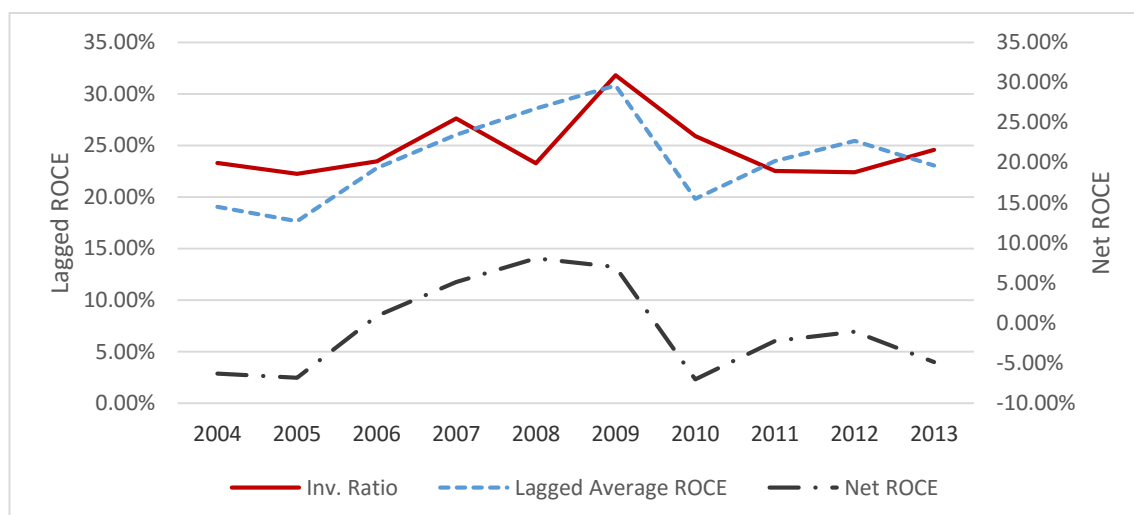
Year	ROCE (%) [*]	Lending rate (%) [†]	Net ROCE
2004	14.51	20.82	-6.31
2005	12.68	19.49	-6.81
2006	19.31	18.41	0.90
2007	23.48	18.36	5.12
2008	26.76	18.70	8.06
2009	29.60	22.62	6.98
2010	15.51	22.51	-7
2011	20.20	22.42	-2.22
2012	22.71	23.79	-1.08
2013	19.64	24.51	-4.87

Source: ^{*}ROCE figures were calculated by the author based on data from the annual financial statements of the top 30 indigenous non-financial corporations listed on the Nigerian Stock Exchange. The ROCE figures are averages of the returns on capital employed by all of these 30 firms in respective years. It is calculated as the ratio of profit before interest and as (PBIT) on working capital. [†]The lending rate figures were sourced from the CBN 2014 statistical database, <http://statistics.cbn.gov.ng/cbn-onlinestats/>. They are average lending rates in a given year.

Table 6 contains the share of profit before interest and taxes from invested capitals for a number of indigenous enterprises in Nigeria from 2004 to 2013. It is clear, from the table, that on average if the total invested capital is borrowed at the going rates of interests that it is highly unlikely that the borrowing firm will be able to repay the interests from the returns earned by employing the borrowed capital in productive process in the country; the table shows that the exorbitant rate of interest charged by

financial institutions is often above the rate of return expected from the invested capital. The relationship between the rate of profit and the rate of capital accumulation is graphically illustrated in Figure 15 below.

Figure 15 - Investment ratio, lagged average ROCE and net ROCE



Source: Own elaboration based on data from IMF 2014 World Economic Outlook Database, available at <http://www.imf.org/external/pubs/ft/weo/2014/01/weodata/index.aspx>.

From Figure 15 above, we see that from 2006 to 2009, when the net ROCE were positive, indicating that the rates of return on employed capital were higher than the rates of interest, the investment ratio was also higher (with exception to 2007-08, which was when the global economic started). After 2009, the level of investment in the economy tended to fall. This fall was also in consonance with the fall in the net ROCE, which became negative again after 2009 – due to slight increases in the rate of interest. In sum, it is evident that the rate of profit clearly has a positive correlation with the level of investment in the economy⁷⁴. The relation between lagged ROCE (i.e. ROCE in previous years) and current investment corroborates this relation. Both seem to be moving in unison.

⁷⁴The net ROCE has a correlation level of approximately 0.60 with the ratio of investment, with a significance level of 0.05.

In sum, a strong relation seems to exist between the rate of profit and that of interest: according to Smith ([1776] 2005: 289), when the profits which can be made by the use of capital are diminished, the price which can be paid for the use of it must necessarily be diminished by them. Keynes (1936: 135) also remarked that the price of capital (the interest rate) should be below the return (rate of profit) which could be made from it. In fact, both authors concluded that if the legal rate of interest were usually high, sober people who will give for the use of money no more than a part of what they are likely to make by the use of it would not venture into the competition⁷⁵.

From Table 6, it can be gleaned that on average, the possibility of making sufficient profit in a real production process in Nigeria, after compensating for the various associated risks (including the payment of interests), is often less than zero (assuming the whole capital is to be borrowed). Hence, in line with the conclusions of Smith, Keynes and Minsky also, it should come, therefore, as no surprise that the level of real investment in Nigeria has stagnated over the years even with the ample availability of capital and cheap labour force in the country. Sober people in the country have been precluded from partaking in productive economic activities due to the unattractive returns that could be made from employing the borrowed capital.

Interestingly, only a few studies have paid adequate attention to this very important fact while studying the causes of underdevelopment in Nigeria. Although the recent National Enterprise Development Programme (NEDEP) initiated by the Nigerian federal government in 2013 recognises low access to affordable finance as one of the prominent factors inhibiting the potentials of MSMEs in the country, it did not, explicitly or

⁷⁵ Minsky (1986) argued that a capitalist economy actually runs into problems when profit-maximising behaviour does not generate sufficient cash to service debt and sustain asset values.

implicitly, consider the high cost of capital relative to the rate of return obtainable in the economy. The report simply implied that the cost of capital in Nigeria is high relative to those obtainable in other countries and did not relate the cost of capital to the average rate of profit obtainable in the economy.

Two distinct factors can easily be seen as largely responsible for the exorbitant rate of interest charged by financial intermediaries in Nigeria. First is due to poor contract enforcement in the country - which is because of the weak judicial system. This could be seen to be the case when the law does not enforce the performance of contracts, and as a result puts all borrowers nearly upon the same footing with bankrupts or people with doubtful credits (risk borrowers), and because of the uncertainty of recovering the money, the lender thus exerts usurious interest, which is usually required from bankrupts.

Figure 16 below highlights the level of government effectiveness⁷⁶, regulatory quality⁷⁷ and the rule of law⁷⁸ in a cross-section of some countries. Based on a ranking from 0 to 100 in each component, with 0 the lowest and 100 the highest, Nigeria ranks amongst the lowest (out of 213 countries) in each of these three components measured. When matched with the data on the rate of interest, it can be easily seen that countries that rank high on these three indicators, on average, have a lower rate of interest (see Figure 17).

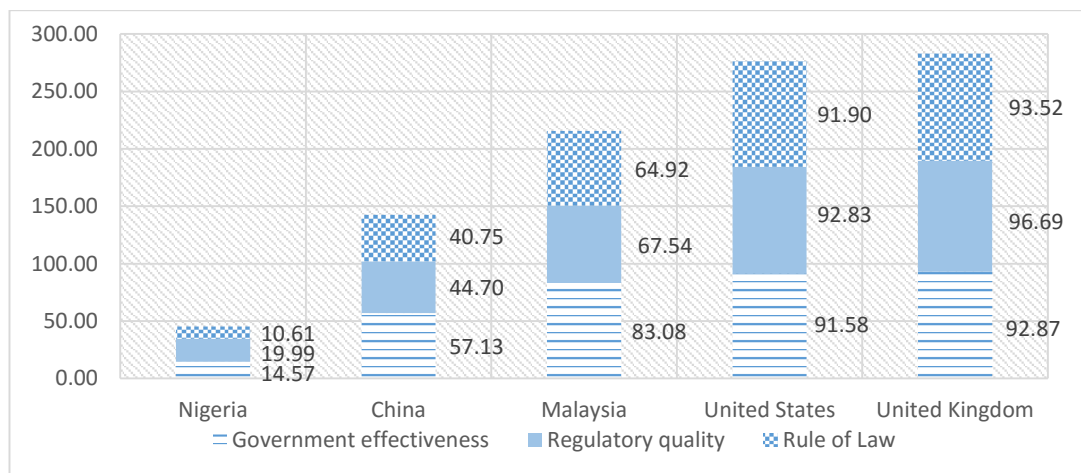
⁷⁶This indicator captures the perceptions of the quality of public services, the quality of the civil services, and the degree of its independence from political pressures, the quality of policy formulation and implementation and the credibility of the government's commitment to such policies.

⁷⁷This indicator captures perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development

⁷⁸This captures perceptions of the extent to which agents have confidence in and abide by the civic rules, in particular the quality of contract enforcement, property rights, the police and the courts.

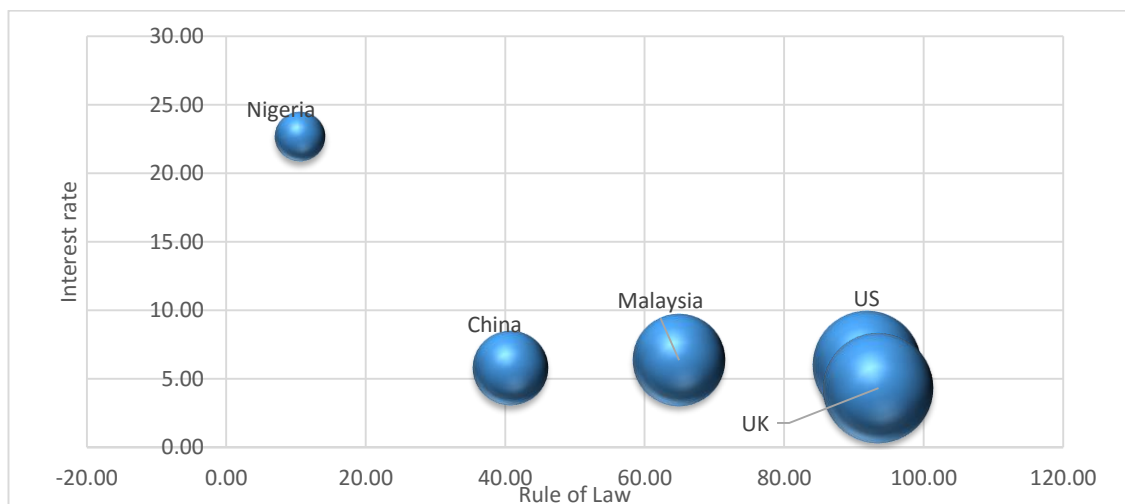
These contradictions were also expertly explicated by La Porta *et al.* (1997), Demirgüç-Kunt and Maksimovic (1998), and Asiedu (2003). These authors provided support to the argument that weak investor protections or contract enforcement (which is an outcome of the ineffective judicial system) reflects in underdeveloped and often expensive capital markets, and often results in the country not been able to attract foreign direct investment.

Figure 16 - Governance indicators (based on percentile ranks)



Source: Own elaboration based on data from World Bank's 2014 World Governance Indicator database, <http://databank.worldbank.org/data/views/variableselection/selectvariables.aspx?source=worldwide-governance-indicators>. Note: The percentile ranks for each of the three indicators represented in the chart above are the average ranks from 2000 to 2012 for each country.

Figure 17 - Governance indicators and the rate of interest



Source: Own elaboration based on data from World Bank's 2014 World Governance Indicators and the IMF's 2014 International Financial Statistics databases. Note: The interest rate figures are based on the average figures in Table 5. The bubble sizes reflect the average rank for regulatory quality from 2000-12.

La Porta *et al.* (1997) showed that countries with poorer investor protections, measured by both the character of legal rules and the quality of law enforcement, have smaller and narrower capital markets (for both equity and debt) and that those with better legal protections have more external finance in the form of both higher valued and broader capital markets. For the later, they argued it is so because a good legal environment protects the potential financiers against expropriation by entrepreneurs thus raising their (the financiers') willingness to surrender funds in exchange for securities, and hence expands the scope of capital markets, which invariably accelerates the pace of capital accumulation along with economic development.

Demirgüç-Kunt and Maksimovic (1998) on the other hand investigated how differences in legal and financial systems affect firms' use of external financing to fund growth. They showed that countries whose legal systems scored high on the efficiency index have a greater proportion of firms using long-term external financing, and these firms' growth exceeded predicted average rate of growth.

Similar to Demirgüç-Kunt and Maksimovic (1998), Asiedu (2003) showed that some minimum level of ‘good governance and institutions’⁷⁹ matter in order to attract private foreign investment. She opined that if a country’s institutions are sufficiently weak that the country may not achieve the minimum threshold required to attract foreign investment. Her theoretical and empirical results both indicated that unless these basic institutions are in place that the policy recommendations of standard models such as the Solow Growth Model are fundamentally inapplicable: in other words, countries that lack these basic institutions, her results contended, are more likely not to converge with developed countries.

Overall, it is clear that firms in countries that have high ratings for compliance with legal norms are able to obtain external funds at reasonable and affordable prices, and are as a result able to grow faster, whereas those that do not tend to stagnate or even decline. Furthermore, a satisfactory level of these institutions is also argued to help countries attract foreign investment.

Thus, the ineffective judicial system in Nigeria can be argued to be partly responsible for the usurious interest rate financial intermediaries in Nigeria charge for lending; because the risk of loss is high, the rate charged, therefore, needs to be high enough to compensate for the level of potential risk involved. In most cases, the financial intermediaries demand very high levels of collateral as a prerequisite for lending (Table 7 below), which results in those without sufficient collateral (a large proportion of the population by the way),

⁷⁹ Her measures of institutional quality fall into two categories: (i) governance, and (ii) political and civil rights. The governance variables include measures of judicial efficiency, contract enforcement, and corruption. Political and civil rights include measures of the extent to which individuals can participate in the political process and the independence of unions and the media.

but with genuine business ideas, to be precluded from participating in growth inducing economic activities.

Table 7 - Loan conditions in some selected countries

Attributes	Nigeria	Malaysia	Mauritius
Proportion of loans requiring collateral	78.8	60.4	81.1
Value of collateral needed for a loan (% of the loan amount)	138.8	64.6	59.9
Proportion of investment financed by banks (%)	1.3	32.8	30.8
Percent of firms with a bank loan/line of credit	3.8	60.4	47.7

Source: Figures are from the 2014 World Bank's Enterprise Survey database, http://databank.worldbank.org/data/views/variableselection/selectvariables.aspx?source=enterprise-surveys#s_p.

Note: Figures for Nigeria and Mauritius are from the 2009 survey and those for Malaysia are from the 2007 survey.

The second reason for the high rate of interest charged in Nigeria derives from the monetary policy directive in place in the country. In the words of the former governor of the Central Bank of Nigeria, Sanusi Lamido Sanusi, and in consonance with the primary mandates of many central banks, the obligation of the central bank is to 'manage inflation' (Anon, 2013). For this reason, the CBN's monetary policy committee has often kept the monetary policy rate at circa 12-4% in order to manage inflation in the country.

However, given that the monetary policy rate is the barometer that swings the direction of interest rate in the economy, and bearing in mind also that banks are allowed to charge some percentages above the policy rate, it could therefore be seen that the prime lending rate in Nigeria is already in the high double digits as a result of the conscious monetary policy pursued by the monetary authority. When we now consider the weak judicial system that cannot enforce contracts and the very high cost of running banks; due to erratic power supply, most banks run on independent power supply; it becomes even

clearer that it is close to impractical for banks not to charge high-interest rates to cover their costs and potential losses.

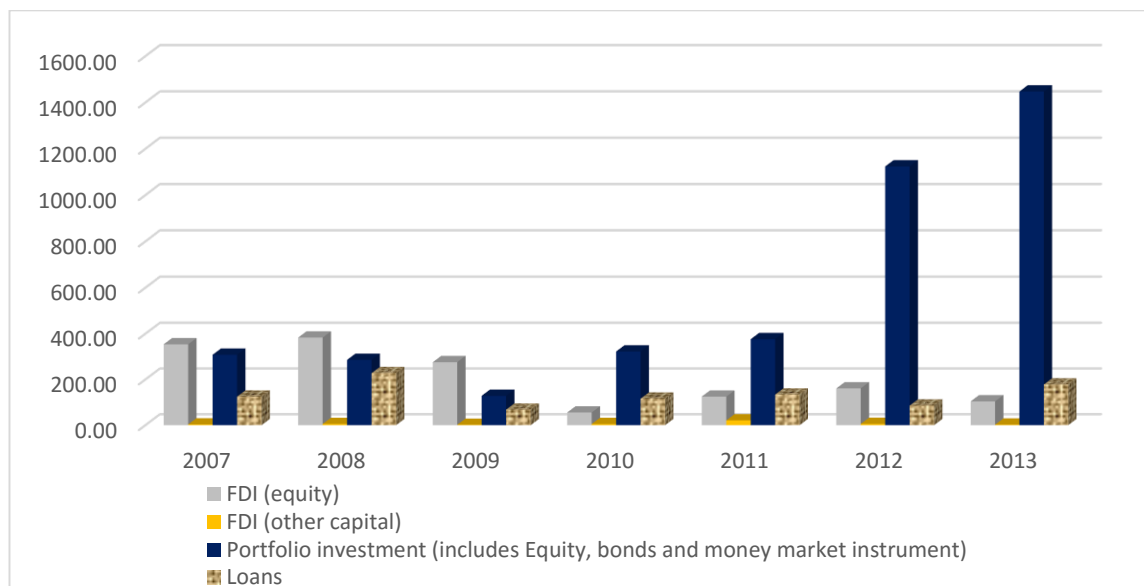
In the 1970s, the cause of rising inflation witnessed in many countries at that time derived primarily from the conscientious increases in the prices of goods by producers – which arose due to the increasing cost of oil. However, since the mid-1980s, increasing inflows of liquid capital has been the source of increasing inflation in many recipient countries. Combined with the neoliberal mandate of fighting inflation with monetary policy, the end effect has been a high rate of interest in many developing countries; many of whom are often inundated with liquid foreign capital.

While studying some Latin American economies, Palma (2013) observed that it was the huge capital inflows, brought about by the liberalisation of capital accounts, that induced the high rate of interest witnessed in many Latin American countries in the 1990s. The reason, he explained, is that when faced with excess influx of foreign liquidity that has the tendency to induce inflation, the monetary authority, with the mandate to manage inflation with monetary policies, often resorts to raising the monetary policy rate in order to mop the excess liquidity, and to stem any risk of inflation in the economy.

In Nigeria, since the deregulation of the capital account controls, the inflow into the economy has more than doubled. However, much of these inflows are often in liquid short-term form (portfolio investment); with a small proportion as long-term investment (see Figure 18 below). The presence of these huge liquid inflows (coupled also with the revenue from oil exports) forces the monetary authority to maintain a high monetary policy rate in order to quell any threat of inflation that is prone to arise. However, in managing inflation with this monetary tool, the pace of capital accumulation is

inadvertently undermined: due to the resultant high cost of capital, which such policy induces.

Figure 18 - Capital importation by type of investment in Nigeria (US\$ - millions)



Source: Own elaboration based on data from CBN 2014 statistical database, <http://statistics.cbn.gov.ng/cbn-onlinestats/>

In conclusion, the constellation of the weak judicial system and the excessive influx of liquid capital from abroad in a way occasion the high rate of interest charged by financial intermediaries, which in turn inflates the cost of capital and reduces the probability of real capital enterprises of earning a sufficient rate of profit in Nigeria. The consequence often is the decline in the pace of capital accumulation in the country. The resultant falling rate of capital accumulation, on its part, explains to a very large extent the increasing unemployment, falling income and the overall underdevelopment of the economy. Here again, any meaningful solution to Nigeria's problem should also encompass addressing this problem of 'costly' capital.

iii. Uneven development

The neoliberal policy of trade liberalisation involved the removal of the various barriers to international trade, which many developing countries, such as Nigeria, had previously erected to protect their nascent industries. For instance, import tariffs, quotas and subsidies to local firms were abolished during the implementation of the Structural Adjustment Programme in the late 1980s in Nigeria. A peculiar consequence of these reforms, however, has been the exposing of these nascent, and often backwards, indigenous industries in the country to intense competition from firms in other economies with varying levels of technological advancement.

The developing blocs of capital assets in Nigeria which had, for an extended period of time (during the regulation epoch), tended to earn adequate profits and as such grow (as was evident from the proportion of national output that was made up of contributions from the manufacturing output in those periods), have however declined since the liberalisation of trade. As soon as the advanced capitals of the core, and the semi-periphery blocs, were allowed, by virtue of trade liberalisation, to compete, sometimes unhindered, with those in Nigeria they began to undermine the developing blocs of capital in Nigeria. By offering lower-priced substitutes, which advanced capital assets from the core (and other semi-periphery economies such as China and India) can afford to make through the combination of their lower-cost inputs (especially achieved through access to more advanced lower-cost technologies, steady and cheap electricity supply and also cheap labour power and capital), the already fixed high-cost technologies in peripheries such as Nigeria therefore found it difficult to reproduce sufficient returns that would ensure their continual existence, given that the price of their outputs are determined by the global competitive forces. The study by Brenner (2006), produced a cohesive analysis

of this process of uneven development in the global system by elucidating its impact on fixed high-cost technologies that characterised the U.S. economy in the 1950s/60s.

The starting point for the rate of profit to fall, according to Brenner, stem from the anarchy and the competitiveness of capitalist production in the world-system. He explained that the need for the capitalists to acquire competitive advantage requires them to cut costs, which they often pursue by introducing ever-more efficient technology (through constant innovation). However, by pursuing this strategy, he showed that the outcome embodies two separate effects on the wider economy. These constant innovations, Brenner observed, brings about the unprecedented development of the productive forces, but at the same time prevents firms with higher-cost methods of production, frozen in their already-existing plant, equipment, and software, from realising their fixed capital investments.

According to Brenner, the competitive pressures induced by the low-cost technologies the German and Japanese firms were using in the 1970s caused the collapse of the high-cost technologies that characterised the U.S. economy. Therefore, by producing cheaper and selling cheaper, the German and Japanese firms were able to undermine the high-cost processes in the U.S.

This contradiction of uneven development was exactly what Kate Meagher explained that has been undermining the ability of capital assets in Nigeria. She noted that liberalisation and state neglect condemned Aba's⁸⁰ informal producers to a future of disconnection and

⁸⁰ Aba is one of the industrial cities in Nigeria. Located in the eastern part of the country, the annual turnover of the city's shoes and garments industry alone was estimated to be around \$174.9m in 1999/2000 period and the sector was estimated to be providing employment to over 20% of the total population in that area (Meagher, 2010).

economic failure: the liberalisation of trade, she observed, allowed cheaper imports to undermine the competitive capacity of Nigerian producers (Meagher, 2010). The cheap imports (mostly made in China and imported via the Freeport of Dubai), Meagher observed, flooded the Nigerian market and subsequently caused the collapse in demand for locally manufactured goods. She argued that these crippling foreign competitions were causing the haemorrhaging of local producers in Nigeria: from her estimate, nearly half of the businesses she surveyed earlier in the 1990s have, either moved into other economic activities (mostly commercial trading) or have completely closed down, by 2005.

The inability of Nigerian firms to compete effectively in the global market could be seen to derive largely from the high costs of production (due to the private provision of infrastructures and expensive capital) that raises the cost curve, and also as a result of lack of technological advancement (innovation) that could have differentiated (and added value to) the country's produce.

To begin with, in the face of increasing costs of production, studies have found that firms often respond through adopting other strategies (apart from private provisions and output and input reductions) to survive: for example, Tyler (2002) reported that firms might respond to infrastructural deficiencies through business relocation, factor and/or product substitution. With regards firms adopting business relocation strategy in Nigeria due to infrastructural deficiency, Tyler remarked that there was no evidence in his study of firms relocating to obtain improved electricity supply in the country. This is not surprising largely because little would be gained, since the shortage of electricity supply is ubiquitous in Nigeria. The survey actually showed that on average, there was only a slight variation in the incidence of generator ownership by firms in different regions of the

country (96% of firms in another part of the country were using private generators to generate power compared to 98% in another part).

With regards firms adopting the factor substitution strategy in order to cope with infrastructural deficiency, Tyler remarked that there was much evidence from his survey to suggest that most firms in Nigeria were adopting this strategy. He observed that most firms in Nigeria were adjusting their mode of production in favour of less electricity-intensive inputs; this strategy implies avoiding modern technologies with electronic controls and, in extreme cases, reverting to mechanical technologies, which are not susceptible to damage from electricity power fluctuations and outages. This strategy however also has a huge implication on the ability of capital assets in Nigeria to compete effectively against foreign capitals, and as such earn a favourable rate of profit.

Adopting the factor substitution strategy (that is adopting mechanical technologies that do not consume much electricity or is not susceptible to damage from power outages) by Nigerian firms inevitably puts them in an even more disadvantaged position, and also further undermine their competitiveness in the global market. To understand the ramification of this strategy on the reproduction capability of capital assets in Nigeria, one needs to analyse this strategy within the 'creative destruction' paradigm.

The renowned Austrian-American economist, Joseph Schumpeter, observed that innovation causes most markets to evolve in a characteristic pattern: broadly, he posited that the opening up of new markets, foreign or domestic, and the organisational development from the craft shop and factory to such concerns as U.S. steel illustrate the same process of industrial mutation that incessantly revolutionises the economic structure from within, incessantly destroying the 'old' one and incessantly creating a new one (Schumpeter, [1943] 1976: 83). Schumpeter referred to this process of industrial

transformation as 'creative destruction'. He noted that it is the essential fact about capitalism. For Schumpeter, capitalism creates and destroys existing structures: the new perennial gale of creative destruction, he contends, destroys the modus operandi of competition.

Schumpeter argued that wars, revolutions (and so on) often condition industrial change, but they, he asserted, are not its prime movers. He also remarked that the evolutionary character of capitalism (i.e. its constant transformation) is not due to a quasi-automatic increase in population and capital or to the vagaries of monetary systems. The fundamental impulse that sets and keeps the capitalist engine in motion, he asserted, comes from the new consumers' goods, the new methods of production or transportation, the new markets, the new forms of industrial organisation, (i.e. through innovations) that capitalist enterprise creates. These innovations, he maintained, threatens existing structures of an industry considerably by reducing the long run scope, and the importance of practices that aim at conserving established positions and at maximising the profits accruing from them, through restricting their outputs (*ibid*: 88).

In view of this explanation by Schumpeter, it can be deduced that a firm that can innovate by developing superior products, and/or by adopting superior advanced technologies, or by exploiting organizational capabilities, would earn positive economic profits during the steady-state periods compared to its rivals that failed to innovate (or are trying to conserve their obsolete processes).

These innovations, as Schumpeter explained, disrupts the status quo, creates shocks, which often displaces the incumbent and favours the innovators; for instance, firms that have adopted cost-reducing newer technologies can reduce prices in order to disrupt the market and gain larger market share. Therefore, those that fail to adapt their production

process to accommodate the new prices determined by these new cost-saving technologies will be undermined. For Schumpeter, old concerns and established industries, whether or not directly attacked still live in 'the perennial gale'. Situations, he remarked, often emerge in the process of creative destruction in which many firms may have to perish that nevertheless would be able to live on vigorously and usefully if they could weather a particular storm (short of such as a general crisis or depression). Overall, Schumpeter noted that there is no point in trying to conserve obsolescent industries indefinitely.

In sum, in the face of the increasing innovations that is taking place in the modern world economy, which has caused increasing reductions in prices, Nigerian firms that are upgrading backwards (in terms of adapting mechanical technologies and measures that are intended to mitigate the negative impact of electricity failures, which often does not reduce the average cost of production or increase productivity), will, without a doubt, see their competitiveness continually eroded. In other words, trying to adapt mechanical technologies that are not susceptible to damage due to electricity failure, as a means of mitigating the increasing costs incurred from providing private electricity, is no better alternative to sustaining competitiveness in the ever evolving modern world system because, not only will the productivity of the backward firms be reduced compared to those with advanced technologies, the backward firms will also be less able to sell their produce given the lower prices set by the lower-cost advanced technologies.

These consequences, of Schumpeter's gale, are also corroborated by the scheme of 'natural tendency of capital accumulation', as coherently articulated by Marx. Given that it is a natural tendency for production processes to centralise, and also that firms are encouraged (to expand their markets) by the advances of machines, which affords them

increased productivity and cheaper costs, it then becomes clear that the markets of those processes with higher-cost obsolete technologies will be, within a short period, usurped by the advanced processes that have managed to reduce cost and increase output by adopting efficient low-cost technologies. In essence, advancing backwards is no better substitute for ameliorating the negative effects of high cost of production that is undermining capital accumulation in Nigeria.

The effect of the intensive global competition on Nigeria's real economy can be easily gleaned from the rate of business closures in the country. A look at the number of large non-financial corporations (NFC) that are listed on the Nigerian stock exchange revealed that the number of listed NFCs has been on the decline since the turn of the millennium. From the over two hundred and fifty firms listed on the Nigerian Stock Exchange's (NSE) main board in 2002, only one hundred and eighty-seven were still currently listed in 2013. Sixty-three firms (amounting to an average of six firms per year) have been de-listed as of June 2013. Only seven of these delisted firms were financial institutions, which either merged with another financial institution or were nationalised by the central bank. The 56 remaining de-listed firms belonged to the manufacturing industry (with only two out of these 56 absorbed through a merger with another industry)⁸¹.

Similarly, and more crucially, is the rate of closure of micro, small and medium enterprises (MSME) in the country within a short period after their formation. A recent survey conducted by the Nigerian Bureau of Statistics (NBS) in collaboration with the Small and Medium Scale Enterprises Development Agency of Nigeria (SMEDAN)

⁸¹ Facts are from the NSE's 2013 website. Available at <http://www.nse.com.ng/>

highlighted that an average of five to ten per cent of MSMEs fails within five to ten years of their establishment⁸².

Certainly, when faced with intensive competition from outside, these MSMEs, mostly hampered by increasing costs of capital and production, find it very difficult to grow because they are not able to increase prices above their cost of production, which is slightly higher compared to those incurred by rival firms in other parts of the world. In other words, the effect of the unprecedented development of the productive forces in the capitalist system, fraught with destabilising hyper-competition among blocs of capitals, generally manifests in reductions in profitability for high-cost backward technologies (which are prevalent in periphery economies such as Nigeria). Overall, competition between unequal processes, therefore, tends to lead to the collapse of these high-cost processes.

In this study, real production processes in Nigeria, mostly characterised by backward, high-cost technologies are argued to be at a disadvantage in the highly competitive global markets, where capitals with low-cost technologies allow their owners to sell at very competitive rates that displace those in Nigeria with high-cost inputs. This uneven process, as a result, causes a persistent decline in the rate of capital accumulation and, in turn, the level of development in Nigeria. Again, unless this contradiction is appropriately addressed, periphery and backward economies such as Nigeria will continue to wallow in underdevelopment in the midst of its abundant natural and human resources.

⁸² The survey result is published on SMEDAN's website, <http://www.smedan.org/>.

iv. Ineffective demand

Smith ([1776] 2005: 335), remarked that the capitalist derives his subsistence from the employment, not of one, but of one hundred or a thousand different customers. According to Marx ([1867] 1990) also, the basic condition of accumulation is that the capitalist must have contrived to sell his commodities. Luxembour ([1913] 1972), in a similar stance, also noted that a steadily increasing possibility of selling the commodities produced by the capitalist is indispensable in order to make the accumulation a continuous process. Keynes (1936: 28) noted likewise that the mere existence of an insufficiency of effective demand may, and often will, halt increases in investment because the expectation of the capitalist (with regards returns on the invested capital) will not be met.

In view of these, it is clear that effective demand is a very vital element that ensures the continual accumulation of capital. Nevertheless, of whose demand are we referring to that will ensure the subsistence of the capitalists? It was the answer to this that Rosa Luxembour's work, *The Accumulation of Capital*, first published in 1913, sought to explain.

As have been noted severally already in this study, the contemporary capitalist form of production is governed by the profit motive. However, the basic law of capitalist production, as Luxembour puts it, is not only profit in the sense of glittering bullion but also constantly growing profit (Luxembour, [1913] 1972: 49). This, she remarked, is where the capitalist system differs from another economic system; for the capitalist uses the fruits of exploitation (profit), not exclusively, and not primarily for personal luxury, but for more and more to increase exploitation (profit) itself.

Therefore, a production process is referred to as a capitalist production process only if the labour process recreates surplus-value, which results from a quantitative excess of labour, often obtained by lengthening out the labour process and where a large proportion of that surplus value (the profit share) is destined neither for the renewal of used means of production nor for the maintenance of workers and capitalists but for further accumulation of capital.

Traditionally, the gross total output produced by the capitalist production process is observed to be partly consumed by the workers, who were paid the bare minimal from the total stock that is just necessary for their existence (their consumption from the gross total stock is thus purely a small proportion of the total produce) and also by the capitalist, whose consumption is from the portion of the total stock (i.e. a portion of the surplus value). The portion that makes up the profit is then seen as the consumption of the ‘other’ working class who are neither capitalists nor labourers; this includes government officials, the clergy and other liberal professionals (Smith, [1776] 2005; Marx, [1867] 1990). Minsky (1986) added the deficits of the government as also a form of the ‘other’ demand: he argued that the existence of a large increasing proportion of disposable income that is independent of employment or of the profitability of business (i.e. transfer payments by the government to its citizens) is beneficial, for it sustains demand, and often prevents a very deep and sustained fall of the economy during a recession.

However, Luxembourgh argued that these latter classes (i.e. these ‘other’ classes articulated by Smith and Marx) are often indirectly maintained out of the pockets of the capitalists, and as such does not account for the source of the capitalists’ profit. She contended that profit is rather accumulated from other buyers who receive their means of purchase from an independent source, and who do not get it out of the pocket of the

capitalist, like the labourers, or the collaborators of capital (the government officials and officers, the clergy and liberal professionals). Instead, she remarked that the ‘other’ consumers that make up the capitalists’ profit have to be consumers who receive their means of purchase on the basis of commodity exchange that is taking place ‘outside’ of the capitalist’s commodity production (Luxembourg, [1913] 1972).

This lucid distinction by Luxembourg highlights that the capitalist production process is impinged upon by four distinct demand institutions namely: the wage labourers; the capitalists; the collaborators of capital (i.e. the liberal professionals and government officials and officers, etc.); and the non-capitalist strata (which in this case could be construed as the peasant farmers not paid by the capitalist or the government, and those consumers from international markets).

Though there have been a lot of debate on these distinctions by Luxembourg, it is, however, obvious that these various demand entities as a whole directly, and indirectly, determine the profitability of a capitalist production process, and its continual subsistence. These various entities make up the profit equation designed by Michal Kalecki: according to Kalecki (1971), aggregate profits are determined by consumption out of profit income, plus investment spending, government deficit spending plus net exports, minus saving out of wages. An increase of consumption out of profits and investment, he remarked, increases profit at the aggregate level. Export surplus, he noted, enables profits to increase above that level which would be determined by capitalists’ investment and consumption: the capitalists of a country, which manages to capture foreign markets from other countries, Kalecki explained, are able to increase their profits at the expense of the capitalists of the other countries. Equally, budget deficit, he asserted, has an effect similar to that of an export surplus: according to Kalecki, it also permits

profits to increase above the level determined by private investment and capitalists' consumption. On the other hand, an increase in saving out of wages, he contended, reduces aggregate profits. The distinctive sources of demand that impinge upon the accumulation process are discussed in more details below.

(a) The wage labourers' demand and the accumulation process

Due to competitive pressures, and the rising cost of production and capital, the entrepreneur is often habitually inclined to stagnate or reduce the wages or the number of his workers⁸³. However, the stagnation and/or reduction in wages/number of workers squeeze aggregate demand indirectly; given that the propensity to consume depends largely on the amount of disposable income.

The work by Keynes (1936) provided a succinct discussion of all the elements that affects the propensity to consume – i.e. the propensity of the wage labourers to increase their demand. Keynes observed that the expenditure on consumption (i.e. the amount people spend on consumption) depends, to a significant extent, on the amount of their income,

⁸³ Based on Marx's postulation on ways surplus value can be increased, it is clear that surplus value can be increased by increasing the working day (i.e. absolute surplus value) or by reducing necessary labour, through increasing productivity (i.e. relative surplus value). Marx remarked that since absolute surplus value has a limit set by physical exhaustion enterprises are thus often inclined to expanding relative surplus value. This means often substituting variable capital (labour power) with organic capital (dead labour or machines). These choices, Marx remarked, are forced on capitalists by the pressure of competition deriving from the concentration tendency of the production process (Marx, [1867] 1990). Here, the advance of technology ensures less and less work force is needed to increase productivity, which reflects in decline in labour demand. The *Economist* recently highlighted this tendency in an article (4th October 2014). It was observed that firms are now resorting to replacing human labour with robots; productivity growth, the article remarked, meant cutting down on labour given the plummeting cost of capital goods, particularly those associated with computing and information technology, which are now relatively cheaper in the long-run compared to wages paid to human labour. In other words competitive pressures forces the capitalist agent to replace labour force with organic capital.

and also on some other objective attendant circumstances and some subjective needs, including the psychological propensities and habits of the individual. In fact, Keynes highlighted eight main motives of a subjective character, which he argued lead individuals to refrain from spending out of their incomes. These motives include – (i) to build up a reserve against unforeseen contingencies, (ii) to provide for an anticipated future relation between the income and the needs of the individual or his family – such as for old age, family education or maintenance of dependents, (iii) to enjoy interest and appreciation, (iv) to enjoy a gradually increasing expenditure – since it gratifies a common instinct to look forward to a gradually improving standard of life, (v) to enjoy a sense of independence and the power to do things, (vi) to secure en-masse so as to carry out speculative or business projects, (vii) to bequeath a fortune and finally (viii) to satisfy pure miserliness.

Drawing from these observations, especially with regards the motive to provide for an anticipated future relation between the income and the needs of the individual or his family – such as for old age, family education or maintenance of dependants – it is argued that this particular motive broadly affects the pace of capital accumulation in Nigeria; given that the share of the wage labourers' income secured for the maintenance (especially for healthcare) of the wage labourers' dependants and for themselves eats deep into the wage-labourers income, and as such decreases their propensity to consume other products – which forms part of the gross total capital output.

Considering that health care is, in many cases, at the top of the ladder likewise items such as food provision and shelter (with regards essential human needs), consumers with 'squeezed' income naturally, therefore, tend to prioritise these essential needs above other needs; for instance, in America, it was observed (*Economist*, 4th October 2014) that in

1990, Americans on average secured 38% of their income for housing, health care and education alone. By 2010, that share was noted to have risen to 43% - partly because the prices for all three of these categories had risen faster than for non-essential goods and services as a whole.

Therefore, given that the capitalist producers depend on the consumers for their subsistence, any decline in their demand will negatively affect the income of the producer, and this will subsequently lead to declines in the rate of accumulation and employment in the wider economy. As Kalecki's profit equation shows, the higher the savings out of wages, the lower the profit attributable to the productive process – which, in turn, also reduces the propensity to save (given the stagnation in wages that declines in capital accumulation often precipitate). Clearly, therefore, the higher the provision that is to be made for acquiring the essential needs (such as food, shelter, education and medicine), the more detrimental will the impact be on the level of capital accumulation in the economy.

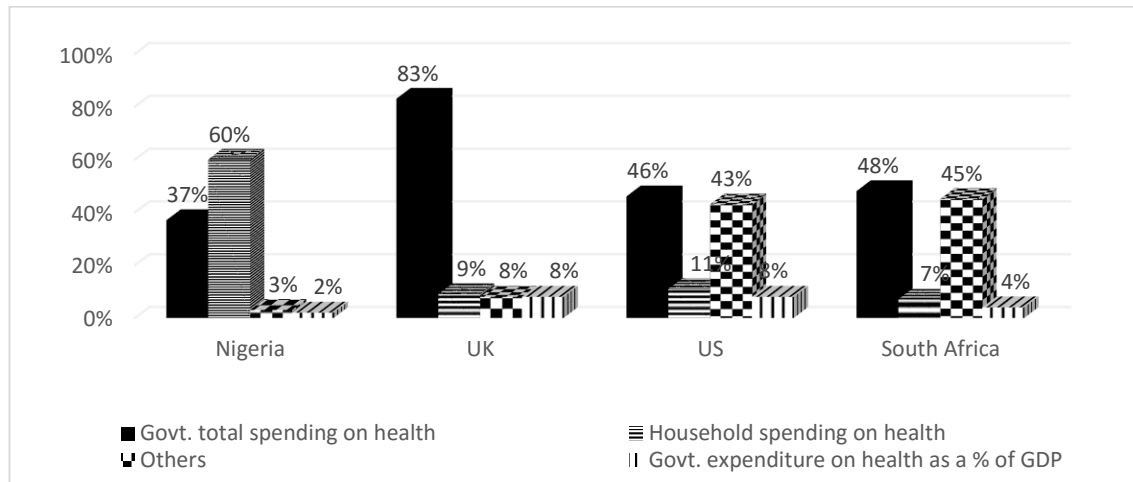
This will undeniably be worse in economies where a significant proportion of the essential goods' costs are not subsidised by the government and where there exists no significant level of transfer payments. It will be very debilitating for the local producers of non-essentials in that economy because a large chunk of disposable incomes of the workforce for which they employ (on aggregate that equals the largely employed populace) will tend to be secured for providing for those essential goods. As a result, there will be a substantial fall in the share of the wage-labourers' consumption of the gross total capital output produced in the country; which in turn means a fall in profitability in the accumulation process, and consequently a decline in the pace of capital accumulation, along with employment.

To buttress this point, individual out-of-pocket medical expenditures in different economies were compared in order to weigh the likely impact of high medical expenditure on the disposable incomes of the wage labourers, and subsequently on their demand patterns for non-essential capitalist goods.

According to the data from the World Health Organisation's 2011 database (WHO, 2011), reproduced in the diagram below, over 60% of the total spending on healthcare in Nigeria are funded by private households. In contrast, in the UK for instance, the private households fund only nine percent of the total spending on health: the UK government funds over 83% of the total spending on health. In real terms, this means that if a medical care costs say £100 across both countries, an individual in Nigeria is thus expected to cover over £60 of the total cost, whereas in the UK, an individual will only be liable for £9 of the total cost. Hence, given an average income of say £150, an average individual consumer in Nigeria is therefore left with only £90 as disposable income after medical expenses, compared to £141 for a British resident with the same average cost for medical care. In essence, with low wages which are not helped by the meagre interests on savings deposit and the lack of social safety nets, the wage labourers disposable income in Nigeria is predominantly usurped by unsubsidised maintenance costs, which are chiefly healthcare costs, food, education and shelter (the main essentials).

Furthermore, given that over 80% of Nigerians are regarded poor (living below \$2 a day), the end effect is thus an overall shortage of domestic wage-labourers' demand, especially for locally made non-essential products which are often more expensive compared to foreign substitutes, due to high cost of production and capital in the country.

Figure 19 - Healthcare financing



Source: Own elaboration based on data from WHO 2013 statistical database, <http://apps.who.int/gho/data/node.main>

(b) The capitalists' demand and the accumulation process

In his book, *The Political Economy of Growth*, Paul Baran argued that the 'potential surplus' that could be utilised for productive investment are to a large extent wasted away by the oligarchs (and capitalists) addicted to luxury consumption on the most extravagant scale (Baran, 1957). That is the proportion of the capitalists' surplus value that could have been appropriated from the consumption of the capitalists are instead lost as a result of the addiction by the capitalist class to foreign luxury goods consumption. In a recent article published in the *Financial Times* newspaper, this wastage was noted to have become severe. Wealthy Nigerians were noted to be among the biggest foreign shoppers in London and the article remarked that Nigeria is among the fastest growing markets globally for foreign luxury brands - including private jets and expensive luxury cars - (*Financial Times*, May 5, 2014).

Keynes has lucidly articulated the implication of such wastes on the real economy: he remarked that the growth of wealth of a nation is more likely to be impeded by the abstinence of the rich (Keynes, 1936: 235)⁸⁴.

Again, following Kalecki's profit identity, it is also clear that consumption out of profit income largely determines the level of capital accumulation in an economy. In essence, if the consumption out of the profit the domestic capitalists earn in the economy are wasted, due to their (the capitalists') extravagant consumption of foreign commodities, it will certainly reflect in the sluggish pace of domestic capital accumulation – since a significant proportion of the total capital output will remain unsold.

In sum, the abstinence of the wealthy few from consuming their portion of the gross capital output in Nigeria further contributes to the narrowing of the possibility of capital assets in the country of earning sufficient rate of return that could guarantee their continual subsistence.

(c) The 'other' consumers' demand and the accumulation process

Smith, Marx, Luxembour, Kalecki, and Minsky all agreed that the consumption by the 'other' (external) consumers, though distinctive in their definitions, contribute to the profits appropriated by the capitalists – which are used for further accumulation of capital. These 'other' consumers, as articulated by these scholars, derive from capital collaborators (government officers, liberal professionals etc.), the peasant farmers and those whose capitalist production are external to those of the studied entity (herein

⁸⁴ That is when the rich are addicted to foreign consumption, but abstain from consuming locally produced goods and services.

construed as foreign consumers/markets), and the consumers who are maintained by transfer payments by the government. These ‘other’ consumers are simply assumed in this thesis, for ease of discussion, to be the ‘external’ markets (consumers)⁸⁵ that impinge, to a large extent, on the possibilities of the capitalists of appropriating sufficient profits that will allow them to grow.

These external markets have long been argued to contribute immensely to the acceleration of capital accumulation: according to Smith ([1776] 2005), foreign trade accelerates industrialisation⁸⁶. Likewise, Stuart Mill also remarked that international trade or commerce benefits countries because, not only that it allows them to obtain commodities which they could not produce themselves at all, but it also consists in a more efficient employment of the productive forces of the world (Mill, [1865] 1965). According to Mill, therefore, international trade has the tendency to extend the market (i.e. ensure the continual accumulation of capital), and to improve the process of production. This, he explained, is because a country which produces for a larger market than its own can introduce a more extended division of labour, can make greater use of machinery, and is more likely to make inventions and improvements in the processes of production. Also, according to the profit equation by Kalecki, net exports (i.e. exports minus imports) contributes to the aggregate profit of a nation and aids in the rapid acceleration of the pace of capital accumulation in that economy (Kalecki, 1971).

⁸⁵ Given that in Nigeria, there is no significant contribution from transfer payment to the real economy.

⁸⁶ Smith noted that the development of industry is likely to be severely handicapped if it is deprived of the ability to trade widely. In fact, he remarked that the division of labour, which he noted is the key to increased productivity, is limited by the size of the market.

Based on the above observations, it could be argued that the cause therefore of lack of inventions, improvements in the processes of production, and the deceleration in the pace of capital accumulation in Nigeria also derive from the ineffective international demand of the gross total stock of capital-outputs of the country. Therefore, the inability of enterprises in Nigeria to sell their produce to an 'extended' foreign market also underpins the reason for the stagnation of the productive process in the country.

The inability of Nigerian enterprises to extend the market for their goods is reflected in the abysmal share of exports from Nigeria that are made up of manufactured goods. For example, the recent trade statistics of countries produced by the World Trade Organisation (WTO) in 2013 shows that the percentage of Nigeria's total exports made up of manufactured goods was a paltry 2.5%⁸⁷. While on the other hand, 86.5% of the country's total imports were manufactured goods. These figures are in stark contrast to those recorded for other developing countries like South Africa and Indonesia and developed countries like the U.S. and the U.K. For these latter countries, for instance, 71.3% of their exports were made up of manufactured goods and their proportion of imports made up of manufactured goods (69.3% and 63.4% respectively) were also lower than the proportion of their exports made up of manufactured goods. This, at least, indicates that a significant proportion of their surplus value is appropriated from the consumption (demand) from abroad.

Given that foreign trade accelerates industrialisation, it could be argued therefore that the dearth of industrialisation in Nigeria derives also from the shortage of foreign demand; that is the shortage of the 'other' consumers' demand for the country's gross total capital

⁸⁷ A large chunk of the country's export is oil.

outputs. In essence, the shortfall in manufactures export could be said to be among the factors that contribute to the deceleration of capital accumulation in the country, which in turn leads to increase in unemployment and poverty in the end.

Additionally, the lack of transfer payments in the country could also be seen as the other main reason why the capitalists are not able to sell all their produce. For instance, Minsky (1986) observed that the dramatic rise in unemployment insurance payments in the mid-1970s helped to explain why the sharp downturn in the US economy at that time was reversed quickly. In fact, Minsky argued that the existence of a large, increasing proportion of disposable income that is independent of employment or of the profitability of business is beneficial, for it sustains demand. Therefore, the lack of income support from the government in Nigeria also partly contributes to the narrowing of the possibility of capitalist enterprises in the country of extracting a commensurate level of profit from their real productive processes.

To conclude, the capitalist producers of 'non-essential' commodities in Nigeria, when faced with increasing cost of capital and of production, stiff competition from cheap substitutes and declining demand will without question resort to contracting expansion, and in extreme cases, might actually shut down: as have been evident by the number of MSMEs that cease operation just few years after their establishment. In other words, any solution put forward to remedy the stagnation in real capital accumulation cum economic development in Nigeria should also encompass the resolution of the ineffective demand element.

4.1.3 Summary of the outcome of the 2013 Expectation Survey

The Central Bank of Nigeria, in its role as a principal advisory agent to the Federal Government of Nigeria, generates many statistical data for assisting with monitoring, appraising and evaluating development in the various sectors of the Nigerian economy. The CBN conducts surveys that cover business expectations in Nigeria, including also consumer expectations, inflation attitudes and credit conditions. The Business Expectation Survey (BES) is a quarterly survey of leading firms drawn from business establishments of updated frames of CBN and the National Bureau of Statistics (NBS), whereas the Consumer Expectation Survey (CES) is a household based quarterly survey.

In the recent Business Expectation Survey, published in December 2013, the CBN polled over 1900 firms, and around 1900 households for the Consumer Expectation Survey. The BES results provide an advance indication of the changes in the overall business activity in the economy and highlight the various factors put forward by the business entities themselves as significantly affecting their operations. The CES results, on the other hand, reflect the consumers' tendencies and expectations for general economic conditions, job opportunities, personal financial standing and market developments. From these results, the major elements constraining businesses', and the consumers', expenditure behaviour in Nigeria can be easily assessed.

Figure 20 below is a graphical representation of the results of the BES surveys. The diagram highlights the main factors put forward by many of the firms polled in the Business Expectation Survey as having a significant impact on their operations. In 2013 alone, around 70% of the respondents highlighted insufficient power supply as their major constraints. In addition, around 50% of the firms polled highlighted high-interest rate,

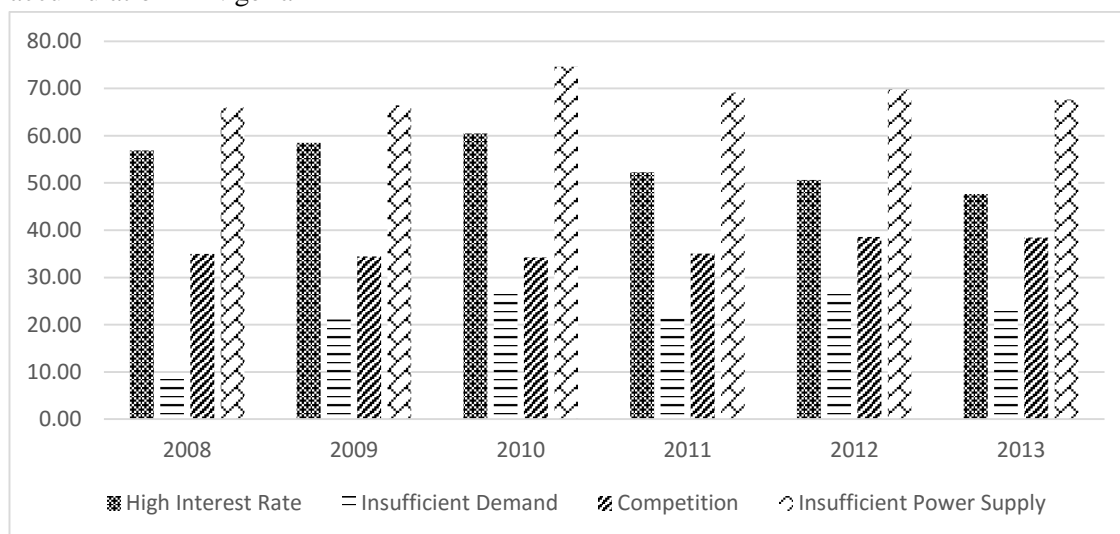
with around 40% going for competition and around 25% highlighting insufficient demand as the other major constraints.

Overall, insufficient power supply, high-interest rate, disruptive competition, and insufficient demand, as have been discussed, all constitute unfavourable economic climate. They limit access of firms to affordable credits, deepen financial problems for viable enterprises, and when there are no clear policies to address these issues, further contributes to economic uncertainties, all of which undermine real capital accumulation together with economic development.

It is clear from the figures presented in the diagram (below) that since 2008 these factors have consistently been bemoaned by many businesses as the major constraints hampering their operations and sustainability in Nigeria. Oddly, only a few academic studies have actually considered these factors in-depth in their analysis of the major problems undermining economic development in Nigeria.

To conclude, it is the constellation of these profit-decimating elements that is been put forward in this study as the fundamental issues undermining the pace of capital accumulation in Nigeria. If these issues can be adequately addressed, Nigeria will certainly have the chance to develop along the conventional lines (of industrialisation) towed by other developed and emerging countries in the past.

Figure 20 - Graphical representation of the core factors undermining the pace of capital accumulation in Nigeria



Source: Own elaboration with data from the Central Bank of Nigeria's 2013 Expectation survey. Note: These figures are the averages of the quarterly results. Over 1900 firms in Nigeria were polled for this survey in 2013.

4.2 Financialisation and economic development

The compensation for the declining fortunes of real economic activities in Nigeria could be seen to have emerged primarily through opportunities for arbitraging – especially in the deregulated multi-tiered foreign exchange market, where there existed a dual pricing system. The prospective huge gains that could be garnered from currency trading and financing certainly deepened the flight of capital (of both human and physical) from the already weakened real sectors.

Following the collapse of the fixed exchange system and the deregulation of capital accounts (including the liberalisation of the financial system), many of the financial institutions in turn concentrated extensively on exchange rate trading and financing. The excessive concentration by banks on foreign exchange trading was even highlighted by the former Governor of the Central Bank of Nigeria, Professor Chukwuma Charles Soludo, during his address at the annual bankers' meeting in Abuja in 2004.

The main reason for the estrangement of the real sector by banks, as was clarified by Minsky (1986), derive from the pessimism of bankers regarding the potential of real productive processes in the economy. Minsky explained that the bankers' expectation about the ability of businesses to validate their (the businesses') debts reflect their (the bankers') experience with existing loans, as well as their (the bankers') expectations of how the economy will behave. Successful fulfilment of business commitments to banks, Minsky noted, increases the money supply because it encourages debt financing, and the failure of business to fulfil commitments, on the other hand, decreases the money supply because it leads to a reluctance by bankers to debt finance business. Overall, Minsky concluded that the money supply is very much determined within the economy, for changes in the money supply reflect profit anticipations of business and bankers' expectations of business conditions.

Radwan (2010), was the first to observe this estrangement of the real sector by banks in Nigeria. He noted that given the enormous costs of providing basic amenities such as electricity, Nigerian SMEs struggle to compete with cheap imports. Following the decimating impact of the high costs for private provision on the profitability of SMEs, most bank managers, he remarked, are often, therefore, reluctant to lend to SMEs given that they are also likely to suffer losses.

Overall, the pessimism of the bankers, which derive from their experience with existing loans with the capitalists, could be argued to be the major reason why most newly formed financial institutions in Nigeria during the period from 1990 to 1998 neglected the private sector and accumulated large gains by purely obtaining foreign exchange at auction prices, and re-selling them to end users or other market operators at the high market prices. Many of the financial institutions also took advantage of interest rate differentials

(which happened to be extremely wide, see Table 8) and laundered money from low-interest sources (especially from abroad) to the very lucrative domestic money market.

Table 8 - Interest rate (1986-2013)

Year	Savings rate*	Maximum lending rate*	Spread*
1986-1989	11.67	16.35	38.80%
1990-1993	16.305	27.15	65.83%
1994-1997	10.45	20.7775	128.24%
1998-2001	5.3025	25.475	384.67%
2002-2005	3.8325	23.345	514.32%
2006-2009	3.05	19.5225	551.96%
2010-2013	1.8725	23.3075	1184.38%

Source: CBN statistical database (*figures are in averages)

In summary, therefore, the growth of financial activity in Nigeria after the neoliberal financial reforms of deregulation and liberalisation were largely propelled by foreign exchange speculation and interest rate arbitraging, and in some cases, plain simple fraud. There existed weak linkages between the activities of the financial institutions and real production. What is clear now is that deregulation of the financial sector and the liberalisation of international capital flows, instead of inducing real capital accumulation, merely precipitated excessive financial speculation in Nigeria.

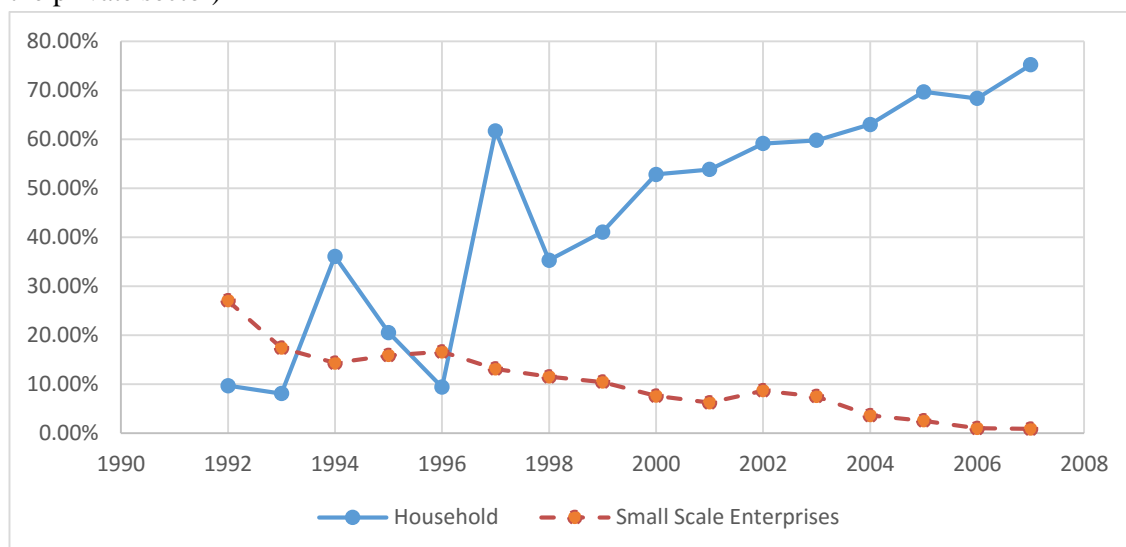
The probability of most NFCs of earning a commensurate level of profit was incidentally narrowed more by the high-interest rate most financial intermediaries were subsequently charging. Given the lucrative exchange dealing, there arose excessive demand by some undercapitalized banks, which were in need of more funds for their speculative activities. These increased demands pushed up the money market rate of interest, which inevitably raised the commercial rate of interest. Coupled with the high risk attached to the real production, most NFCs that needed capital for their activities were thus charged ridiculously high rate of interest. In many cases, the high rate of interest deterred potential investors from even venturing into business. For the ones already in business, the

increasing cost of capital forced them to switch from the long-term strategy that had labour relations at its core to short-term strategies that involved an attack on labour relations. In a way, therefore, the expansions in the financial system (i.e. both the increase in the number of financial actors in the country and in financial activities), following the liberalisation and deregulation exercise, simply led to a widening of the inequality gap in the country. The few elites with connections to the ruling circle – which afforded them the privileged access of owing banks – have, through engaging in exclusive and lucrative foreign exchange trading and interest arbitraging, seen their wealth increase at the detriment of those of the NFCs – whose profitability is seriously decimated by the exorbitant rate of interests they are often charged for borrowing. The result, every so often, is the stagnation or contraction of the wage-labourers' income. The resultant contraction in the wage-labourers' income and the simultaneous increases in the income of the finance capitalists (the bankers) inevitably contributed to the widening of income inequality in the country⁸⁸.

With sharp declines in profitability of exchange rate trading recently, financial institutions in Nigeria have now turned to financing households. Many financial institutions in Nigeria have reverted to lending monies mostly to households with some sort of 'guaranteed' income (such as government and bank workers), and to *rentier-capitalists* – those with exclusive access to, or have full (or part) ownership of some underlying asset that attracts a form of return (e.g. stocks, land, oil-blocs).

⁸⁸ The inequality gap in Nigeria has widened over the years – with the income share of the lowest 20% (around 80% of the population [the percentage living on \$2 a day]) declining from over 6% of the total national income in 1986 to less than 5% in 2010, while that of the highest 10% has increased from less than 30% in 1986 to over 38% in 2010 (see Figure 5)

Figure 21 - Sectoral distribution of commercial banks' loans and advances (as % of total loans to the private sector)



Source: Data are from the CBN statistical bulletin (various issues)

Currently, an increasing number of households in Nigeria, particularly those with some sort of guaranteed incomes and access/claim on some underlying assets, are being deluged with debts, which most often are tied to accumulation of finished imported goods (cars and other household appliances) and/or for the purchase of further financial assets (mostly equities) or for the purchase of fixed assets such as land/buildings (mortgaged-backed lending).

This debt-driven consumption model has also done little to spur development in the economy. Instead, in line with the theoretical proposition that debt-driven consumption is a far more precarious way of stimulating the economy⁸⁹, the new trend that is emerging

⁸⁹ Given that it is prone to crisis because if the underlying real wages that can be used to repay the mounting debts are not rising accordingly, then there is a tendency of an increasing defaults (i.e. increasing invalidation of debt obligations), which will in turn invalidate underlying financial assets held by financiers and may, in the long run, contribute to instability in the banking system and the economy as a whole (see Minsky, 1986; Crotty, 2005; Stockhammer, 2013).

in Nigeria is contended to be contributing to the persistent uncertainty cum underdevelopment in the country also.

To conclude, the various structural reforms pursued by the government in the past, in the bid to attenuate the stagnation in the real economy, could be seen to have merely caused the transformation of the speculative activities of the financial system. This is because these reforms were mostly not directed at the fundamental causes of the economic deterioration. As such, the financial institutions, still not favourably disposed to lending to the real sector due to the bleak outlook, simply adapted their speculative activities. In essence, each reform pursued purely precipitated a change in the type of financial accumulation which often does not reconcile the underlying contradiction in the system.

In view of these, it is clear therefore that a full grasp of the trajectory of financial speculation in Nigeria, the factors that conditioned the speculative activities, and the consequences of the speculative frenzy on the real economy, certainly needs a comprehensive historical analysis. This comprehensive historical analysis of the phases of financial reforms that have taken place in the country and the varying trends they precipitated are the subject of the next section.

4.2.1 Phases of structural reforms in Nigeria

In Nigeria, five distinct phases of banking sector reforms that could be discerned to have taken place over the years. The first occurred between 1986 and 1991 – when the banking industry (both commercial and merchant/investment banking) was first liberalised in order to allow for substantial private sector participation. The second phase was the re-regulation era of 1991 to 1998; the re-regulation was necessitated by the deep financial distress that started after the deregulation and liberalisation of the 1980s. The third phase

was initiated in 1999, with the return of liberalisation, and the adoption of the universal banking model. The fourth phase commenced in 2004 with banking sector consolidation as a major component and was meant to correct the structural and operational weaknesses that re-emerged after the return to liberalisation in 1999. The current and the fifth phase was triggered by the need to address the combined effects of the 2007/08 global financial and economic crises.

4.2.1.1 The first phase – the deregulation/liberalisation era

The first phase caused an increase in the number of new banks. The banking sector surged from just 29 banks in the 1980s to over 65 banks by 1992. However, as have been discussed earlier, little to no impact were felt in the real sectors. Most of these newly formed banks were rather merely engaged in foreign exchange speculation: the liberalisation exercise birthed the dual foreign exchange system, which had two price systems. In addition, only banks were allowed to buy at the auction sessions at official rates. Given the huge difference in the official and the market rate, and the bleak real economy, most banks then concentrated on foreign exchange trading.

With the deregulation of interest rate controls in 1987, there was also an explosion in ‘carry trades’ (round-tripping); those financial institutions with access to cheap finance abroad borrowed at the relatively cheap foreign rates and re-invested the borrowed funds in debts issued by financial institutions, most of whom were largely engaged in the prosperous exchange rate trading.

Given that at that time public accounts were lodged in commercial banks, most of these banks were also often not seriously engaged with the private sector; they had no need to mobilise funds from households in order to carry out their speculative activities, given

the huge public sector deposits. This was reflected in the huge decline in the national households' savings level during those periods.

In sum, most banks, with access to excess government deposits and cheap foreign funds concentrated on foreign exchange trading. Foreign currencies were bought at official rates, which were traditionally lower than the market rates, and were subsequently sold to end users (mostly importers and exporters) at the free-market going rate. The spread between the official rate and the market rate were often significantly wide (see table 9): this huge premium caused most banks to concentrate their activities on the lucrative foreign exchange market, with less emphasis on traditional banking. Overall, foreign exchange financing and trading constituted the bulk of financial activities during the first phase of financial reform in Nigeria.

Table 9 - Average exchange rate indicators (1991-2006)

Year	WDAS/RDAS*+	BDC***	Premium****
1991-1994	17.87	32.81	73.75%
1995-1998	22	85.58	289.00%
1999-2002	106.93	120.6375	12.52%
2003-2006	130.915	140.625	7.43%

Source: Figures are from the Central Bank of Nigeria statistical database and the author did the calculations. +Figures are in averages. *WDAS/RDAS = Weighted Dutch auction System/Real Dutch Auction System. **BDC = Bureaux De Change. ***Premium does not consider the 'black markets' rates. Note: Because the 'black market' rates are not recorded; these figures were not included in this calculation. However, the financial institutions and even the official BDC that buy at auction prices re-sell at higher rates in black markets. The premiums in the black market are often as high as 500%.

4.2.1.2 The second phase – the re-regulation era

As soon as public accounts were withdrawn from these commercial banks in 1989, crisis erupted in the banking sector. It was realised that most of the newly formed banks lacked sufficient capital to operate efficiently: eight out of the 66 banks operational in Nigeria then were noted to be technically insolvent (Fowowe, 2010). This prompted the re-

regulation of the banking sector. The government took some steps to bolster regulation: The Nigerian Deposit Insurance Corporation (NDIC) was created in 1989 to complement the CBN's efforts in banking supervision.

The government also stopped further bank licencing in early 1991. Instead, they introduced new prudential guidelines on asset quality and demanded more transparent accounting and loan classification from banks. The CBN Act, and the Banks and Other Financial Institutions (BOFI) Act were promulgated in June 1991 to strengthen the CBN's regulatory powers in these regards. These Acts granted the CBN more power (previously under the Federal government) in licencing banks and in sanctioning failing banks. In addition, there was a further enhancement of commercial banks' minimum paid-up capital from ₦20m to ₦50m in 1992 – which was aimed at weeding out undercapitalised banks.

Furthermore, the new prudential guidelines introduced in 1991 made sure banks adequately classified non-performing loans: this provided the first indication of the extent of decay in the banking industry. By 1993, a total of 28 banks were identified as insolvent and a further 26 were seen to be in early stages of distress (Fowowe, 2010). The failed Banks and Financial Malpractices Decree were later promulgated in 1994; this decree set out the guidelines for dealing with distressed banks. The licences of two banks were suspended in 1994, and by 1995, 17 private banks had been taken over by the CBN. In that same year also, the CBN estimated that 60 out of 115 banks (this included merchant banks) were in distress.

In sum, the first phase of financial deregulation in Nigeria, which was characterised by foreign exchange financing and trading, including 'carry-trading', could be said to have occasioned instability in the economy in the 1990s, by causing a banking crisis. These uncertainties in the banking sector had a huge impact on the real non-oil sectors – they

increased the money market rates and commercial interest rates (which burgeoned to almost 100% in that period), thereby further undermining expansion in the productive sector.

4.2.1.3 The third phase – return of liberalisation and the creation of universal banking system

In 1999, the commercial banks' minimum paid-up capital was increased from ₦50m to ₦500m, and the official and interbank exchange rates were unified. This reform precipitated declines in profitability in exchange rate trading; the premium declined from the height of 289% in the 1995/98 period to 12% in 1999/2002 and subsequently to a meagre 7.4% in 2003/06. Also in 2001, universal banking was introduced, and there was further enhancement of the banks' minimum paid-up capital from ₦500m to ₦1bn for existing banks and ₦2bn for new banks; this caused a reduction in the number of banks operational in the country.

Nonetheless, statistical evidence has shown that over these years (1986-1999), despite all the reforms (the initial deregulation, the re-regulation, and the subsequent deregulation) implemented to ensure the flow of capital to the real productive sectors, that there were no significant improvements in the manufacturing and agricultural outputs. Even the aggregate domestic savings did not witness any significant increase. Instead, most banks merely switched from the rescinding exchange rate trading market to focus on lending to households, and most banks also concentrated lending to the oil/gas sector, and toward the booming stock market, through share-purchase margin lending (these trends are discussed in more details by Anyanwu, 2010 and Radwan, 2010).

4.2.1.4 The fourth phase – banking consolidation

Given these worrying new trends, the Nigerian banking sector was further reformed in 2004. The required minimum paid-up capital was increased from ₦1/2bn to ₦25bn, particularly to clear out weak banks that were purely engaged in financial trading instead of traditional banking. This saw the reduction in the number of banks from almost 90 to just 24. The banking sector consolidation exercise also saw banks raise over ₦400b from the capital market, and, in addition, attracted a foreign capital inflow of US\$652m and £162,000 (Anyanwu, 2010).

The liquidity engendered by these inflows of funds into the banking sector did induce falls in the rate of interest. The average maximum lending rate (the prime rate) fell from over 25% in 1998-2005 to an average of 19% in 2006-09. An unprecedented increase was also recorded in lending to households and a slight change in lending to the private sector: the share of total bank lending that went to households saw a huge jump from less than 10% in 1992 to almost 80% by 2008. In addition, margin-trading loans rose to ₦900b as at December 2008 (this represented about 12% of the aggregate credit issued by the banking industry in 2007 [Anyanwo, 2010]). Similarly, banks' total loan to the oil/gas industry represented over 10% of banks' total loans to the private sector by the end of 2008; a significant increase from the levels recorded in previous years.

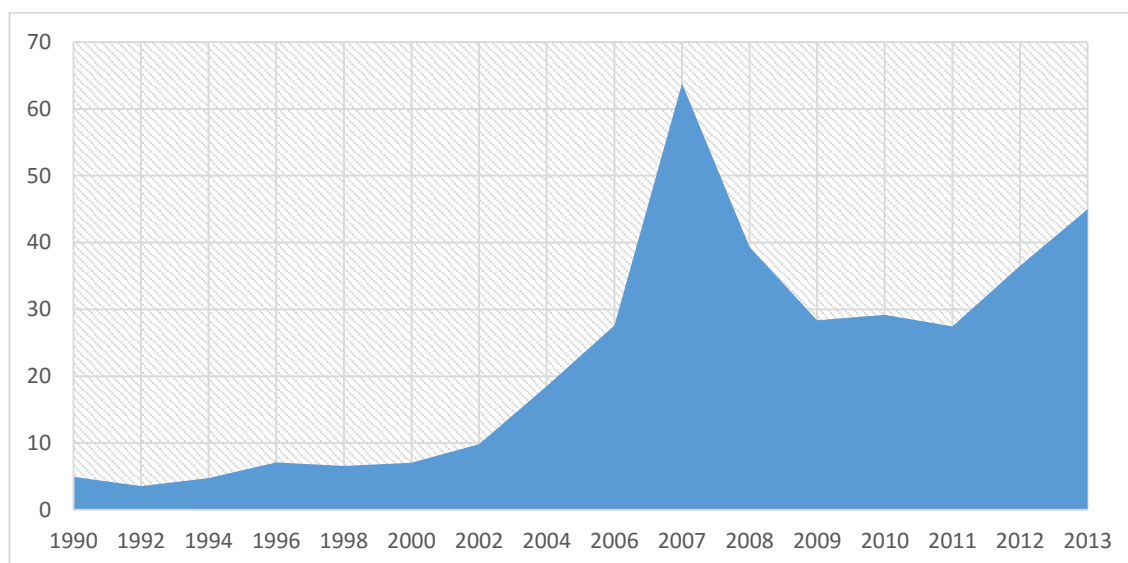
Overall, the fourth phase of financial reforms occasioned increases in households' debt financing, margin lending, and credits to the oil and gas sector. So with decreases in profitability of foreign exchange trading, the huge liquidity that built up in the financial system, following the consolidation exercise, were released mostly through increased lending to the households (especially those with some secured income or access to some underlying assets), for share-dealing and to the ever lucrative oil and gas sector.

4.2.1.5 The fifth phase – the 2007/2008 global financial/economic crisis

However, notwithstanding the increases in households' debt, margin lending, and credits to the oil/gas sector, the underlying real wages that could sustain the repayments for these loans continued to fall throughout these same periods – due to the declining investment in the non-oil sector (especially in MSMEs' activities, which contribute over 70% of national employment). The global financial and economic crises that erupted in 2007 in America, but came to roost in Nigeria in 2008 simply led to chaos in Nigeria's financial system, and again, exposed the structural weakness of accumulation that is not supported by increasing wage levels.

The financial crisis occasioned some form of credit squeeze, especially to share-purchase margin lending. Given that most Nigerian banks were borrowing money from abroad to finance the varying 'share-purchase margin lending', the rescinding inflow from abroad in the heat of the financial crisis exposed the insolvency of most of these banks. The eventual collapse of the stock market (illustrated in Figure 22) wiped off a substantial amount from most banks' balance sheet, given that most of these banks had high exposure to margin loans.

Figure 22 - Ratio of stock market capitalisation to GDP (in percentage)



Source: Own elaboration based on data from the Central Bank of Nigeria's 2013 statistical bulletin

Overall, the excessive exposure of many of these banks to the stock market resulted in serious liquidity problems exhibited by most of the banks towards the end of 2008. It was against this background that the CBN moved decisively to strengthen the banking industry, protect depositors' and creditors' funds, safeguard the integrity of the industry, and restore public confidence. The CBN established the Asset Management Corporation of Nigeria (AMCON), as a resolution vehicle expected to soak the toxic assets of troubled banks. Chief executives of distressed banks were replaced, and the CBN established the Consumer and Financial Protection (CFP) division to provide a platform through which consumers can seek redress.

Generally, it could be deduced that the varying financial reforms that have been implemented in Nigeria over the years have not worked in stimulating significant economic development in Nigeria: given that the levels of real capital accumulation, including that of employment, have not increased significantly over these years. Instead, these strategies, as we have seen, merely engendered some form of volatility in the economy. For example, as soon as asset bubbles busted in 2007, the collapse of the

previously bloated stock market wiped off a huge chunk of value off financial assets. This in turn undermined consumption and real growth: when banks, during the aftermath of the crisis ceased lending and redeployed their funds into safer assets such as government securities, the real sectors consequently suffered due to collapse in both aggregate domestic demand and bank lending.

Although the Nigerian government and the CBN have taken several steps to correct the resultant anomalies that often emerge in the financial system after some form of reforms have been implemented, it is however clear that these various reforms have largely been peripheral – with regards resolving the underlying structural problems that have been undermining capital accumulation along with wage growth. Rather, the countermeasures simply occasioned changes in the banks' activities.

To conclude, the initial financial reforms and the counter-measures employed to attenuate the anomalies occasioned by the reforms could be argued to have almost done little to address the fundamental problems undermining real capital accumulation in Nigeria so far. Instead, given the falling wages, declines in the value of financial assets held by households and increases in the rate of interest charged by the domestic financial institutions have simply led to increased defaults in the economy⁹⁰. These, in turn, have led to reductions in banks' profitability, which inevitably reduces the chance of real enterprises to access affordable credit from the banks. These contradictions further engendered decline in the pace of capital accumulation, and development of the wider economy.

⁹⁰ According to Radwan (2010) and Fowowe (2010), at the heat of the crisis in 2009, over 80% of loans made by most banks were subsequently declared as non-performing assets

4.2.2 *Subordinate financialisation in Nigeria*

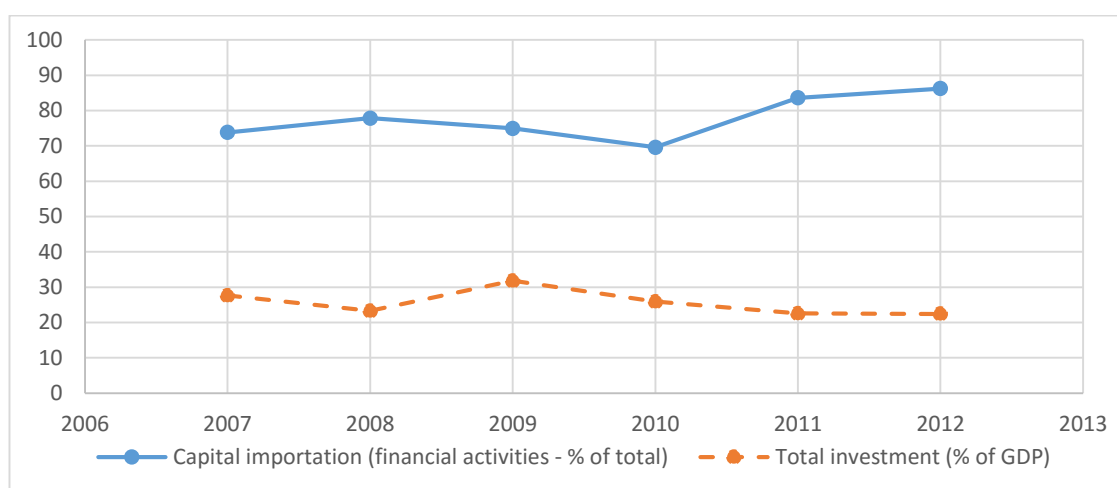
So far, we have concerned ourselves with explaining financialisation and its impact on the Nigerian economy. However, underneath this trend, another form of financialisation, termed *subordinate financialisation*, could be seen to be also taking place in Nigeria. Subordinate financialisation, as defined by Lapavitsas (2013b), involves the outflow of potential capital following the actions of the monetary authority of that economy. Whilst analysing Nigeria, it was observed that financialisation in the economy has also followed the *subordinated* path articulated by Lapavitsas – given that potential capital now flows out from the country and into rich countries, as a result of the monetary authority's actions, instead of the other way round.

To be able to delineate how potential capital is flowing out of the Nigerian economy, we first need to analyse the actions of the monetary authority with respect to addressing perceived consequences that may arise from huge foreign inflows of liquid capital.

To begin with, as was shown in Table 3, we see that most capital inflows into Nigeria have been directed towards financial activities with a stagnant or declining flow to the real sectors. In addition to the fact that a huge portion of the inflows into the country are being directed purely for the accumulation of financial assets, a significant proportion could also be seen to be borrowings by the domestic financial institutions (Figure 18). For example, the average proportion of the total portfolio investment inflow that is attributed to loans to domestic financial institutions from 2007-2013 was around 26% (i.e. 26 pence borrowing for every one pound of portfolio investment) compared to those attributed to the real sectors, which were around 2%, on average in the same period.

In general, these liquid inflows could be simply seen to be contributing to the huge increases in Nigeria’s stock market, given that most of the banks are also mostly involved in share-purchase margin lending. To support this point, we can see that (see Figure below) the share of market capitalization (the market prices of stocks multiplied by the number of stocks issued by corporations) in the national output has been on the increase since the globalization of Nigeria’s stock market in the 1990s⁹¹, while little to no impact have been felt on the pace of growth of real investment in the country (see Figure below).

Figure 23 - Capital inflow to finance (% of total capital inflow) vs. gross investment (% of GDP)



Source: Own elaboration based on data from the CBN’s statistical database and the IMF’s financial database

Secondly, these huge liquid inflows could be seen to be the reason the monetary authority holds an increased level of reserve, as an insurance against unexpected withdrawals of foreign funds, which may induce pressures on the domestic currency. Although the CBN’s focus has shifted from active exchange-rate management to inflation

⁹¹ From 1990 to 2000, the ratio of market capitalisation to real GDP rose to 59% of real GDP. The ratio peaked at a tremendous height of 2096% of GDP in the heat of the financial bubble in 2007.

management, the bank nevertheless still uses the foreign exchange reserve, which it manages, to defend the country's currency on certain occasions⁹².

Though not explicitly stated in the bank's (CBN's) operating guidelines, the bank's investment policy, with regards the management of the country's foreign reserve, has been mainly developed on the basis of the following objectives –

- Preserving the real foreign purchasing power of the reserve – this goal finds expression in the currency composition of the reserves and the management of their interest rate risk.
- Maintaining a high degree of liquidity. This goal is met mainly via limits on the type of assets, which are included in the reserves portfolio.
- Earning a reasonable rate of return on the portfolio. This goal has an influence on the choice of portfolio duration, the level of credit risk accepted and the decision to employ active management.

Given this new role of maintaining an increased level of reserve, in the face of the increasing liquid inflow, and the investment strategy of the monetary authority, some often unobtrusive and unintended consequences, which further narrow the possibilities for economic development, can be seen to emerge as a result of the attempt by the monetary authority to address the obvious consequence of the increased liquidity inflow.

⁹²The knowledge that it has access to substantial reserves of foreign currency serves to reassure both residents and foreign investors and acts as a deterrent to speculative attacks on the nation's currency.

Firstly, the increasing inflows, which are often channelled to the accumulation of financial assets (which are highly liquid) causes the monetary authority to maintain a relatively high monetary policy rate, in order to regulate the level of inflation such liquid inflows will often occasion.

Secondly, the monetary authority also expands its foreign reserves, in order to safeguard the integrity of the country's currency against any speculative attack and partly also because of the requirements imposed by the IMF. Given also that the bank's investment policy is to earn a reasonable amount of return on its foreign reserve portfolio, they (the CBN), at the same time, also expend a proportion of the accumulated reserve in reasonably less risky and liquid asset – which most often is the United States' treasury security.

Inadvertently therefore, while the liquid inflows – portfolio investments and bank borrowings – continue to pour in, the Nigerian monetary raises its policy rate – which raises the domestic cost of capital – and also proceeds to 'insure' these private debts by advancing official loan to the U.S. (through the purchase of U.S. treasury securities) at a much lower official U.S. interest rate. This latter action contributes to the loss of potential capital. This is because the Nigerian economy earns a negative net interest return in the whole process – given that the domestic firms borrow from abroad at a high market rate while the monetary authority lends overseas at a low official rate.

For example, an average of 17.21% of the total Gross National Income (GNI) of Nigeria was held as a foreign reserve from 2008 to 2012, with over 15% as U.S treasury securities. In value terms, this meant that over \$7.6 billion per year were held as U.S. treasury securities between 2011 and 2013 (see Table below):

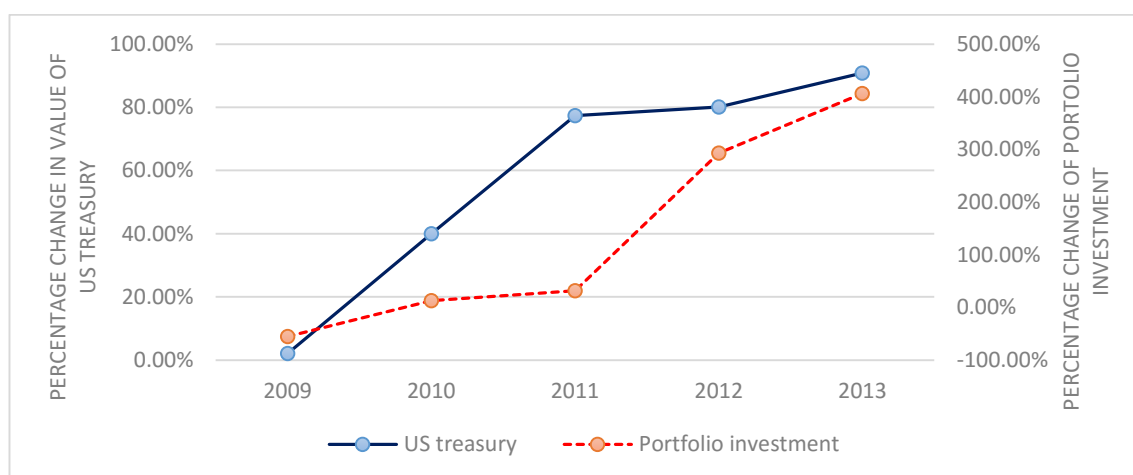
Table 10 - The US treasury securities holdings (2008-2013)

Year	Value of short and long term US treasury securities held by Nigeria (in million \$)	Percentage change ^a
2008	4,308.00	170
2009	4,396.00	175
2010	6,032.00	277
2011	7,642.00	378
2012	7,758.00	385
2013	8,222.00	415

^aThe percentage change is based on 2007 figure as 100. Source: Figures are from the U.S. department of Treasury.

Coincidentally also, we see that there is a positive correlation between the huge liquid inflows and the purchase of US securities (see figure below): the correlation between portfolio inflows into Nigeria and the value of U.S. treasury held by the monetary authority is around 0.80%, with a significance level of 0.001%. This means an increase in the portfolio inflows correlates positively with increases in reserve accumulation, of which a significant proportion is used in purchasing U.S. treasury securities.

Figure 24 - Changes in value of purchased US treasury bills and portfolio investment in Nigeria



Sources: CBN statistical database and the US department of treasury's website. ^aPercentage change in the value of US treasury securities purchased by Nigeria (2008 values as 100). ^bPercentage of portfolio investment inflows into Nigeria (2008 values as 100).

Given therefore that the credits made to Nigerian firms are often at a relatively high market rate of around seven percent⁹³, while the rate received by the monetary authority that insured the inflows – by accumulating reserves – and expended a significant proportion thereafter on treasury securities is a paltry 0.15%-2%⁹⁴, the circular flow between the U.S. and Nigeria clearly therefore embodies a significant outflow of potential capital from Nigeria. Using the figures above, around 5%-6.85% potential interest earnings could be seen to be lost as a result.

Furthermore, while the productive processes in Nigeria are continually undermined by the increasing cost of capital, which the liquid inflows often precipitate, and the monetary authority continues to subsidise loans to the U.S, the inflows into the country also contribute to the intense financial speculation in the country – which also produces further differentiation in the economy.

The internal or pull factors to the increased financial inflows in Nigeria are, without a doubt, neither due to increased earnings from real productive activities nor due to sound fiscal and monetary policies, but because of the huge gains from exchange rate trading, interest rate arbitraging and the booming stock market in Nigeria. The private financial firms that have been able to borrow from abroad at rates that are typically lower than domestic rates have often used the cheap funds to invest in domestic financial assets that yield higher returns and as a consequence, this has also allowed for the direct appropriation by privileged private borrowers of the benefits of interest rate spread.

⁹³ This is the average rate of interest on new external debt commitments by private institutions in Africa, (World Bank, 2014)

⁹⁴ This is based on a one-year average Treasury yield curve rate i.e. the Constant Maturity Treasury rate (US department of Treasury, 2014)

Hence, the whole process – of subordinate financialisation – also contributes to the internal differentiation (widening of income inequality) in the economy.

4.3 Conclusion

In summary, the bane of capital accumulation, along with economic development in Nigeria can be seen to be the low capability of real enterprises in the country of extracting sufficient rate of profit from their productive processes. This low possibility is argued to emanate from the high cost of doing business in Nigeria, which derives from the dilapidated infrastructures that cause the capitalist enterprises to resort to expensive private provision. The low possibility also derives from the high cost of capital pervasive in the country. Ineffective demand along with unequal competition and uneven development that is inherent in the globalised capitalist system also undermines the possibility of backward blocs of capital in Nigeria of earning a commensurate rate of profit that will ensure their subsistence.

Contrary to mainstreams believes that the deregulation of the financial sector and of capital accounts will induce development of domestic financial institutions which will, in turn, accelerate the pace of capital accumulation along with economic development, the increased financial deepening in Nigeria has had little to no significant impact on the real economy. Instead, the deregulation and liberalisation exercise has promoted financialisation and subordinate financialisation, which has further narrowed the chances of development in the real economy in the end.

Chapter five: Summary and conclusions

5.1 Summary of major findings

It is contended in this study that the main reason for the decelerating rate of capital accumulation, along with the persisting underdevelopment in Nigeria, is the inability of real capital enterprises in the country to extract a commensurate rate of profit from their productive processes. The declining possibility of extracting commensurate rate of profit is posited to be because of the uneven development that is occasioned by the uneven competition between backward peripheral productive processes (pervasive in Nigeria) and advanced quasi-monopolistic capitals (ubiquitous in the core and semi-peripheries). High-internalised ‘external’ costs of production, including the exorbitant rate of interest charged by domestic financial intermediaries in Nigeria, and the ineffective demand for goods made in Nigeria also contribute to lowering the probability of capitalist enterprises in the country of earning sufficient rate of profit from their productive processes. In sum, the interaction of these factors on the possibilities for profitability causes the declines in the rate of real capital accumulation, which then contributes to growing unemployment, rising poverty and widening inequality in the country.

The internal and external elements that undermine the possibility of earning adequate rate of profit, along with the pace of capital accumulation cum economic development in Nigeria are remarked to have been intensified by the ‘neoliberalised’ social structure of accumulation. The policies of financial deregulation and liberalization, instead of accelerating development actually triggered *financialisation* – the dominance of financial institutions and activities in economic matters –, which has quickened the flight of both industrial and human capitals from the weak real sectors into the financial sector. On the other hand, the globalisation of trade occasioned the problem of uneven development: the

backward blocs of capital in Nigeria, which had tried to conserve their obsolescent industries, and preserve their positions in order to maximise the profits accruing to their processes, are now threatened considerably by advanced low-cost technologies that restrict such long-term scope. These new low-cost technologies, which often occasion the phenomenon of ‘perennial gale of creative destruction’, strikes, not just at the margins of the profits and outputs of these backward blocs of capital, but at their foundations and very lives.

Additionally, capital account deregulation engendered *subordinate financialisation*, which has exerted tremendous social cost on the developing economy. The deregulation of capital account controls caused a rapid influx of foreign liquidity into the economy. This huge influx, in turn, occasioned two distinct phenomena that have, to a significant extent, further undermined the development of the real economy. First, due to the foreign exchange management policy in place, and the requirement by IMF for national monetary authorities to hold as foreign reserve a certain amount (at least equivalent to a month’s import value), the Nigerian central bank thus accumulates foreign reserves. Initially as a sort of insurance against unexpected reversal of flows, which could cause currency crash, and due to IMF’s rules. Because of its foreign reserve investment policy, it often invests these acquired reserves in a relatively liquid and less risky asset – such as the U.S. treasury security. However, by so doing, it is inadvertently subsidising loans to the U.S. government; given that the treasury bills yield a relatively low interest compared to what local financial institutions in the country pay for borrowing abroad. In essence, the capital account deregulation, contrary to neoliberal expectations, occasions substantial outflow of potential capital – which could have been put to some better use in the country.

Secondly, the huge inflows indirectly cause the increases in the rate of interest in the country. This is because, given that it is a mandate for the monetary authority to manage inflation, huge liquid inflows that may trigger rises in inflation causes the monetary authority to maintain a high policy rate, which inadvertently contributes to the increase in the cost of capital in the economy. Therefore, in addition to causing a massive outflow of potential capital from the economy, the capital account deregulation policy also indirectly occasions incessant increases in the cost of capital in the economy.

On the other extreme, privatisation of the country's national assets has done little to improve the provision of basic infrastructural amenities in the country; and this has also contributed to undermining the possibility of capitalist enterprises to earn a commensurate rate of profit that will sustain their existence. Since privatisation started in early 1990, many national facilities, such as refineries, and electricity generating and distributing plants, which provided basic infrastructural services in the country, have mostly been privatised. Nevertheless, their privatisation has done little to improve their services. Most have actually been severely dilapidated⁹⁵, and the private provisions, which the dilapidation necessitated, have increased costs for many capitalist enterprises.

Altogether, these factors have substantially reduced the capability of real capitalist enterprises in the country of earning a commensurate rate of return on their invested capital. This reduction in capability, in turn, has caused them not to expand their

⁹⁵ Since the oil refineries were privatised, starting in early 2000, they have rarely refined any petroleum product in Nigeria. Rather, crude oil is now exported abroad for refining and then imported back in its finished form. Likewise, since the National Electric Power Authority (NEPA), later renamed Power Holding Company of Nigeria (PHCN), was privatised in 1998, electricity supply has neither improved nor remained as it were before. Rather, electricity supply has further deteriorated; this is reflected in the constant power outages that have become rampant.

productive activities – hence the stagnation in the gross level of stock of capital in the economy. The effect of such has been the growing rate of unemployment, which has accelerated the rate of poverty and has widened the inequality gap in the country.

5.2 Conclusions

Nigeria's economy has been shaped by several economic philosophies since its amalgamation in 1914. These philosophies have ranged from the primary commodities export-oriented strategies, adopted during the colonial epoch, to the planned public sector-led economic development strategy and the import substitution industrialisation (ISI) growth strategy, adopted from the 1970s to mid-1980s, and eventually to the current market-led strategies that have been in place since the mid-1980s. The results from the above regimes have been mixed, with much of them disappointing: judging from the performances of some of the country's macroeconomic indicators since the country's independence in 1960. For example, all major productive sectors in the country have considerably shrunk in size since the 1980s: from 1960 to 1984, for instance, the manufacturing⁹⁶ output averaged around seven and three-tenths percent of the total GDP; however, the manufacturing outputs from 1985 onwards have not reached the average output witnessed in the pre-SAP epoch.

The declining pace of capital accumulation reflects the number of firms ceasing operation: according to the survey published by the Small and Median Enterprise Development Agency of Nigeria (SMEDAN) in 2013, many MSMEs (five out of ten) cease operation within few years of their establishment. These increased closures have in

⁹⁶ This includes all other manufacturing that excludes oil refining, mining and extraction of mineral resources.

turn amplified the rise in the rate of unemployment, which rose sharply from 11.9% in 2005 to 23.9% in 2011⁹⁷. The increasing rate of unemployment means falling household incomes, which translates to rising poverty: over 68% of the population are now living below the poverty line⁹⁸. Poverty is also becoming dynastic in Nigeria – with the threat that the children of the poor are also likely to end up poor; given the bleak economic prospect, the children of the poor are also in danger of not being employed in the future. Income distribution is also largely skewed, with a Gini coefficient of 48.8%⁹⁹.

Furthermore, the economic capacity remains highly underutilised and uncompetitive: Nigeria is not only very poor, but she also experiences the worst form of underutilization of both human and industrial capital. For example, Nigeria's economy is still currently heavily dependent on the oil sector – which presently contributes around 90% of its export revenues¹⁰⁰, 75% of the government's revenues¹⁰¹, and over 45% of its Gross Domestic

⁹⁷ Data sourced from the IMF world Economic Outlook Database for 2014, <http://www.imf.org/external/pubs/ft/weo/2014/01/weodata/index.aspx>. The figures represent the percentage of the total labour force that is unemployed. The rate of unemployment in youths is altogether a different case. In a recent report published by the National Bureau of Statistics in 2011, unemployment in age groups 15-24 is around 37.7 per cent.

⁹⁸ This is the percentage of the population living below \$1.25 PPP per day. 84.5 per cent of the population are estimated to be actually living below \$2 PPP a day. Data are for 2010. Sourced from the UNDP's human development indicator and the World Bank's world development indicator databases

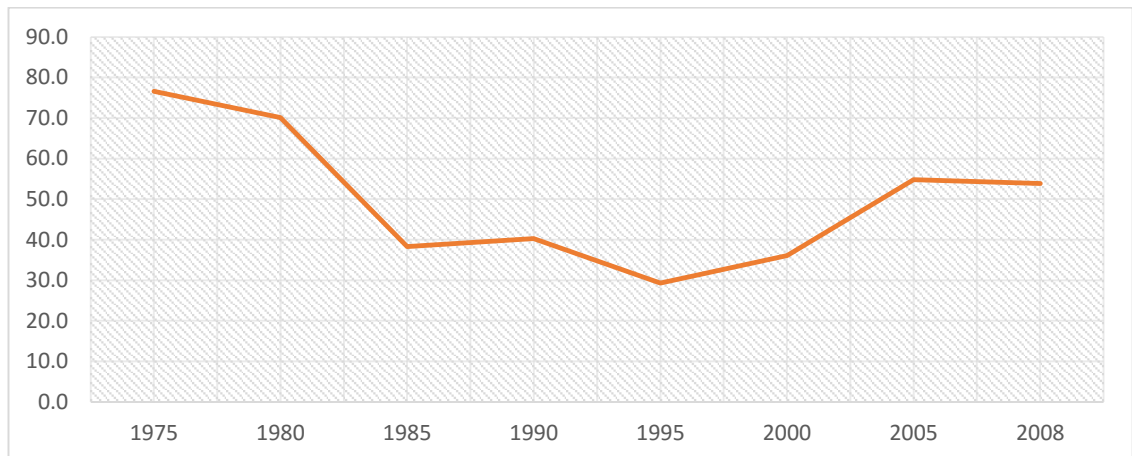
⁹⁹ The Gini coefficient measures the deviation of the distribution of income (or consumption) among individuals or households within a country from a perfectly equal distribution. A value of 0 represents absolute equality and a value of 100 represents absolute inequality. Data is for 2010, sourced from the World Bank's development indicator database.

¹⁰⁰ This figure is for 2011. This represents a percentage of merchandise export income that is from fuel export alone. Data sourced from the World Bank Development Indicators database, <http://databank.worldbank.org/data/views/variableselection/selectvariables.aspx?source=world-development-indicators>

¹⁰¹ This figure is from the 2012 federal account. Total revenue (gross) was ₦ 11,116.90 billion and oil revenue (gross) alone stood at ₦ 8,025.95 billion. Sourced from the CBN statistics database, <http://statistics.cbn.gov.ng/cbn-onlinestats/DataBrowser.aspx>

Product (GDP)¹⁰². The manufacturing capacity utilisation is very low compared to what is obtainable in other parts of the world: given the lack of adequate infrastructures, a substantial level of industrial capacity is not fully utilised in the economy (see figure below).

Figure 25 - Manufacturing capacity utilisation



Source: Own elaboration based on data from the CBN 2014 statistical database, <http://statistics.cbn.gov.ng/cbn-onlinestats/>

The increasingly poor investment climate has caused private agents to keep the bulk of their assets abroad¹⁰³ and have also instigated the mass exodus of highly skilled workers from the country; over one million Nigerians (mostly highly educated) are argued to have emigrated to Europe and the U.S (Soludo, 2003). The poor state of the economy also explains the increasing foreign inflows into the financial sector.

¹⁰² 2011 GDP at current basic prices and the 45 per cent represent contributions from crude petroleum & Natural gas, Solid Minerals, Quarrying & other mining and oil refining. Data sourced from the CBN 2012 statistical bulletin.

¹⁰³ Goldin and Reinert (2012) and more recently Ndikumana (2014) have noted that the residents of low- and middle-income countries hold a great deal of their wealth in form of flight capital mainly due to poor domestic investment opportunities and confidentiality.

Nigeria's economic and social developments have also been disappointing. The country's per capita income, as of 2012, is just about \$1071¹⁰⁴, which is significantly below its level at the time of independence in real terms. Equally disturbing are the country's social indicators which have slipped to well below the averages for developing countries, the top on the ladder being life expectancy at birth of only 52.3¹⁰⁵ years and the under-five mortality rate as high as 143 per 1,000 live births¹⁰⁶.

Clearly, Nigeria's economic and social development over the years have been, and is still, disappointing despite the implementation of various macroeconomic policies aimed at accelerating development in the country. Although the country has been recording significant rises in its gross national output/income (and its rate of growth), the core development variables – employment, income equality and low levels of poverty – have largely stagnated and/or deteriorated. And despite the fact that a huge amount of foreign capital has been flowing into the economy, little to no significant improvement has been recorded in the real productive sectors.

The fundamental causes of these contradictory experiences in Nigeria are argued to emanate from the low possibility of capitalist enterprises in the country of earning a commensurate rate of profit from their productive activities, which thus inhibits their

¹⁰⁴ 2012 figure from the World Bank's development indicator database, <http://databank.worldbank.org/data/views/variableSelection/selectvariables.aspx?source=world-development-indicators#cn> Discounting this figure to 1960's using a moderate inflation rate of five per cent = $1071 / (1+0.05)^{53} = \$80.68$. 1960's GDP per capita was higher at \$93.

¹⁰⁵ The figure is for 2012 life expectancy at birth. Data is from UNDP human development indicators database, <http://data.un.org/DocumentData.aspx?id=327>. Life expectancy at birth for low-income countries is 59.1. Nigeria's 52.3 years is still below the average for low-income countries.

¹⁰⁶ This figure is for 2010. Nigeria's figure is still higher than the average (110 per 1000 births) for low-income countries. Sourced from the UNDP's statistical database (see footnote 92 for the source)

expansion.

For Nigeria to develop, these mitigating elements – the high cost of capital, and of production, the uneven development that derives from the uneven competition between peripheral processes (ubiquitous in Nigeria) and quasi-monopolistic processes (prevalent in core economies), and the low demand for goods made in Nigeria – that undermine the capability of capitalist enterprises in the country to develop – needs to be fully addressed.

In addition, given that peripheral and obsolete processes (pervasive in Nigeria) could be easily subordinated to the domination of advanced (and constantly innovating) capitals from the core and other semi-periphery countries, Nigeria needs, not only to address the various elements that undermine accumulation in the real economy, but to also embrace an ‘innovative culture’ – a knowledge-based industrialization¹⁰⁷.

The uneven development, which derives from the uneven competition certainly hinges on the lack of innovation in the country. Nigeria, as an economy, is devoid of superior productive processes or methods, a coherent industrial organisation, and the ability to engineer new consumer goods: given the zero patent rights that belong to indigenous capitalist enterprises in the country.

Given that the possession of an ‘innovative’ advantage, as Schumpeter ([1943] 1976: 83) remarked, helps capitalist enterprises to acquire a new significance in the midst of the perennial gale of creative destruction, Nigerian firms, by possessing such advantage, will almost certainly be insured – even if partly – from the uneven development that

¹⁰⁷ A knowledge-economy, as defined by Mazzucato (2011: 22) is an economy that is driven by technological change and, knowledge production and diffusion.

often befall peripheral processes during the perennial gale.

Therefore, for Nigeria to develop, it needs, not only to increase the pace of real capital accumulation but also to embrace knowledge-based industrialisation. It needs to adopt processes that could ensure a significant surplus value (and profit) would be earned (given that they are quasi-monopolistic in nature): the agrarian processes and competitive goods production prevalent in Nigeria can rarely be argued to be earning significant surplus value; that is why most have often struggled to expand significantly.

Furthermore, history shows that the driving force of successful capitalist development is not 'perfection of the market mechanism' but the building of organisational capabilities¹⁰⁸ (also a form of industrial innovation). Lazonick (1991: 5) explained that it is through this innovation (building of organisational capabilities) that particular business organisations (and the economy) gain competitive advantage, which then drives the development process.

Lazonick's central argument concerning the changing institutional foundations of successful capitalist development is that the superior development and utilisation of productive resources increasingly requires that business organisations have privileged access to productive resources. Inherent in such privileged access, he noted, is the supersession of market coordination to planned coordination. The supersession of market coordination, to some degree, to planned coordination, he remarked, has become an increasing characteristic of a successful economy.

¹⁰⁸ 'Building organisational capabilities', according to Lazonick (1991: 5), refers to cooperation among firms that have common interests. This cooperation, he remarked, should be aimed at enhancing the capabilities of the participating enterprises to develop and utilise their productive resources (such as sharing basic technical information for the sake of developing the national industry).

For instance, the Japanese state, Lazonick explained, played an important role in preserving the home market for Japanese firms. By influencing the distribution of income, the organisation of industry, the availability of finance, the education of labour, and even the patterns of consumer demand, the Japanese government, he noted, has gone further in creating conditions supportive of economic development.

Therefore, contrary to the neoliberal assertion of minimal state intervention in the economic process, the role of the government in the drive to innovation is not only crucial but also pertinent. If Nigeria is to develop, the government therefore also needs to play a significant role in the process.

Marianna Mazzucato – a renowned Schumpeterian economist – recently espoused the strategic importance of government in driving development. She also argued that the role of the government in the most successful economies has gone way beyond just creating the right infrastructure and setting the rules. The state, she remarked, is the leading agent in achieving the type of innovative breakthroughs that allow companies, and economies, to grow (Mazzucato, 2011: 18).

Mazzucato (2011), using the U.S. as a case study, argued that innovation is far more likely to happen when it is commissioned via a multitude of contracts by the government for particular advances or technological solutions, rather than by – for example – providing tax credits or badgering banks to lend more to certain parts of the economy. For instance, the emergence of high-growth firms – such as Facebook, Google – and the establishment of Silicon Valley and the biotech industry in the U.S. since the 1990s, she remarked, was actually engineered by the U.S. government. The algorithm that led to Google's success, according to Mazzucato, was funded by a public sector National Science Foundation Grant. The molecular antibodies, which provided the foundation for

biotechnology before venture capital moved into the sector, she also noted, were discovered in public Medical Research Council (MRC) in the UK. Many of the most innovative high-growth firms in the US, she contended, were funded, not by private venture capital but by public venture capital such as through the Small Business Innovation Research (SBIR) programme.

In sum, the role of government in the development process, given these accounts, certainly cannot be questioned. The involvement of government in driving innovation through funding Research and Development (R&D), as have been obtainable in many developed and even emerging countries does not yet lie at the heart of Nigeria's economic policy. In addition, there is no strong network and connections among enterprises where knowledge could be diffused (i.e. there is no cohesive business organisation in the economy). The Nigerian government has not assumed any responsibility for fostering horizontal links between existing institutions in order to create a flat structured national system of innovation.

In view of the strategic relevance of government active participation in the real economic process, the Nigerian government needs, therefore, to create a strategy around a new high-growth area before the potential is understood by the business community. It needs to be the leader, the instigator. It needs to be active in funding the most uncertain phase of the research process that the private sector is too risk-averse to undertake. It can seek and commission potential innovations, and can even oversee the commercialization process. These, Mazzucato (2011) also explained, have been central to most successful governments, such as the U.S. The Nigerian government, therefore, needs to embrace these roles if Nigeria is to have any hope of developing. It needs to adopt a more hands-on approach to funding potential technologies such as the green technology innovation

(e.g. the geothermal and the solar energy technologies); given that the country is blessed with potential natural resources and favourable climates for such technological advancement.

Lessons from these economies – the U.S., Japan, South Korea, and China, for instance – where the state plays active roles in the economic process are important for Nigeria to learn from. The policy makers need to understand that it is the state that should take the lead for inducing innovation in the economy and to create a highly networked system of private actors that can harness the best of the private sector for the national good.

Overall, the industrial policy Nigeria needs is that which –

- (i) addresses all the crucial elements undermining capabilities of capitalist enterprises in the economy
- (ii) is based on a knowledge economy, and
- (iii) where the state is the central catalyst.

5.3 Further research issues

The main problem often encountered when studying developing economies is that of lack of reliable data. Many developing economies lack the capacity to collate and store data. Due to this, it often becomes close to impossible to study such economies effectively.

The central argument put forward in this study, which is that the growing underdevelopment in Nigeria is because of the low possibility of extracting sufficient profit from real productive processes in the country, was underpinned by a critical examination of the average rate of profit obtainable in the economy (relative, in particular, to the average costs of capital). Given that, as a rule, the costs of capital should be

sufficiently lower than the average rate of profit in order to induce the capitalist to invest (if the capital is to be borrowed), it thus becomes clear that in Nigeria, where the average rate of interest is usually higher than the average rate of profit obtainable in the country, that capitalist enterprises (who often need to borrow capital) are not sufficiently induced to invest.

In view of the above, it goes to show that the average rate of profit in an economy could act as a signal of the capability of that economy to accumulate capital. In addition to the cost of capital, the inability of the capitalist enterprises in that economy to compete favourably in the international market, and the lack of cheap production inputs (such as electricity, internet, roads, postal services, etc.) also undermine the capability of the enterprises in that economy because they also reduce the profitability of the productive process.

To come to the conclusion reached in this study, the average rate of profit obtainable by non-financial corporations in Nigeria was calculated from a sample of 30 firms, over a ten-year period. Though from this sample, a rough estimate of the average rate of profit extractable from real productive processes in the country was obtained, nonetheless, a truer picture of the level of deterioration of the real economy could have been painted if the aggregate (or a close approximation of it) of the profit level in the whole country were calculated.

In sum, having a database of the aggregate (national) level of profit will almost certainly make it easier to accurately measure the health of the economy – i.e. the level of capability of all real enterprises in that economy. Having a national measure will also assist with an effective comparison of periphery economies with core economies (those that already have such indicators – such as the US). In general, more research needs to be directed at

measuring (or creating a database of) the aggregate (national) rate of profit obtainable by non-financial enterprises in developing economies for it will assist in evaluating the economic health of these economies relative to those in the other parts of the world.

PART THREE

EMPIRICAL ANALYSIS

Chapter six: Review of empirical literature on the finance-growth debate

6.0 Introduction

The savings-growth and the finance-endogenous growth theories of the 1950s and 1990s respectively have attracted a host of studies employing varying mathematical or statistical models to investigate the relation between financial and economic variables. However, similar to the dissension surrounding the underlying economic theories, the varying econometric analyses conducted in order to provide support or to refute the theories have also developed amidst controversies. Most often, the empirical analyses have produced varying conflicting results, especially when subjected to some form of verification: when different datasets or population are used, the models have often yielded conflicting results.

Furthermore, most studies that adopt purely econometric models in their analyses have also attracted widespread criticisms for their alleged ‘static’ approach for analysing ‘dynamic’ situations. Minsky (1986: 3) remarked that the highly mathematical theories are only valid for abstracting from corporate boardrooms and Wall Street. The models, he noted, does not deal with time, and uncertainty – the essential characteristics of a dynamic real economy.

This section will be reviewing some of these empirical studies on the finance-growth nexus. An attempt will be made at exposing the several inadequacies that mar the validity of some of the results from many of these empirical analyses.

The review is organised as follows. Section 6.1 examines the relation of the financial system to the accumulation-growth process. Section 6.2 discusses the first generation empirical studies that investigated the finance-growth nexus. Section 6.3 focuses on the

second-generation studies while section 6.4 examines the third generation studies on the finance-growth nexus. The conclusion to the chapter is contained in section 6.5.

6.1 The financial system and the accumulation-growth process

A large number of studies have detailed the contributions of the financial system to the growth of the real productive sectors. Bain (1992) and Levine (1996b), for example, showed that the functions of the financial intermediaries, such as facilitating transactions, mobilising and allocating capital, facilitating the trading, hedging, diversifying, and pooling of risks, and exerting corporate governance, are fundamentally necessary for economic growth. These functions, according to these scholars, inherently affect economic growth by influencing the savings rate, and by re-allocating these savings efficiently among different capital producing technologies. By facilitating payments, the financial system is posited to accelerate exchange and, therefore, contributes to the growth of the accumulation process. When it facilitates the trading, hedging and diversification of risks, Levine (1996b) remarked that it ensures the real sectors are not starved of funds. By exerting corporate controls, the financial system, they remarked, ensures increased productivity.

Therefore, establishing appropriate financial sector policies, Bain and Levine concluded, should be of paramount importance to policy makers given that an efficient financial system will provide better financial intermediary services that will subsequently boost capital accumulation along with economic growth and development.

The relative importance of the financial system to economic growth cannot be denied. Instead, it is the impacts of the varying macroeconomic reforms on the capabilities of the financial system, and subsequently on the productive sector of an economy that is

debatable. The financial *repressionists*' arguments (i.e. the McKinnon-Shaw's theses) assert that government intervention in the financial sector represses the sector and thereby undermines its ability to efficiently mobilise and allocate funds to the real productive sectors. The fundamental piece of their argument (as have been discussed earlier) relates to the effect a 'regulated' (or repressed) interest rate – permeated through government's prescription of interest rate ceilings – is perceived to have on the ability of financial institutions to mobilise savings.

A complementary neoliberal argument also posited that allowing private participation, by promoting unhindered competition in the financial system, will induce deepening (development or expansion) of the financial system which will, in turn, reflect an accelerated mobilisation and allocation of funds to capital accumulation. Those who hold this view, classified by Gupta as 'financial structuralists' (Gupta, 1987), generally contend that the quantity of financial variables, such as the level of aggregate financial assets in a particular economy, is a good predictor of the level of economic growth of the country (see Goldsmith, 1954; Levine 1996a). The theoretical foundations of the financial structuralist's studies derive from the works of Goldsmith (1954) and also from that of Gurley and Shaw (1967). However, it was only after the recent work by Levine (1996a) that a fairly comprehensive empirical framework for financial structuralists' school of thought emerged; Levine (1996a) produced an extensive set of financial proxies that measures the level of deepening of the financial sector.

Following the observation by Odedokun (1996b), it is clear that there is a common ground between these two schools of thought (i.e. between the financial repressionists and the structuralists) nevertheless. Both unanimously agree that the process through which the financial system stimulates economic growth is by 'mobilising larger resources' for

productive activities. They believe that deregulation and liberalisation of the financial system will stimulate development in (expansion of) the financial system and that the development will in turn enhance the mobilisation activity of the financial system.

In sum, building upon these early theoretical works of Goldsmith (1954), Gurley and Shaw (1955), McKinnon (1973) and Shaw (1973), are a vast number of empirical studies using both panel and time-series approaches to investigate the relationship between financial development (deepening or expansion) and economic growth, in various countries and for varying time periods. In what follows, is a critical review (in chronological order) of some of the leading literature.

6.2 Pre-1990s: The first generation studies on the finance-growth debate

Galbis (1977), was one of the first authors that used an abstract model to examine McKinnon-Shaw's hypotheses. In the study, Galbis concluded that high-interest rate, brought about by deregulation, does promote growth. He opined that the development (deepening) of the financial system, induced by deregulation, is a prerequisite for 'take-off' into sustained economic growth. He asserted that the proliferation of regulation by the government contributes to the malfunctioning of the financial system and subsequently leads to inefficient use of real resources in the economy.

To come to these conclusions, Galbis analysed the economic system using a two-sector model, which consisted of a backward and an advanced sector: under the assumption that both produce the same goods, which are sold at identical prices. Galbis went on to explain that the technologies available to these two sectors are different, with the advanced sector having advanced technologies, which enable it to have more investment opportunities and the backward sector having the low technology and thus inadequate investment

opportunities. Consequently, therefore, Galbis explained that the investment in the backward sector often falls short of the internal savings available to the sector, whereas the plentiful investment opportunities in the advanced sector exceed what the available savings in the sector could finance. He postulated that the investors in the backward sector, without much investment opportunities, will tend to acquire an alternative asset in the form of bank deposits, and the investors in the advanced sector are, on the other hand, dependent on bank borrowing to finance their investment.

Galbis therefore argued that interest rate deregulation will cause the investors in the backward sector to acquire more bank deposits (based on the premise that there will be higher returns on acquired bank assets *viz.* increased interest rate receipts as against the returns from their backward low-yielding real capital assets), and these increased savings, mobilised by the bank, will then be channelled to investors in the advanced sector, thus boosting the overall investment in the advanced sector. He contended that since the productivity in the advanced sector is higher (given the advanced technologies), that this reallocation of funds by the financial intermediaries will, as a result, induce an increase in aggregate productivity, and, therefore, growth in the wider economy.

Though intriguing, some inadequacies concerning Galbis' conclusions have been highlighted regardless by many analysts. For example, Gupta and Lensink (1996) noted that the way Galbis' two-sector model is specified that it will be difficult to show the effects an increase in the rate of interest, caused by deregulation, will have on the reallocation of actual investment within the whole economy. This means that the model focused only on the effect on aggregate output from investments in the whole economy without accounting for the actual relative change of the stock of investment in the

economy, especially in the backward sector, including the consequent economic impact of such on the wider economy.

In essence, Galbis' analysis could be said to have failed to consider, fully, the wider consequences of the *centralization* process on the economy. Galbis' two-sector model certainly reflects the dual production system that characterises poorest economies. Nigeria, just like many developing countries, has a large number of peasant farmers and artisans, with a shallow advanced sector, which is dominated by some centralised foreign firms, and few local quasi-monopolistic industries. Following Marx's ([1867] 1990) explanations (which have been discussed earlier), intensified industrialisation (as in the growth of the advanced sector in Galbis' model) could be seen to be undermining the wider economy in the process because, as Marx explained, when few large enterprises centralise means of production, the number of unemployed labourers which were not to be found previously are now increased by dozens and hundreds. And when the destruction of medium and small enterprises, especially those of the craft type (the backward processes in Galbis' model) is not accompanied by an all-round industrial advance, which creates new needs for labour-power, the former owners of means of production, now in thousands, disposed through competition are not transformed into employees but simply thrown out of the production process. They are, Marx remarked, no longer proletarianised but are completely pauperised.

Inherently, therefore, the transformation articulated by Galbis certainly precedes the eventual pauperisation of a large number of the populace in the economy; because in most cases, those that lost their sources of income in the backward sector may not be fully absorbed by the few centralised advanced enterprises in the country that are now increasingly less labour-intensive (following the 'law of the tendency of accumulation')

which simply imply that as the capitalist development progresses, there is an increasing accumulation of organic capital, with a relative reduction in the use of labour power).

So, given that the centralisation of production by few advanced sectors often do not produce enough employment opportunities for the displaced backward workers (although average output in the economy might increase as a result of the improved labour-saving technologies that increases productivity), the rate of development in the economy will, without a doubt, be at risk. This is because more people stand to lose their means of living, and income inequality will widen as a result – despite the increasing national output.

In conclusion, although Galbis' study examined the relationship between interest rate deregulation and output growth, it could be argued that it did not holistically and accurately evaluate the impact of such policy with regards the overall transformation in a typical agrarian (backward) economy – such as Nigeria's – that is dominated by a few centralised high-tech low labour-intensive corporations. In other words, Galbis' study could be argued to be somewhat inadequate in providing a consistent theory of capital accumulation and economic growth/development.

Fry (1978), studied the effect of interest rate deregulation on domestic savings for ten less developed Asian countries from 1962-72. He concluded in the study that the real rate of interest (level of interest rate above the inflation level) has a positive effect on domestic saving and economic growth in those countries he examined. He claimed that McKinnon-Shaw's emphasis on the importance of financial deregulation and liberalisation on the growth process can be fully justified based on the outcome of his analyses.

Unfortunately, however, there are various inadequacies inherent in his study that seriously undermine the validity of his arguments. First, the variables employed in his

model are somewhat biased: the use of aggregated domestic savings, without disaggregating between private and public savings, weakens his conclusion that the aggregate domestic savings equate to aggregate investment in the economy. This is because public savings in most developing countries like Nigeria are most often not transferred automatically into investment expenditures, but are rather often used for government expenditures (such as the payment of interests accruing to the government's external debt obligations)¹⁰⁹. These foreign reparations often do not account for any investment in the domestic economy.

Secondly, increases in public savings in most developing countries such as Nigeria are, to a large extent, often due to increases in the government's external transactions (such as increases in royalties from oil exploration and foreign aids), and not necessarily because of increases in domestic real interest rates. Therefore, positing that increases in the aggregate domestic savings level, which also includes government savings, are purely due to increases in the rate of interest, and also that the aggregate national savings equate to aggregate national investment are undeniably specious.

These varying inconsistencies in his work were also exacerbated by the contradictory outcomes from his analysis. His results showed a negative relationship between savings ratio and money demand (by investors). Fry did conclude that his analysis did not favour McKinnon's complementarity assumptions. He noted that despite the fact that investment

¹⁰⁹ In addition, as I have noted earlier, following the postulation by Keynes, this view is flawed because Keynes made it clear that it is wrong to hold the view that current investment equals individual savings because there is no clear link between savings and investment. He noted that individual decision to save does not automatically involve the placing of any specific forward order for consumption (say for the purchase of capital assets for instance). Fry did however acknowledge the inconsistency of equating aggregate national savings to investment. He remarked that it was due to lack of available data on segregated private/public savings that he adopted the aggregated domestic savings ratio as a dependent variable. Nevertheless, this does not absolve his analytical inconsistencies.

expenditures are typically lumpier, that larger cash balances do not have to be accumulated for there to be investment expenditure.

Another weakness of Fry's study derives from the number of years he observed. Following the observation by Ang (2008), a meaningful analysis requires a long series of data in order to properly account for the persistent dynamics, which are features of macroeconomic variables, such as economic growth. In essence, it could be argued that Fry's analysis, which covered just a period of 10 years, is inadequate with regards accounting for the long-run dynamics of the macroeconomy. This is the more reason why his results should be interpreted with some caveats.

Gupta (1987) included more explanatory variables in his model and expanded the number of countries he observed in relation to Fry's study. In this study, he explored the importance of deregulated real interest rate and of liberalised financial institutions as determinants of savings in 22 developing Asian and Latin American countries from 1967-76. Gupta used pooled annual data in his analysis and incorporated uncertainty about inflation and income growth as conditioning variables in his econometric model. He concluded afterwards that there was no clear support for either the repressionists' or the financial structuralists' hypotheses. His outcomes were mixed in the countries he examined in that some showed support to the McKinnon-Shaw hypotheses and some did not.

The inconsistency in this study, as Gupta also noted, derives from the pooling of data for analytical purposes. He observed that the disaggregation of countries is desirable because

there are sufficient differences in the effects of various variables because of heterogeneity of countries¹¹⁰.

Fry (1988), with the use of a bank's balance sheet, examined the effect of financial repression on the real economy. In this study, Fry focused mainly on the processes of economic growth, and how financial variables can affect them. He noted that financial systems in market economies perform two primary functions, which include the administration of a country's payment mechanism and intermediation between savers and investor. Fry argued that when the government intervenes by setting the interest rate that it maligns the intermediary capacity of the financial system by undermining its ability to perform its primary duty of intermediation, and thus leads to sluggish economic growth. To buttress this point, he used the following illustration:

Table 11 - A bank's summarised balance sheet¹¹¹

Assets		Liabilities	
Reserves	(R)	Deposits (D)	
Loans	(L)		

To balance, $R + L = D$ (Eq. 3.1)

If both sides are taken as a ratio of GDP (Y) then equation 3.1 equals –

$(R + L)/Y = D/Y$ (Eq. 3.2)

All things being equal, if the ratio D/Y falls (this, Fry remarked, happens when interest rate is low and savers choose to hold fewer balances in the bank and instead chose to invest in real assets such as buildings), then the ratio $(R + L)/Y$, he noted, will also fall –

¹¹⁰ This observation was later underscored by Arestis and Demetriades (1997) and Ang (2008)

¹¹¹ Adapted from Fry (1988)

given that both R and L are subsets of D. Since L/Y is the ratio of bank loans to nominal value of output (GDP), and we know already that L is a subset of D, a fall in L/Y , therefore, signifies that businesses are faced with a credit squeeze from banks, which was as a result of the fall in the deposit rate, which in turn was due to low-interest rate ceiling.

In general, Fry argued that when firms are unable to obtain the necessary loans to finance their activities, some of these firms may cease to operate and this will in effect cause the aggregate level of output to fall. He, therefore, asserted that the deterioration of money¹¹² reduces the extent to which the banking system performs its core duties and affects the real aggregate level of output in the economy.

The inadequacy of this interesting narrative is drawn from an earlier observation by Kindleberger (cited in Drazen [1979]), which had criticised Shaw's debt-intermediation theory (the foundation of Fry's model). Kindleberger noted that it was narrowly based on the notion that capital markets are underdeveloped (Shaw's hypothesis, just like this adaptation by Fry, is based on the assumption that banks are the ultimate channel through which funds are allocated to investors and that the financial markets and other alternatives play an insignificant role in mobilising resources in the economy)¹¹³.

Drawing from Kindleberger's observation, one can argue therefore that Fry's analysis failed to consider, comprehensively, the various channels – such as the capital markets and the curb markets – that provide funds to the capitalists, which often supplement the activities of the banking system in the economy. He did not consider the possibility in his model of the tendency of investors going through curb markets to raise funds if there

¹¹² This deterioration, according to Fry (1988), could also be because of high inflation. Fry maintained that it would also have the same effect as in the interest rate ceiling.

¹¹³ Singh (1997) also provided another counter argument to this view.

seem to be low finance available from the banks, which is practical in real circumstances in developing countries, as pointed out by Van Wijnbergen (1983). In essence, the inability to account fully for the contributions of these other often-influential institutions in developing countries somewhat limits his analysis of the finance-growth nexus that is peculiar to developing economies.

Jung (1986) and, later on, Darrat *et al.* (1989) employed the Granger-causality econometric model to test whether financial development granger-causes economic growth. Their studies can be conceived as adopting a 'supply-leading' view – based on the classification by Patrick (1966)¹¹⁴. Jung (1986) investigated the causality between financial and real economic development using annual data over fifteen years on fifty-six countries (both developed and less developed). He used the real per capita GDP variable as an indicator for economic development in his analysis. The outcomes of his empirical analysis are mixed, just as was noted for Gupta (1987), and are also inconsistent.

For example, Jung used the ratio of narrow money (M_1) to the sum of currency (M_3)¹¹⁵ as a proxy for financial development. His assumption was that a decrease in this ratio (i.e. a decrease in M_1 or/and an increase in M_3) indicates a real growth in the economy because it reflects that funds are being channelled to productive activities. However, such

¹¹⁴ Patrick (1966) propounded a conceptual framework that categorized the studies of the causal relationship that exist between financial development and economic growth into two-dimensional channels. He classified studies on the finance-growth nexus into either a 'supply-leading' or a 'demand-following' thesis. The demand-following thesis, he explained, are studies that claim that financial development appears because of the development of the real sector of an economy. That is when the development of the economy, characterised by continuous widening of markets, necessitates the development that occurs in the financial system. On the other hand, supply-leading thesis implies that financial system development precedes economic growth. Studies supporting this thesis maintain that the functions performed by financial systems have an autonomous positive incidence on the growth processes of the economy

¹¹⁵ These are traditional proxies for financial intermediation that have been widely used over the years. M_1 refers to the currency outside banks plus demand deposits and M_2 refers to M_1 plus time and savings deposits at commercial banks and M_3 as the sum of currency

assertions are implicitly flawed because, as have been noted by many analysts (see Demetriades and Hussein, 1996; Arestis and Demetriades, 1997), you cannot articulate correctly if such monies are truly being channelled to productive activities. In fact, Demetriades and Hussein (1996) noted that these measures have more to do with the extent to which transactions are completed using physical money than with the degree of financial intermediation. Thus, a decline in these ratios might actually be reflecting a fall in the use of currency rather than an increase in the funds being channelled to productive processes.

Darrat *et al.* (1989), on the other hand, using the same model as Jung concluded that there was no uniform prescription for economic growth across the countries they examined. Darrat *et al.* carried out the empirical analyses in four Asian countries (Hong Kong, Singapore, Taiwan & South Korea – from 1952-84), with real per capita GDP variable as the dependent variable. In Hong Kong, their analyses showed that growth in the financial intermediary sector granger-causes economic growth (is supply-leading). Whereas in Singapore, the outcome was mixed with causality running in both direction (that is financial development causes economic growth and economic growth causes financial development simultaneously). For South Korea, the story was markedly different. There was no significant support for any of the hypothesis of causality.

Again, the outcomes from this study should be interpreted with caution because of the inadequacy of their analysis, which derives from the inconsistencies of some of the explanatory variables they used. Like Jung, Darrat *et al.* also used both M_1 and M_2 in their analysis to examine the causality between financial development and economic growth. However, the inclusion of these variables in the model undermine the consistency of the model because both variables are highly, if not perfectly, collinear: as Gujarati and Porter

(2010) remarked, high multicollinearity often produces wrong signs for the regression coefficients and large variances and standard errors of the estimators – all of which undermine the validity of the estimate. Therefore, the conclusions from these studies should be interpreted with some caution because of these varying inconsistencies. In addition, Ang (2008) remarked that these measures (M_1 and M_2) must be interpreted with caveats because a high ratio of M_2 /GDP, for instance, does not necessarily indicate a high level of sophistication in the financial system. He noted that these ratios were high in several crisis-hit Asian countries before the Asian financial crisis, and remained high after the crisis and that it does not imply the existence of sound and efficient financial system in all these economies.

Additionally, aside the inherent inadequacies in the proxy for financial development adopted in these studies, the adoption of real GDP variable as a dependent variable in empirical models that uses mostly financial variables as explanatory variables, following the observation made by Odedokun (1992), tends to produce a flawed analysis. This is because the real GDP variable reflects the overall economic outputs which are determined by several other variables that interact with and against each other in the whole economy – which the financial variables may not adequately capture. For example, Stern (1991) remarked that the deficiencies of infrastructures, together with the weaknesses of management and economic organisation, are likely to account for a substantial part of low output in developing countries because it will be very hard to run factories and businesses effectively when electricity and water supplies are unreliable, transport is slow, costly and hazardous, telephone and mail services and internet services are weak and costly. Therefore, without accounting for these crucial factors that significantly determine the overall economic output in a model that analyses the aggregate output, the analyses by Jung and Darrat *et al* must surely be incomplete. Odedokun (1992) must have had these

points in mind when he noted that as a result of the ‘multiplicities’ of interactions in an economy that it will be difficult to precisely identify or even approximate the effects of individual variables on economic growth or on the aggregate national output (GDP).

In conclusion, the studies by Jung and Darrat *et al.*, which adopted the real GDP growth as a dependent variable in a model that uses mainly financial variables, and subsequently used contradictory financial variables to evaluate the relationship therein could therefore be said to be inconclusive given these varying limitations.

Greenwood and Jovanovic (1990) and, later on, Bencivenga and Smith (1991), examined the finance-growth nexus within the endogenous growth paradigm. These studies were the first to formalise what could be termed the finance-endogenous growth (FEG) model.

Greenwood and Jovanovic addressed two themes in their study which were–

- i. The connection between financial system and economic growth, and
- ii. The link between economic growth and distribution of income.

Firstly, they explained that economic growth provided the wherewithal to develop the financial structure while at the same time the developed financial structure, in turn, stimulates higher economic growth by making it possible for a higher rate of accumulation through its developed allocative activities that can afford to channel increased funds to prospective investment opportunities. In essence, they opined that economic growth and financial development are inextricably interlinked.

Secondly, they noted that in maturity an economy will have a fully developed financial structure and will then attain a stable distribution of income across people. This, they explained, is because the increased mobilisation by the financial structure will accelerate

capital accumulation, which in turn will produce increased employment and subsequently a reduction in income inequality in the long run¹¹⁶.

However, despite the appealing nature of their model, especially due to its parsimony, it has been shown that increasing mass of financial assets accumulation often indicates a deteriorating real capital accumulation¹¹⁷. In addition, contrary to their conclusion with regards financial development and inequality, many scholars¹¹⁸ have remarked that deepening of the financial system actually causes a widening of income inequality, instead of occasioning a stable distribution of income across people. Piketty (2014), for instance, contended that, contrary to Kuznets' remarks of narrowing of inequality in the long-run (which happen to be the underpinning theory to this study), inequality has widened over the years despite the burgeoning rate of economic growth in many economies.

Bencivenga and Smith (1991) also built their model based on Romer's endogenous growth paradigm. Their model was constructed to examine how the equilibrium behaviour of competitive financial intermediaries (that is how competition in a liberalised financial system) affects resource allocation in ways that have implications for real rates of growth. They formalised this model with a three-period-lived overlapping-generations model. This study examined the relevance of financial intermediary's assets to economic growth. Their result lent support to the more common assertion of the financial

¹¹⁶ This, without a doubt, is in line with Kuznets' proposition: Kuznets (1955:4) observed that the relative distribution of income has been moving toward equality particularly with significant rises in real per capita income.

¹¹⁷ More of this discussion in section 3.5

¹¹⁸ See Crotty (2005), Epstein and Jayadev (2005) among several others

structuralists – which posits that deepening of financial intermediaries reflects economic growth.

The shortcoming of this study is with the adoption of GDP as a dependent variable, especially in a model that utilises mainly financial indicators as explanatory variables (see the critique by Odedokun, 1992, 1996a, 1996b). Also, as pointed out by Kindleberger¹¹⁹, omitting the contributions or impacts of other financial institutions, such as stock markets or even the informal financial sector (curb markets), in models that are examining the impacts of a financial system jeopardises the integrity of such model because these other financial institutions play significant roles in the economy.

A rather contrasting view put forward by Bencivenga and Smith (1991) is that financial intermediaries need not increase savings rate in order to lead to higher economic growth; they opined that intermediation could result in higher equilibrium growth without necessarily increasing the savings rate. This view is in stark contrast to the traditional views held in mainstream development studies. For instance, McKinnon (1973) and Shaw (1973) posited that financial repression results in low or negative real rates which drive potential savings towards the accumulation of non-productive assets. As a result, they concluded that there is a contraction in the available savings the banks can mobilise for productive processes. For McKinnon and Shaw, therefore, the inability of financial systems to mobilise larger investible savings (due to a repressed rate of interest) underpin the underdevelopment of the real the economy. On the contrary, Bencivenga and Smith are of the view that the role of financial intermediaries in stimulating positive changes in economic growth hinges more on the presence of ‘spill-over externalities’, which leads

¹¹⁹ *Op Cit* (pg. 119)

to social increasing returns in production. This means that it is the function or the activity of the financial intermediary in ameliorating the idiosyncratic liquidity risks, and not necessarily, the pooling of savings, that allows for a better allocation of funds. They argued that the amelioration of idiosyncratic liquidity risk is the wheel that ultimately drives the increasing social returns to scale in real production, which invariably leads to further accumulation of capital wealth and economic growth.

6.3 Post-1990s: The second generation studies on the finance-growth debate

The studies reviewed so far have broadly concerned themselves with analysing the effects of liberalisation and deregulation on banking activities, such as on the mobilisation of savings, and the impact of interest rate deregulation on economic growth. Most of these studies implicitly assumed that the roles the financial market and the informal financial sector (the curb market) play in accelerating the pace of capital accumulation along with economic growth are very insignificant to even be considered in their models (see Galbis', 1977; Fry's, 1988; Bencivenga and Smith's, 1991 analyses). Based on these, one can argue, aside the inconsistencies highlighted earlier, that these studies have also not accurately reflected (or considered) the actual contributions of the various institutions that make up the financial systems in most developing countries. For example, using Grosfield's (1994) categorization¹²⁰, it could be argued that the contributions of the financial market in Nigeria over the years are not negligible to not warrant mention when examining the role of the financial system in economic growth. For instance, the total market capitalization in Nigeria in 1986 was over six billion Nigerian naira

¹²⁰ According to Grosfield, the orientation of the financial system in an economy could be determined by simply tracing the sources of finance in the economy and taking its contributory values as a percentage of the economy's GDP

(approximately ₦6.8 billion) and the total credit by banks to the private sector in the same period was around ₦15 billion, with the GDP at current prices around ₦69, 146.990 million¹²¹. The market capitalization as a ratio of GDP can easily be calculated as approximately 10%, whereas banks' credit to the private sector as a ratio of nominal GDP was approximately 22.1%.

These figures clearly show that the Nigerian financial system, though mainly bank-based at the time most of these past studies were conducted, still had a significant stock market system. The financial market contributed financing to the private sector that was equivalent to 45% of the financing from the financial intermediaries – that is, for every one naira from banks, the stock market was contributing an equivalent of 45 kobo¹²². In essence, it is obvious that the financial market did play some roles in the mobilisation and allocation of finance in Nigeria's economy in the 1980s¹²³. Therefore, the impacts of liberalisation of the financial market on the real economy are undeniably worth considering in studies that examine the linkages between financial system's deregulation/liberalisation and economic growth/development.

The significance of financial markets to capital accumulation was further buttressed by the studies by Levine in 1991 and later in 1996. Levine (1991) constructed an endogenous growth model that included the stock market. He examined how the stock market

¹²¹ Figures are from the Central Bank of Nigeria 2011 Statistical bulletin and the author did the calculations.

¹²² Although the financial market contributed significantly to aggregate financing in the economy, the importance of the market to economic growth could still be questioned. For instance, the firms that have access to the financial market in Nigeria are mostly MNCs. However, they currently account for less than 5% of national employment: this could, in reality, be different for other developing economies. In other words, the contribution of the financial market needs further qualification.

¹²³ Singh (1997) also remarked that contrary to beliefs held by most neoliberals that many developing countries' firms were resorting so much to equity finance in the 1980s.

allocates risk and how it alters investment incentives in ways that affect the steady-state growth rate. He observed that stock markets accelerate growth through the facilitation of the ability of investors to trade ownership of firms without disrupting the productive processes occurring within those firms. He also noted that stock markets allow individuals to invest in a large number of firms at the same time thus diversifying away idiosyncratic productivity risks.

In the framework of the endogenous growth model that posits that growth occurs through the externality effects of investments in human capital (see Romer's, 1986 growth theory), Levine explained that the stock markets influence economic growth through their impact on investments secured for human capital development (such as for training). He explained that the average amount of capital maintained by a firm during the entire production process positively affects the development of each labourer¹²⁴. The significance of stock market development, therefore, derives from the fact that since investors can transfer ownership without withdrawing liquidity from the production process, the rate of human capital development will not be impacted. So drawing from the endogenous growth abstraction that growth is inextricably tied to human capital development, the stock markets, by curbing the liquidity risk¹²⁵, Levine observed,

¹²⁴ That is, the level of capital allocated by firms to human capacity development such as training, research and development etc. impacts the level of knowledge and skills (endogenous growth variables – i.e. technological advancement) maintained in the productive process.

¹²⁵ Concerning viewing liquidity as a virtue, Keynes warned of the flaws inherent in 'fetishizing' liquidity (i.e. the doctrine that it is a virtue on the part of investors to concentrate their resources upon holding of 'liquid' securities). He remarked that actual private objective of most skilled investment financiers nowadays is actually to 'beat the gun', to speculate i.e. to outwit the crowd and to pass the bad or depreciating, half-crown to the other fellow without necessarily aiming to help enterprise (Keynes, 1936: 159). Singh (1997) noted that this liquidity frenzy means that investors nowadays have no long-term commitment to the firm. As such, liquidity could be an undermining factor for enterprises. In other words, this virtue could also be the bane to human capital development.

invariably contributes to economic growth by ensuring an unabridged reserve of capital for human capital development.

Levine (1991) also examined the implications of different tax policies. He noted that a capital gain tax policy has the tendency of affecting growth directly – by altering investment incentives – and indirectly – by affecting the incentives underlying financial contracts. He observed that capital gain taxes that are associated with stock markets transactions has the tendency to reduce the fraction of resources devoted to firms and may also in some instances increase the fraction of firm capital that may be removed before its maturity. These effects, Levine argued, will have negative impacts on the rate of human capital accumulation and may even subsequently retard the growth rate of per capita output. Overall, Levine concluded that the financial market and its development is significant for the overall growth of the economy.

From Levine's analysis, it can be deduced that a comprehensive study designed to evaluate the impact and consequences of financial system deregulation and liberalization on the real economic sector should, in principle, be examining these phenomena also with variables from the stock market, given that this institution may also be playing pivotal role in mobilising capital in the economy and in enhancing human capital development.

The study by King and Levine (1992) was one of the first to use extensive cross-country empirical data that included proxies that capture the intermediation activities of most financial institutions in an economy. The study used variables that measured the relative importance of deposit money banks, the stock market, non-deposit money banks and the central bank. The objective was to identify which financial institutions were performing the most intermediation activities in the economy. They designed variables that measured the distribution of assets by the various institutions of the financial system.

Furthermore, this study by King and Levine, unlike past empirical studies, disaggregated the traditionally used dependent variable, the GDP, into two distinctive variables in order to circumvent the flaws associated with using the aggregated form. The two distinctive variables they created were the quantity of investment in the economy (the gross investment rate) and the level of efficient utilisation of invested capital (i.e. the rate of productivity).

They also constructed conditioning variables to accommodate other factors that might be influencing these dependent variables, such as government expenditure pattern; trade policies; secondary school enrolment; and the rate of inflation. They used bivariate graphs and correlation analyses to illustrate the relationships between the financial variables and the economic indicators. In addition, they performed cross-country regression analyses to gauge the robustness of the correlation.

King and Levine categorised countries into various dimensions based on their growth rates (such as slower growth and faster growth categories) and then matched the outcomes of their analyses to these dimensional categorizations in order to infer trends. They observed that faster growth countries tend to have larger ratios of deposit bank assets to GDP than slower growth countries. Similarly, they observed that faster growth countries tend to have financial systems that allocate a larger proportion of domestic credit to the private sector. In all, they concluded that most of these financial performance variables positively and significantly influence the investment share and the level of efficient utilisation of resources in the economy.

Interestingly, some of the outcomes from this analysis were inconclusive. For instance, they observed a negative and insignificant relation between the financial efficiency

proxy¹²⁶ and the average growth rate of their economic variables. In addition, the correlation between the real interest rate proxy (the financial repression proxy¹²⁷) and the average rate of investment showed up as having an insignificant relation. When employed in the time-series regression technique, the financial repression proxy showed up as significantly and strongly related to only the quantity of investment variable, even after controlling for other policy variables, and not strongly related to the efficiency channel. However, when a pooled regression technique is adopted, the financial proxy showed up strongly linked to both the investment and efficiency channels¹²⁸.

Furthermore, it will be presumptuous to conclude from the patterns that emerged based on their categorization that financial repression or government intervention in the financial system is the primary culprit for the economic stagnation in slower growth countries. For instance, countries in the faster growth band unsurprisingly are mostly core countries, and slower growth countries are mainly peripheral countries. As was highlighted by many analysts (see for example Wallerstein's, 2004 explanations), core countries are characterised by advanced low-cost technologies, skilled manpower, and entrepreneurs. The abundance of these growth-inducing elements reflects in the increased productivity of the economy and the production of advanced high-tech goods. Their advanced firms, because of their patent rights that endow them with quasi-monopoly statuses, often extract huge profits and pay high wages, whereas for slower growth

¹²⁶ This was measured as the spread between lending rate and deposit rate (King and Levine, 1992).

¹²⁷ They measured financial repression as the rate of interest minus the rate of inflation. An economy is repressed if the average rate of this measurement is less than five per cent.

¹²⁸ This buttresses the earlier point by Gupta that lumping heterogeneous entities together will often result in contradicting outcomes. The time-series approach reflects individual country's internal characteristics whereas the panel approach lumps heterogeneous economies together.

countries the reverse is the case. Therefore, it is not surprising to see faster growth countries have financial systems that allocate larger percentages of domestic credit to the private sector and have deposit money banks that have assets larger than the central bank's¹²⁹. In other words, it is presumptuous therefore to conclude that it is the repression policies in periphery countries that are solely responsible for the low financial performance (regarding mobilisation and allocation of funds), and the subsequent retardation of the real economies in those regions.

Another inconsistency of King and Levine's interpretations stem from their conclusion that aggregated financial variables simultaneously equates to industrial or productive capitals (for instance, high financial assets in the economy were presumed to equate to increased accumulation in the real sector). This assumption has however been shown to be specious. For example, Goldsmith (1954) remarked earlier in his work that to conclude that increasing financial assets simultaneously reflect increasing funds being channelled to real productive process is flawed because one cannot easily pinpoint the uses to which financial assets have been put to in an economy. Additionally, increases in financial assets accumulation have been remarked to reflect stagnation in real capital accumulation (Hilferding, 1910; Braudel, 1982). In essence, the results from King and Levine's analysis should be interpreted with caution, given these varying inconsistencies.

The studies by Roubini and Sala-i-Martin (1991) and later by Odedokun (1992) are among the first that tried to examine exhaustively the impacts of most of the 'interventionist' policies identified by McKinnon and Shaw on economic growth.

¹²⁹ Because with higher marginal efficiency of capital, core firms can afford to pay high wages (given the organised labour unions and the lack of competition for their goods) which equates to high savings/deposits in banks – hence the high banks' liabilities. In addition, with high rates of profits, banks are more inclined to release their funds given that there is a high probability of recouping them with higher returns in the future.

Roubini and Sala-i-Martin (1991) analysed the impact of trade distortions and of financial repressions on economic growth. They examined the relationship between trade regimes, the degree of financial development and economic growth in a large cross-section of countries. They concluded that there is a negative relationship between trade distortions (import restrictions, quotas and tariffs) and growth. They contended also that financial repression has negative consequences for economic growth. Roubini and Sala-i-Martin remarked that their governments largely due to the trade and financial policies pursued the poor performance of Latin American countries in the 1970s and 1980s. They concluded that due to the inward-oriented policies adopted by these Latin American countries (such as the adoption of import-substitution strategies, which includes the protection of infant industries through tariffs, subsidies and quotas), that they appear to be growing slower than the rest of the world.

Also, Roubini and Sala-i-Martin (1991) explained that the main reason why the government regulates or represses the financial sector is because the financial sector is the potential source of easy money (through inflation tax) for the public budget. They argued that countries that are financially repressed would have higher inflation rates, lower real interest rates, higher base money per capita and lower per capita growth than countries that are financially developed. Overall, they maintained that low real interest rates are correlated with low economic growth.

However, this analysis by Roubini and Sala-i-Martin suffer from many flaws. For instance, it failed to account for the role of profit in the capital accumulation process. Following Smith's ([1776] 2005), Marx's ([1867] 1990), Keynes' (1936), Kalecki's (1954, 1971), Minsky's (1986) and Brenner's (2006) accounts, it is clear that the rate of growth of capital accumulation in any economy is determined by the rate of profit

accruing to the productive processes in that economy. Favourable rate of profit, it is remarked, allows the capitalist to validate past debt obligations and also induces him to commit to future investments. It is also posited that the rate of return on the employed capital must exceed the rate of interest paid for the capital, and must also be reasonably high enough to induce borrowing for future investment. Minsky (1986: 143) concluded that when the price level of capital assets (i.e. profit) is high relative to the price level of current output (i.e. costs), conditions are favourable for investment, but when the reverse is the case, then conditions are not favourable for investments, and a recession – or a depression – is indicated. Therefore, the level of profit extractable from the real productive process in a given economy is the main indicator of the propensity of that economy to grow or develop. In other words, by not considering whether the level of profit accruing to capital assets in those poor countries they examined was adequate to induce growth in capital accumulation in the economy or not, Roubini and Sala-i-Martin's conclusion should thus be accepted with caution. This is because a country with low capability for accumulating a sufficient level of profit from its economy is mostly likely to suffer from a low rate of capital accumulation, low employment levels and high poverty rates regardless of government intervention in the economic process.

Odedokun (1992) examined the effects of selected interventionist policies on economic efficiency¹³⁰ in 81 developing countries. The policy variables adopted in his study capture

¹³⁰ Economic efficiency or the Incremental Output-Capital ratio (IOCR) is mathematically represented as: - IOCR = $\Delta Y/\Delta K$: where ΔY represents change in GDP (or output) and ΔK change in capital stock. The mathematical relationship between IOCR (i.e. the incremental output-capital ratio or economic efficiency), Investment ratio and economic growth (real GDP growth) is represented as follows: - IOCR = $\Delta Y/\Delta K$. Since $\Delta Y/\Delta K = \Delta Y/I$ and $\Delta Y/I$ can also be written as $\Delta Y/Y \div I/Y$ therefore IOCR = $\Delta Y/\Delta K = \Delta Y/I = \Delta Y/Y \div I/Y$. Where $\Delta Y/Y$ = GDP growth and I/Y = Investment ratio.

the export orientation, public sector size, directed credit programme, financial depth and real interest rates¹³¹ of those economies in his analysis. Odedokun noted that export-oriented policies promote efficiency. That is, the growth of the export-GDP ratio, he contends, accelerates the level of economic efficiency. However, the growth of government expenditure-GDP ratio (which reflects a large public sector size), he noted, reduces economic efficiency. Furthermore, he asserted that the growth of development bank lending in relation to GDP (that is increased directed credits) decreases efficiency. Lastly, Odedokun remarked that an increase in the real rate of interest improves economic efficiency.

Although some of the assumptions in this study could be adduced to be consistent with a priori economic theories, particularly his conclusion that policies that fail to depreciate the real value of domestic currency in response to a current account deficit or to appreciate it following a current account surplus hampers economic efficiency, a plethora of inconsistencies could still be pinpointed in the study. Firstly, contrary to Odedokun's observation of a negative relation between 'Big' government (i.e. increased government spending) and growth, Minsky (1986) showed that 'Big' government was one cause of the halt in the sharp decline of the U.S. economy from the second quarter of 1974 to the first quarter of 1975, and was responsible for the strong expansion that occurred in the

It can be then inferred that $\Delta Y/Y = \text{IOCR} \times I/Y$ – that is economic growth is the product of IOCR and the investment ratio. (Here K = capital stock, I = capital formation/investment and Y = real GDP).

¹³¹ The export orientation variable was proxied by export to GDP ratio. The directed credit program was proxied by the stock of development bank lending to private sector in relation to GDP. The financial depth was proxied by the ratio of the stock of liquid liabilities of the banking sector to GDP and the real interest rate was proxied by the nominal interest minus the inflation rate (adopted also in the study by Roubini and Sala-i-Martin, 1991 to measure the level of financial repression).

spring and summer of 1975. In fact, Minsky asserted that it is the ‘Big’ government that stops an economy’s free-fall. He remarked that the efficiency of ‘Big’ government can be questioned but its efficacy in preventing the sky from falling cannot be doubted.

Additionally, Odedokun’s conclusions are further undermined by the implicit conclusion from Kalecki’s profit equation¹³². In other words, in light of Kalecki’s and Minsky’s lucid explanations of how government (deficit) spending accelerates capital accumulation along with economic growth, the outcome from Odedokun’s analysis should, therefore, be interpreted with caution given that history has shown that government (deficit) spending is pivotal for continuing capital accumulation in the real economy.

Nevertheless, despite some of the inconsistencies in his conclusion, Odedokun’s study has some interesting insights, especially with regards some variables commonly adopted in the finance-growth debate. Odedokun remarked that a viable way of measuring the effect of financial variables on economic growth would be to measure its impact on economic efficiency. This is because, according to him, it is economically and econometrically feasible to identify explicitly the effects of policies on the efficiency of resource utilization and hence indirectly on economic growth than to study the effects of these policies directly on aggregate national output. He explained that this is so because economic growth (that is real GDP growth) measures the growth in overall economic activities, and there are several variables that interact with and against each other in the

¹³² Kalecki’s profit equation, represented as $P = C_p + I + D_{ef} + NX - S_w$; where P = profit; C_p = consumption out of profit income; I = investment; D_{ef} = government deficit (government spending minus taxes); NX = net export; and S_w = savings out of wages, shows that aggregate profits are determined by consumption out of profit income, plus investment spending, plus government deficit spending, plus net exports minus saving out of wages. Therefore, an increase of consumption out of profits, investment, government deficit spending or net exports increases profit – which is the carrot that induces the capitalist to invest – at the aggregate level.

macro-economy. Thus, because of these various interactions, he remarked that it would be precisely difficult to identify or at times to even approximate the effects of these several individual variables on economic growth in a given model. He asserted that it is however not the case when the efficiency of resource utilisation is separately measured. He noted that the advantage of analysing economic growth through the efficiency channel separately is that the inherent spurious association between economic growth and the many other interacting variables in the economy can be more easily avoided.

In addition, Odedokun noted that the traditional proxy for financial depth, the stock of liquid liabilities to GDP, is not an appropriate measure for 'growth-inducing' financial development indicator because it is often difficult to articulate to what purposes deposits in banks have been used for. This is in stark contrast to the conclusions provided by some past studies that have posited that deepening in the financial system (traditionally measured as the increase in the ratio of liquid liabilities to GDP) reflects an increase in economic activities¹³³. In his study, Odedokun remarked that this variable showed up as having an inverse relationship with economic efficiency. He observed that the coefficient of this variable was statistically significant for every country, even when the growth index of the indicator was adopted instead of the aggregate value. He also noted that even measuring the financial depth from the perspective of the asset side of the banking balance sheet yielded the same negative relationship with economic efficiency.

These observations by Odedokun highlights the embedded inconsistencies of purely empirical studies; in that when some variables are used in some form, for a different time-frame and drawn from a different population, there are then huge possibilities of obtaining

¹³³ See Fry (1978) for instance

conflicting results (that is some of the outcomes are often inimitable for different population and parameter sets). For example, many studies have contended that increase in the ratio of liquid liabilities (such as M_1 or bank deposits) to GDP reflects an increase in economic growth (see Jung, 1986, Darrat *et al*, 1989, King and Levine, 1992). However, following Odedokun's observation, this indicator (even when the asset approach was used) is negatively related to economic growth. In other words, the choice of dependent variable somewhat refracts the direction of the impact of the financial proxy employed. This makes a purely empirical approach an inconsistent method of analysing the dynamism of economies.

The study by King and Levine (1993) investigated whether higher levels of financial development are significantly and robustly correlated with faster 'current' and 'future' rates of economic growth, physical capital accumulation and economic efficiency (productivity). They computed several indicators of financial development and studied the relationship between these indicators and some growth indicators. They posited that the predetermined components of financial development are good predictors of long-run growth over the next couple of years. Furthermore, they asserted that higher levels of financial development are strongly associated with future rates of capital accumulation and future improvements in the efficiency with which economies employ capital (King and Levine, 1993).

Again, the inherent weakness of their conclusion stems from the neglect of the role of the rate of profit in determining the pace of capital accumulation cum economic growth/development. King and Levine, in arguing that some percentage point increase in financial development leads to some percentage point increases in the annual rate of

capital accumulation and average GDP growth, failed to consider the role of the rate of profit in capital accumulation process¹³⁴.

Demetriades and Hussein (1996), conducted causality tests between financial development and real GDP per capita for 16 countries over a period of 27 years and found that there was a significant evidence of bi-directionality between financial development and economic growth. Furthermore, they even noted some evidence of reverse causation – from economic growth to financial development. Their findings also demonstrated that causality patterns vary across countries.

The danger they noted of statistical inferences drawn based on pooled data studies (panel analyses), is that these analyses implicitly treat different economies as homogenous entities. Demetriades and Hussein argued that economic policies are country-specific and their successes depend on the effectiveness of the institutions, which implement them. As a result, they contended that there can be ‘no wholesale’ acceptance of the view that financial development leads to economic growth and that there can be ‘no wholesale’ acceptance of the view that financial development follows economic growth.

They also observed that it is possible that bank deposit liabilities are rising whilst the supply of credit to the productive sector remains stagnant or is even declining. The reason for this, they posited, could be because the domestic government might be draining a

¹³⁴ Borrowing Minsky’s words, domestic profits validate debt and asset-prices and are the carrot that induces investment (Minsky, 1986:150). In other words, to adequately understand how the economy works, it is paramount that we should identify what determines profit since it is the ‘carrot’ that induces investment. King and Levine’s study clearly failed to explain what determines profit, and as a result could be considered as an incomplete exposition of the determinants of capital accumulation in a capitalist economy.

larger share of these increased savings through higher reserve requirements or the government might actually be borrowing heavily from the banking sector¹³⁵. Therefore, they argued that it is flawed to automatically assume that increased bank liabilities are representative of increased funds been channelled to the private sector. This latter point was also remarked by Gupta and Lensink (1996). They noted that when the government does not borrow from the banking sector that increased bank deposit liabilities might actually lead to an increase in the supply of bank credit to the private sector. If, however, the government borrows from the banking sector to finance its deficits and debt obligations, they concluded that it is not possible to predict the impact of increased bank deposit liabilities on the supply of credit to the private sector.

Arestis and Demetriades (1997) conducted an examination of the empirical literature on the finance-growth nexus and examined the relationship between financial development vis-à-vis stock market development and economic growth. They also examined the effect of financial repression on economic growth using South Korea as a case study. They used the real GDP per capita, the stock market capitalization ratio (measured as the ratio of stock market value to GDP), the index of stock market volatility (measured as the variance of the stock market index) and financial repression proxy (the real rate of interest), the ratio of M₂ to nominal GDP and the ratio of domestic bank credit to nominal GDP as their independent variables. The outcome of their analysis also contradicts the traditional financial repressionists' arguments.

¹³⁵ As we shall see later, Nigeria's public sector has been the largest net borrower from the financial sector from 1988-93.

For instance, they noted that the financial repression index has a positive effect on financial development; they remarked that increased real rate of interest has a negative relation with aggregate output and that increasing real interest rates completely failed to reflect increasing savings or investment. Both of these variables (savings and investment rate) they concluded actually fell as a proportion of GNP over the periods interest rates were deregulated. These observations clearly contradict the financial repressionists' thesis, which predicts a positive association between a rising real rate of interest and savings/investment/economic growth.

An interesting insight from this study is regarding the robustness of the different econometric approaches traditionally adopted in the study of the finance-growth phenomenon. Arestis and Demetriades posited that time-series approach is a more fruitful approach than the cross-sectional/panel approach, which has been popular in recent studies. They argued that the question of causality cannot satisfactorily be addressed in a cross-sectional framework that does not compensate for the heterogeneity of national economies. The results from cross-country analyses, they contended often does not accurately reflect individual country circumstances, such as the institutional structures of the financial system, the policy regimes, and the degree of effective governance.

The study by Jappelli and Pagano (1994) also contradicted the repressionists' thesis. Their result, in fact, suggested that financial deregulation in the 1980s contributed to the decline in national savings and economic growth rates in OECD countries. Furthermore, they asserted that liquidity constraints (implicitly referring to policies that lower the express convertibility of capital to liquidity, such as capital gain tax) increase growth rate when productivity is endogenous and may actually be increasing welfare in the economy.

In general, the late 1990s saw a growing number of studies (both theoretical and empirical) that completely refuted the financial repressionists' and structuralists' theses. Worsening economic performances with deepening financial hardship, and crises in several countries that implemented financial reforms predicated on the McKinnon-Shaw's theses fuelled the explosion of these studies that countered the repression theory. For example, Sikorski (1996) noted that the results from the periods of liberalisation have been mixed and at best disastrous in some parts of the world. He, just like Chandrasekhar and Ghosh (2013), Wolfson and Epstein (2013), Damill *et al.* (2013), and several others, also contended that the various neoliberal financial reforms simply led to periods of financial crash and chaos¹³⁶. Wapenhans (1994) also remarked that structural adjustment programmes (i.e. the neoliberal reforms) were, under the best of circumstances, poor substitutes for a perceptive, inclusive and long-term strategy for sustainable development. He contended that the neoliberal reforms were never adequate tools that could be used to deal with the severe institutional and policy deficiencies that were besetting most African countries.

Similarly, Ajayi (1994) remarked that while it would be illogical to assume that the implementation of neoliberal reforms in Sub-Saharan Africa have worsened the economic situations in those countries, that however it is appropriate to claim that the implementation of neoliberal reforms has actually failed to bring about statistically significant positive impacts on macroeconomic variables in many. He remarked that IMF's and World Bank's insistence on increased exports of traditional primary commodities, rapid import liberalization and drastic cuts in public investments retarded

¹³⁶ A detailed review of studies that countered the neoliberals' theses is carried out in section 3.5.

Africa's recovery and actually pushed many African countries away from achieving their long-term objectives of greater self-sufficiency, an efficient manufacturing sector, diversified export composition and markets, and increased export of manufactured goods. He concluded that the stabilisation and adjustment policies advocated by the IMF and the World Bank, and widely adopted in Africa, did not succeed in restoring growth in most of these countries. Instead, these policies, he noted, were often accompanied by continued economic deterioration.

Singh (1997), also countered some of the neoliberals' traditional arguments. He posited that, in general, financial liberalisation and its associated expansion of stock markets in developing countries is likely to hinder rather than assist their economic development. He noted that liberalisation of financial institutions and the capital market in the 1980s in developing countries simply led to portfolio substitution from bank deposits to tradeable securities. He explained that the liberalisation of financial systems did not bring about any rise in the aggregate national savings or even long-term growth. He even observed that there were secular falls in corporate profitability in India because of liberalisation.

Furthermore, Singh concluded that the inherent volatility in liberalised financial markets makes the stock market pricing process a poor guide to efficient investment allocation¹³⁷. He argued that the interactions between the stock and currency market in the wake of

¹³⁷ Singh explained that developing countries' stock markets do not possess the regulatory infrastructure for well-functioning markets, and also that they do not possess adequate information-gathering-and-disseminating private firms. Furthermore, he noted that young listed firms on most of these developing countries' stock markets do not have long enough records for their reputations to be accurately assessed. As such, all these also lead to a noisier stock market environment, with arbitrary pricing and considerable volatility. The volatility he argued thus undermines the financial system as a whole and even discourages risk-averse investors and savers and raises the cost of capital to corporations.

unfavourable economic shocks in the global system actually exacerbated macroeconomic instability and reduced long-term growth in some economies (due to financial contagion).

The main reasons postulated by many studies on why there were mixed outcomes in the economic performances of countries that implemented neoliberal financial reforms revolved mostly around the internal institutional framework of the economies in question – particularly on the existence of poor governance. McKinnon (1993), for instance, argued that macroeconomic instability – characterised by raging inflation – made the domestic financial system too weak and susceptible to collapse in the face of liberalisation. Sikorski (1996), remarked that liberalisation should only be attempted after an initial series of preconditions have been met, such as when macroeconomic stability has been achieved. He maintained that focus should be on adopting prudent fiscal policies, and on having an efficient and uncorrupt government that can ensure that deregulation and liberalisation do not lead to economic chaos. Fry (1997), argued that for financial liberalisation to be effective, that it must be accompanied by fiscal reforms aimed at ensuring that government's debt will not explode in the aftermath of financial liberalisation. He noted that it was the inability of some governments to reduce expenditure or increase traditional tax revenue that caused the abandonment of financial repression to lead to an explosion in government debt and economic instability.

Contrary to these emerging views on why neoliberal reforms have failed to accelerate development in some countries, Stiglitz (1999) commented that to suggest that the policy of financial liberalisation would have worked if only the implementing developing countries' had incorrupt government, and or adequate institutions misses the point. He noted that it was only a few of these developing countries that actually had incorrupt government and adequate institutions and that these weaknesses should have been

addressed first prior to the neoliberal reforms. Instead, Stiglitz contended that the prescriptions of 'Washington Consensus' (that is the neoliberal's free-market ideas) are not sufficient for development because much of the rationale for liberalising financial markets are not based on a sound economic understanding of how financial markets work, and on the potential scope for government intervention. He opined that neoliberal theorists lack an understanding of the historical events and political forces that have led governments to assume their present role of intervening in the markets. He noted that neoliberal theories are instead based on an ideological commitment to an idealised conception of markets that is grounded neither in fact nor in economic theory.

Stiglitz went further to argue that financial markets are markedly different from other markets and as such, market failures are likely to be more pervasive in them. He remarked that there exist forms of government intervention that will not only make these markets function better but will also generally improve the performance of the economy. Stiglitz (2000), also explained that a liberalised financial and capital market actually induces increased frequency of financial and economic crises. These increased frequencies of financial and economic crises, he concluded, brings about instability, which has the tendency of causing persistent negative effects on economic growth.

Overall, Stiglitz contended that not only is there no compelling empirical case for capital market liberalisation but in fact that there is a compelling case against capital market liberalisation. He remarked that the presumption that capital market liberalisation provides additional sources of funding and that restriction on short-term capital flows discourage foreign direct investment or other longer-term investment is false. He maintained that capital market liberalisation exposes countries to vicissitudes associated with changes in economic circumstances outside the country's domestic economy and

that capital market liberalisation is systemically associated with greater instability. He concluded that the argument that liberalising capital account is important for enhancing a flow of capital into a country is actually turned on its head. In many instances capital, he observed, actually flows out of poor countries and into rich ones.

To conclude, it is obvious that there have been contradicting opinions on the relationship between economic liberalism (particularly of financial deregulation and liberalisation) and real capital accumulation, along with economic growth or economic efficiency. While many empirical studies have attempted to provide support to the theory that economic liberalism will ameliorate underdevelopment, albeit in the long run, and given necessary governmental restraints, many studies have also shown, at the same time, with varying statistical evidences too, that these neoliberal practices have failed, and have in, some cases, worsened the economic situation in most countries that implemented them.

6.4 Post-2000s: The third generation empirical studies on the finance-growth debate

Despite the plethora of studies on the finance-growth debate over the years, there has been no overwhelming conclusion on the matter. The twenty-first century also saw a renewed interest in this now three-decade-old debate. One of the first study in the twenty-first century that examined the debate using data from Nigeria was that by Odeniran and Udejaja (2010). Using Granger causality test in a vector autoregressive (VAR) framework they concluded that their various measures of financial development bar one do not granger-cause output growth in Nigeria.

They adopted the traditional financial variables: the ratio of broad money stock (M_2) to GDP; net domestic credit to GDP; private sector credit to GDP; and banks' deposit liability to GDP; as exogenous variables and modelled them against the GDP per capita

of Nigeria from 1960-2009. They argued, similar to the views put forward by Demetriades and Hussein (1996), that the growth of the ratio of broad money to GDP (M_2/GDP) does not have any significant influence on economic growth. Furthermore, they found that changes in banks' deposit liabilities appear to have no impact on economic growth. Similarly, Demetriades and James (2011) also pointed out in their study that banks' liabilities in Sub-Saharan Africa follow, but not lead, economic growth.

Odeniran and Udejaja (2010), however, found that a standard deviation shock to net domestic credit would lead to a significant positive response in per capita output. But on the contrary, Demetriades and James (2011) pointed out that the link between bank credit and economic growth in Sub-Saharan African is altogether absent. Clearly, the studies by Odeniran and Udejaja (2010) and Demetriades and James (2011) produced mixed results on the whole finance-growth debate.

The results by Odeniran and Udejaja should, however, be interpreted with caution because some of the variables they adopted (for example the dependent variable, the GDP per capita) have been shown to be improper for analysis that uses mainly financial variables as explanatory indicators (see Odedokun [1992]). Also, considering that net domestic credit could, in fact, be a subset of M_2 ¹³⁸, there is thus a possibility of a high correlation between the two variables (in essence, there could be a problem of multicollinearity in the model). The presence of multicollinearity in the model, as we have seen, certainly undermine the consistency of the estimators (by inducing specification bias or error in the

¹³⁸ Since M_2 measures cash as well as savings and time deposits, in some part therefore, it also captures credits by banks; which also reflects as cash as well as savings and time deposits in the banks. In essence, increase in credit could also mean an increase in M_2 . In other words, M_2 and bank credit are correlated (a proof of this high correlation is in Table 20A in appendix 2).

chosen model). Therefore, the inherent flaw of adopting the GDP variable as the sole dependent variable in their analysis and the specification bias induced by the presence of multicollinearity in the model somewhat weaken the validity of their results.

Calderón and Liu (2003), also examined the finance-growth nexus by studying 109 developing and industrial countries from 1960-1994, using the Geweke decomposition test (this technique tests the degree of dependence and feedback between the dependent variable and independent variables). As have often been the case, they adopted traditional financial development variables, such as the ratios of M_2 to GDP and credits to the private sector to GDP, in their econometric model.

Calderón and Liu contended that financial development generally leads to economic growth. They remarked that financial deepening contributes more to the causal relationships in developing countries than in industrial countries. Furthermore, they noted that the longer the sampling interval, the larger the effect of financial development on economic growth. They found that financial development enhances growth through rapid capital accumulation and technological change. Calderón and Liu thus concluded that in order to gain sustainable economic growth in developing countries, that it is desirable to undertake further financial reforms.

However, several inconsistencies could be attributed to their interpretation. Firstly, Calderón and Liu contended that a larger M_2 /GDP ratio implies a larger financial sector and, therefore, greater financial intermediary, which will subsequently accelerate the development of the real sector. On the contrary, Arestis and Demetriades (1997) argued that using the M_2 /GDP ratio to measure financial development could be misleading because a large component of M_2 in developing economies are often currencies held outside the banking system. As such this, they remarked, could only indicate more of the

extent to which transactions are completed using physical cash rather than the degree of financial intermediation.

Also, similar to the limitations to Odeniran and Udejaja's results, the combined use of both M_2 to GDP and credit to GDP ratios in the same equation will no doubt result in model specification bias (as a result of the presence of multicollinearity). The presence of multicollinearity in the analysis, in turn, undermines the consistency of the results from the model

In sum, the interpretation of their (Calderón and Liu's) results therefore, should be guarded with caution. The contradiction of their assumption, including also the inadequacy inherent in using the GDP indicator as an endogenous variable in a model populated by exogenous financial variables, and the problem of running a model that uses collinear exogenous variables surely weaken the validity of their results.

Until recently, very few studies have actually examined the impact of economic liberalisation on the performance of financial intermediaries. Most studies have been primarily concerned with the impact of economic liberalisation on macroeconomic variables, using the financial system as a channel. The study by Dabo (2012) however, unlike many, examined the impact of financial liberalisation on the performance of banks.

Using the Wilcoxon signed rank test, Dabo (2012) examined the relative changes in banks profitability, lending and operating efficiency in Nigeria between the periods of pre-deregulation and post-deregulation. She observed significant increases in the mean levels of profitability and operating efficiency of these banks from the periods preceding bank consolidation (2000-04) to the periods after consolidation (2006-09). Dabo went on to argue that the liberalisation policy in Nigeria had had a significant impact on the banking

consolidation exercise. Her study lent support to the neoliberal arguments given that she implicitly concluded that increased banks' profitability accelerates lending in the economy.

However, despite the simplicity of her analysis and the results thereof, high profitability in banks can be scarcely argued to reflect development in the real economy. A plethora of studies (Gowan, 1998; Stockhammer, 2013; Tabb, 2013) has shown that the share of national income going to finance capital has been growing since the deregulation and liberalisation of the financial system while those going to labour have declined tremendously in the same period. In essence, the increasing profitability of banks could be hardly inferred to be a precursor to increases in credits to the private sector.

The most recent contributions to the finance-growth debate that used evidence from Nigeria are those by Udoh and Ogbuagu (2012) and Ujunwa *et al.* (2012). The study by Udoh and Ogbuagu examined the impact of real income, the deposit rate and the expected inflation rate on financial depth (M_2/GDP); while that of Ujunwa *et al.* examined the channels through which banks and the financial market promote economic growth.

According to Udoh and Ogbuagu (2012), interest rate liberalisation tends to cause financial deepening and consequently economic growth. These authors posited that there is only one-way causality between financial depth and economic growth – they contended that it flows from financial deepening to economic growth.

However, underlying their analysis are few flaws that undermine the validity of their conclusions. Firstly, as have been observed in many studies (see Demetriades and Hussein [1996], Arestis and Demetriades [1997] and Ang [2008] for instance), financial depth

(M₂/GDP) can be scarcely inferred to cogently represent effective financial intermediation.

Furthermore, according to Udoh and Ogbuagu, a higher inflation rate encourages households to substitute purchased transaction services for money balances, thereby boosting the financial sector. As such, higher inflation, they inferred, will reflect in deepening of the financial sector, which will subsequently reflect in economic growth. Given this presumption of theirs, it should be expected, therefore, that the coefficient of the expected inflation indicator in their model should have a positive relation with the dependent variable (M₂/GDP). On the contrary, instead of having a positive coefficient, based on their presumption, the inflation coefficient actually had a negative coefficient in their result: their result implied that expected inflation is negatively related with financial depth. This ironically contradicts their underlying economic theory. This inconsistency also weakens their results.

On the other hand, the study by Ujunwa *et al.* (2012) concluded that bank activity (measured as the ratio of bank credit to the private sector) in Nigeria does not promote growth. In addition, they observed that market activity (measured as the value of shares traded divided by GDP) was negative in promoting economic growth. They contended that for banks to promote economic growth, that they must make a paradigm shift from short-term lending to long-term lending.

In conclusion, it is clear that there is still no consensus on the benefit of financial development to the development of the real economy. Diverse views have been advanced by various studies adopting various models. Inconsistencies in several of these studies emanate either from the variables adopted, or in some cases due to the omission of some vital determinants, or from the timeline covered by the study and in some cases, all of the

above. Nevertheless, one thing is clear – there is still no overwhelming consensus on the finance-growth debate, especially when econometric models are used in investigating the phenomenon.

6.5 Conclusion

Since the resurgence of the debate on the relevance of a deepened financial system to economic growth in early 1970, several empirical studies examining the finance-growth nexus have dominated academic discourse¹³⁹. Varying econometric approaches (panel or times-series), datasets, and timelines have been adopted by these vast empirical studies. However, despite the magnitude of attention that has been given to the subject, there is no overwhelming consensus on the relevance of deepening in the financial system on the real economy. Instead, several of these empirical studies are strewn with inconsistencies and contradictions – often due to their inappropriate variables, inadequate timelines and the assumption of homogeneity of economies (which often are significantly heterogeneous).

¹³⁹ Ang (2008) and more recently Pasali (2013) recently provided a comprehensive survey of literatures on the finance-growth nexus.

Chapter seven: Econometric analysis and discussions

7.0 Introduction

One of the channels through which the financial system is argued to stimulate economic growth is through the facilitation of funds to the capitalist. It is often contended that the expansion of the system, either in its assets or in its liabilities, reflects the increased ability of the system to mobilise large resources, which could be directed to the real sector. This empirical analysis will test whether financial development, when narrowly defined as financial depth, spurs economic growth, within the Nigerian context.

This analysis tests this assumption by examining if the expansions in the financial system, due to the financial deregulation and liberalisation reforms, have induced any significant positive impact on the levels of capital stock in Nigeria over the years. Annual time-series data are used in the analysis – given that it has been shown that they are more appropriate for studying the finance-growth nexus.

7.1 Data description and sources

(i). Financial development proxy

The individual financial development proxies used in this study are according to the traditional proxies that have been widely used in related studies. The individual finance proxies were designed according to those used earlier by Roubini and Sala-i-Martin (1991), King and Levine (1992), Odedokun (1992, 1996a, 1996b) and Levine (2004).

The finance proxies used in the analysis are – the share of bank private credit in GDP (*BPC*), share of deposit money bank assets in GDP (*DMBA*), Share of financial system's deposits in GDP (*FSL*), deposit money bank assets to deposit money bank and central

bank assets (*DMBFA*), ratio of banks' credit to banks' deposit (*BCD*), share of the central bank's assets in GDP (*CBN*). These finance proxies were taken from the Federal Reserve Economic Database (FRED) and the Central Bank of Nigeria's database. The ratio of liquid liabilities of the financial system to GDP (*M₂*) and the ratio of quasi-liquid liabilities of the financial system to GDP (*QM*) were extracted from the CBN's statistical database.

(ii). Dependent variable

The variable used as a dependent variable in this estimate is the share of capital stock in GDP, labelled (*CKG*). As Odedokun (1992) showed, it is more econometrically feasible to measure elements that determine the rate of capital accumulation than to capture all elements that affect the national output. It is for this reason, and because capital accumulation affects, to a significant extent, the rate of employment, poverty and inequality, that stock of capital stock was adopted as the dependent variable. The data for the capital stock were taken from the PENN World Table, version 8.0, compiled by Feenstra *et al.* (2013).

(iii). Control input variables

The choice of conditioning variables was influenced particularly by the studies by Barro (1991, 1997) and Levine and Renelt (1992). Proxy variable for trade policy is the ratio of exports to GDP (*SHX*): to proxy trade openness. For fiscal policy, I used the share of government expenditure in GDP (*GOVT*). I also included GDP per capita annual growth rate (*GDPKC*) to proxy initial income. The spread between deposit and lending rate (*SPREAD*) is used to proxy financial liberalisation (i.e. to reflect the impact of competition between banks; which is presumed will induce the spread between interest

charged on loans and that for deposits to fall). The annual average inflation rate (*CPI*) is used to proxy monetary policy: this proxy measures the degree of repressiveness¹⁴⁰.

7.2 Exploratory data analysis

In order to capture the relative effects of the various financial deepening indicators that have often been employed in related studies, a composite indicator of financial deepening that includes the various financial deepening proxies was created using the Principal Component Analysis (PCA). The PCA approach helps circumvent the problems associated with *multicollinearity* – given that most of the financial deepening indicators are highly correlated¹⁴¹. Furthermore, by using this approach, problem of underrepresenting certain aspects of financial deepening was avoided.

The unit root test was also used to identify the stationary properties of the investigated time-series variables. This test helps eliminate the chances of producing spurious empirical findings, which are usually caused by using *non-stationary* variables in econometric modelling (a la Granger and Newbold, 1974).

The validity of any statistical procedure depends undoubtedly on the distributional properties of the underlying data. For example, it has been shown that applying parametric tests on a non-normally distributed data often produces inaccurate results (Field, 2005). In order to address this issue, it is traditional to first study the distributional properties of the data to ascertain which appropriate statistical procedure can be applied.

¹⁴⁰ Roubini and Sala-i-Martin (1991) remarked that countries that are financially repressed would have higher inflation rates and lower real interest rate. So an increasing *CPI* is assumed to reflect a repressed real interest rate.

¹⁴¹ See Table 23A in Appendix 2

The Kolmogorov-Smirnov and Shapiro-Wilk tests were used to compare the scores in the sample to a normally distributed set of scores with the same mean and deviation. This was to help ascertain if the collected variables are normally distributed, in order not to bias the statistical procedure applied to the data.

(i) Principal Component Analysis

In related studies, several financial development proxies for financial deepening have been used to measure the relationship between financial development and economic growth. However, there is no consensus on the superiority of any indicator. Rather, there have been disagreements on the relevance of some of the proxies often used (as was highlighted by Demetriades and James, 2011). Following the approaches adopted by several others (for example Ang, 2007 and Gries *et al*, 2009), I also constructed a composite indicator of financial development to obtain an indicator that is as broad as possible.

The PCA method is used to reduce the collected data sets to lower dimensions, while retaining as much information of the original sets as possible, and to circumvent the problem of *multicollinearity*. In this study, *MS* (a measure of the size of the financial system), *MI* (a measure of the relative importance of institutions) and *MD* (measure of credit distribution by the financial system) components were extracted from the initial financial development proxies. Table 12 below gives an overview of the derived components from the PCA method. On aggregate, the three derived synthetic components explain over 93% of the variation in the initial series. Thus, the composite factors could be said to contain sufficient information on the initial financial development datasets.

Table 12 - PCA eigenvectors (factor loadings)

Variable	MS	MI	MD
BCD	0.008866	0.198217	0.924667
BPC	0.422293	0.214158	0.190438
CBN	0.195124	-0.627301	0.152458
DMBA	0.440695	0.180353	0.028261
DMBFA	-0.050100	0.685380	-0.210812
FSL	0.451113	0.092041	-0.051765
M2	0.430200	-0.097698	-0.107427
QM	0.445218	-0.032404	-0.161306

The second column is named *MS* (measure of size) given that the financial proxies that load significantly (above 40%) on this index measure, in some form, the size of a financial institution or its activity: BPC – measures the credits by banks to the private sector; DMBA – measures the assets of domestic banks in the national income; FSL – measures the liabilities [deposits] of the financial system [of which are mainly deposit money banks in Nigeria] in the national income; M2 and QM are monetary measures which capture deposits in banks (liquid liabilities) and the quasi-liquid liabilities (non-monetary financial liabilities – such as time deposit) of the financial system respectively.

Interestingly, these variables that load significantly on the MS indicator were also categorised by King and Levine (1992) as measures of the size of the formal financial system, except the ratio of domestic banks' assets to GDP. Nevertheless, the variables that loaded significantly on the MS index, when their correlation coefficients were measured, showed up as significantly correlated with each other (see Table 23A in Appendix 2).

For MI (measure of the relative importance of institutions), we see that it is only CBN (the ratio of the central bank assets to GDP) and DMBFA (the ratio of the assets of

domestic money bank to the assets of financial institutions in Nigeria, including the CBN) that load significantly on this index. In addition, while the assets of DMBs increases, those of the central bank (CBN) decreases, thus the negative sign on the CBN variable: these variables were also classified by King and Levine as measures of the relative importance of different financial institutions (i.e. the importance of deposit banks relative to the central bank).

For MD (a measure of the distribution of credit), it is only BCD (the ratio of banks' credit to banks' deposit) that loads significantly. This index measures the degree of bank lending relative to their liabilities (deposits). To measure the distribution of assets by the financial system, King and Levine proposed the ratio of claims on the non-financial private sector by the financial system (central banks and deposit money banks) to total domestic credit. Due to lack of this data for Nigeria, the BCD was instead adopted to proxy this measure. Overall, the MD index could be seen as the closest proxy to what King and Levine proposed.

(ii) Unit root test

As a next step, the Augmented Dickey-Fuller (the ADF) test, proposed by Dickey and Fuller (1979), was used to check whether the adopted time series are stationary, that is $I(0)$, or first-difference stationary, that is $I(1)$. As reported in Table 13 below, in almost all but three cases, the ADF test fails to reject the null hypothesis of the existence of a unit root for the data at their initial levels. The ADF results were mixed for MD and CPI (see Table for details). For *GDPKC*, the null hypothesis was completely rejected at the initial levels for all conditions. In all cases, the null hypothesis is rejected strongly when the first difference is taken. Overall, none of the series is integrated of order 2 that is $I(2)$.

Table 13 - ADF unit root test results

Unit root test - using the Augmented Dickey-Fuller (ADF) approach and Schwarz Info Criterion (SIC) method for lag length selection.						
Conditions [included exogenous]	Variables	Levels		First difference		Rule
		t-Statistic	5% critical value	t-Statistic	5% critical value	
Intercept		-1.2397	-2.9225	-5.4611	-2.9238	
Intercept & trend	MS	-1.7957	-3.5043	-5.381	-3.5064	I(1)
None		-1.2827	-1.9477	-5.4328	-1.9478	
Intercept		-0.0334	-2.9225	-5.2184	-2.9238	
Intercept & trend	MI	0.2647	-3.5043	-5.8759	-3.5064	I(1)
None		-0.0662	-1.9477	-5.253	-1.9478	
Intercept		-2.8541	-2.9225	-7.8964	-2.9238	I(0) at 10% [only with intercept]
Intercept & trend	MD	-2.8739	-3.5043	-7.8185	-3.5064	I(1) at all conditions
None		-2.8839	-1.9476	-7.9879	-1.9478	I(0) at 5-10% [on None condition]
Intercept		-1.0867	-2.9224	-5.9975	-2.9237	
Intercept & trend	GOVT	-1.4503	-3.5043	-5.932	-3.5064	I(1)
None		-0.5905	-1.9476	-6.0621	-1.9478	
Intercept		-4.9991	-2.9225	*	*	
Intercept & trend	GDPKC	-4.9799	-3.5043	*	*	I(0)
None		-4.9162	-1.9477	*	*	
Intercept		-3.2919	-2.9224	-7.1809	-2.9252	I(1) at all conditions
Intercept & trend	CPI	-3.3265	-3.5043	-7.1446	-3.5085	I(0) at 10% [intercept & trend]
None		-2.1538	-1.9477	-7.2571	-1.9479	I(0) at 5-10% [on None condition]
Intercept		-2.439	-2.9225	-6.5005	-2.9238	
Intercept & trend	SHX	-3.1183	-3.5043	-6.4408	-3.5064	I(1)
None		-1.0455	-1.9447	-6.5583	-1.9478	
Intercept		-0.964	-2.9224	-6.8761	-2.9237	
Intercept & trend	SPREAD	-2.1743	-3.5043	-6.8711	-3.5064	I(1)
None		0.2366	-1.9476	-6.8497	-1.9478	
Intercept		-1.3761	-2.9252	-5.8186	-2.9252	
Intercept & trend	CKG	-2.7591	-3.5155	-5.759	-3.5085	I(1)
None		0.62144	-1.9479	-5.8842	-1.9479	

(iii) Normality test

To test whether the distribution of the variable deviates from a comparable normal distribution, the Kolmogorov-Smirnov and Shapiro-Wilk tests were employed. If these tests are non-significant (i.e. if the *p-value* is greater than .05) it shows that the distribution of our sample is not significantly different from a normal distribution (i.e. it is probably normal). If, however, the tests are significant ($p < .05$) then the distribution of the sample can be said to be significantly different from a normal distribution (i.e. it is non-normal). The results of these tests are presented in Table 14 below.

Table 14 - Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Capital stock/GDP	.160	50	.003	.874	50	.000

a. Lilliefors Significance Correction

From the table, it is clear the sample is non-normally distributed: given that the Kolmogorov-Smirnov and Shapiro-Wilk tests are both significant. This result is also reflected in the normal Q-Q plot¹⁴² (Figure 26) and the Histogram¹⁴³ plot (Figure 27) below. In the Q-Q plot, the observations, represented by the dots, could be seen to be imperfectly aligned with the diagonal line that represents a normal distribution. While, in the histogram plot, the distribution could be seen to be positively skewed: given the long

¹⁴² The normal Q-Q chart plots the values you would expect to get if the distribution were normal (expected values) against the values seen in the data (observed values). The expected values are a straight diagonal line, whereas the observed values are plotted as individual points. If the data are normally distributed, then the observed values (the dots on the chart) should fall exactly along the straight line. Any deviation of the dots from the line represents a deviation from normality.

¹⁴³ A normal histogram usually has a bell shaped curve. A deviation from such curve indicates non-normality.

tail. These diagrams therefore support the outcomes of the normality tests of non-normality of the distribution of the share of gross capital stock in GDP.

Figure 26 - Normal Q-Q plot

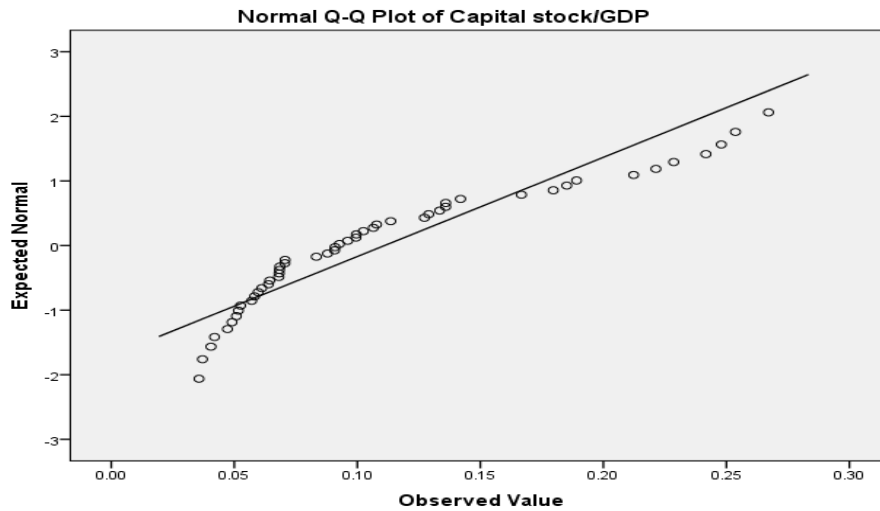
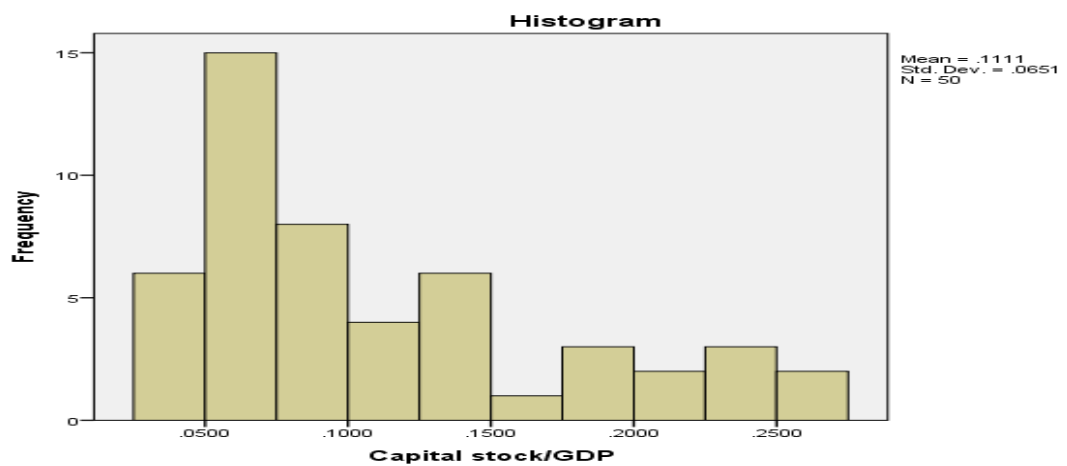


Figure 27 - Histogram diagram



7.3 Model specification

According to the results of the normality tests, it is obvious that the data is non-normally distributed (non-parametric). As such, to accurately compare the two different conditions (regulated capitalism vs free-market capitalism), we can only apply a statistical procedure that is not undermined by the non-normality of the distribution of the underlying data.

Such statistical techniques are known as non-parametric techniques. Their outcomes are not biased because of the non-normality of the underlying data.

The non-parametric procedure adopted to compare the median of a share of the selected macroeconomic variable in the GDP across the two sub-periods is the Mann-Whitney test. The test works on the principle of *ranking* the data; that is, finding the lowest score and giving it a rank of 1, then finding the next higher score and giving it a rank of 2, and so on. This process results in high scores to be represented by large ranks, and low scores by small ranks. The inference is then drawn based on the sum of the rankings. To test if the difference between the summed rankings of the two conditions are statistically significant, the test statistic (z-score) is calculated; it is computed using the sample sizes of each group, the mean, and the standard error of the test statistic (which is usually the lowest of the sums of the rankings)¹⁴⁴.

Secondly, the relationship between the financial development components and the capital stock level was measured using Pesaran and Shin's (1998) proposed method of Autoregressive Distributed Lag (ARDL) approach to cointegration testing. This method has been shown (see Pesaran *et al*, 2001) to be consistent when it is not known with certainty whether the underlying regressors are trend- or first-difference stationary. From the ADF tests (see Table 13) it is clear that the regressors in the model exhibit mixed characteristics; some were I(0) and some I(1). As such, the Bounds testing approach is best suited for testing the existence of a long-run relationship between the variables,

¹⁴⁴ *Rule:* If the computed z score is bigger than 1.96 (ignoring the minus sign), then the test is significant at $p < 0.5$ (that is the difference between the medians of the two conditions will be construed as been significant).

compared to the two-step residual-based procedure for testing the null of no cointegration (following in the order of Engle-Granger [1987]) and the system-based reduced rank regression (by Johansen [1988, 1991]), both of which are predicated on the condition that the underlying variables should be integrated of order one (that is I[1]).

A priori, the simple mathematical form of the model used in this study can be summarised as –

$$y = f(x_i) \tag{Eq. 7.1}$$

[Where y is the dependent variable CKG and x_i are the regressors - *MS, MI, MD, GOVT, GDPKC, CPI, SHX, and SPREAD*]

Eq. A1. 1 could be re-written as –

$$y = x_1 + x_2 + x_3 + x_4 + \dots + x_k \tag{Eq. 7.2}$$

The econometric representation of this mathematical relationship is written as –

$$y_t = \beta_0 + \beta_1 x_{1t} + \beta_2 x_{2t} + \beta_3 x_{3t} + \dots + \beta_k x_{kt} + u_t \tag{Eq. 7.3}$$

(Note: This model could be summarized as: $y_t = \beta_0 + \sum \beta_i(x_{it}) + u_t$)

Where β_0 is the coefficient of the intercept and β_i ($i = 1$ to k) represent the coefficients of the k -number of ‘ x ’ regressors and u_t is the stochastic error term. The t , the periods, ranges from 1, 2,..... T (1961-2013).

Following the methodology developed by Pesaran and Shin (1998), the unrestricted ADL error-correction model with p lags of y and q lags of x_i , ADL (p, q), is summarised as –

$$\Delta y_t = C_0 + \sum \Pi_i \Delta y_{t-i} + \sum \varphi_j \Delta x_{1t-j} + \sum \delta_j \Delta x_{2t-j} + \sum \omega_j \Delta x_{3t-j} + \dots + \sum \Psi_j \Delta x_{kt-j} + \theta_0 y_{t-1} + \theta_1 x_{1t-1} + \theta_2 x_{2t-1} + \theta_3 x_{3t-1} + \dots + \theta_k x_{kt-1} + \mu_t \quad [\text{Eq. 7.4}]$$

Where Δ is the difference operator, $i = 1$ to p , and $j = 0$ to q .

The number of lags (p, q) to be included in the model is determined using the Schwarz Information Criterion (SIC). The result obtained from the above model and its restricted form is discussed in the next section.

To conclude, the regression model adopted was subsequently subjected to various diagnostic tests to ensure its robustness. The Ramsey RESET test is used initially to test the functional form employed in the regression for misspecification. This test is based on the null that the current form is not miss-specified. Additionally, the recursive estimation test, the CUSUM and the CUSUM of square tests, are used to test if the regression coefficients are generally stable over the sample period. As standard, the Breusch-Godfrey Serial Correlation LM (Lagrange Multiplier) test is used to test for independence in the residuals. The results of these tests are also discussed in the next session.

7.4 Presentation and discussion of empirical results

(i) *The Mann-Whitney test result*

To test the significance of the difference observed between the medians (the share in the gross domestic product) of the selected macroeconomic variable (the gross capital stock) in the two sub-periods, the research questions were restated as follows:

- a. The null hypothesis (H_0) indicates that deregulation and liberalisation of the financial system (market-led strategies) have had the same impact on the economic variable as state-led strategies. This hypothesis is based on the premise

that the median of the real economic variable during the market-led epoch are not significantly different from those achieved during the state-led epoch.

iii. $H_0: \mu_1 = \mu_2$ [Eq. 1.1]

Where: μ_1 represents the median of the share in the gross domestic product of gross capital stock in the first sub-period, and μ_2 represents same, but for the market-led epoch.

b. The alternative hypothesis (H_1) adopted is that neoliberal financial reforms have not positively affected this economic variable. This is premised on the basis that the median of the real economic variable during the market-led epoch is significantly different from that in the state-led epoch.

iv. $H_1: \mu_1 \neq \mu_2$ [Eq. 1.2]

The results of the Mann-Witney test, presented below, shows that the difference between the medians of share of the gross capital stock in GDP during the embedded period and the free-market era is statistically significant to be ignored. The median during the embedded capitalist epoch was approximately 0.14 (14% of GDP), while that during the free-market era was 0.06 (6% of GDP) and their difference, 0.08, is contended to be beyond chance. It goes to show that the reforms have not significantly improved the level of capital formation in the country since their implementation. The null hypothesis is thus rejected.

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The medians of Capital stock/GDP are the same across categories of embedded/free-mkt.	Independent-Samples Median Test	.000	Reject the null hypothesis.
2	The distribution of Capital stock/GDP is the same across categories of embedded/free-mkt.	Independent-Samples Mann-Whitney U Test	.000	Reject the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

ii. The bounds test results

As mentioned earlier, the regression is computed over the sample period of 1961 – 2010.

The result of the Schwarz Criterion for maximum lag selection (see Table 15 below)

indicates maximum lag of one period, as the most appropriate lag length.

Table 15 - SIC lag order selection criteria

Endogenous variables: D(CKG)

Exogenous variables: C CKG(-1) MI(-1) MD(-1) MS(-1) GOVT(-1) GDPKC(-1) CPI(-1) SHX(-1) SPREAD(-1) DMS(-1) DMI(-1) DMD(-1) DGOVT(-1) D(GDPKC(-1)) DSPREAD(-1) DSHX(-1) D(CPI(-1))

Lag	LogL	LR	FPE	AIC	SC	HQ
0	117.6535	NA	0.000732	-4.429046	-3.706381	-4.159643
1	121.0256	3.896594*	0.000665*	-4.534470*	-3.771657*	-4.250101*
2	121.4418	0.462432	0.000689	-4.508523	-3.705562	-4.209187
3	122.4828	1.110415	0.000696	-4.510346	-3.667237	-4.196043
4	122.5147	0.032678	0.000736	-4.467322	-3.584065	-4.138053

* indicates lag order selected by the criterion

LR: sequential modified LR test statistic (each test at 5% level)

FPE: Final prediction error

AIC: Akaike information criterion

SC: Schwarz information criterion

HQ: Hannan-Quinn information criterion

With the lag selection criteria concluded, the unrestricted model (Eq. 7.4), was estimated using OLS, without a linear time trend, for $p = 1$ and $q = 1$. From the unrestricted equation results (see Table 16 below), it is clear that the one-period lagged differenced version of some regressors – $\Delta MS(-1)$, $\Delta MI(-1)$, $\Delta MD(-1)$, $\Delta GOVT(-1)$, $\Delta GDPKC(-1)$, $\Delta SPREAD(-1)$, $\Delta SHX(-1)$ and $\Delta CPI(-1)$ – are not significant in the regression.

Table 16 - Initial unrestricted-ARDL error-correction analysis result

Dependent Variable: D(CKG)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.016896	0.032420	-0.521180	0.6062
DCKG(-1)	0.364756	0.169295	2.154554	0.0396
DMS(-1)	0.003039	0.005616	0.541055	0.5926
DMI(-1)	0.015266	0.011729	1.301487	0.2033
DMD(-1)	-0.001334	0.005947	-0.224242	0.8241
DGOVT(-1)	-0.140250	0.131979	-1.062671	0.2967
DGDPKC(-1)	0.000170	0.000496	0.341964	0.7348
DSPREAD(-1)	0.000827	0.001539	0.537768	0.5948
DSHX(-1)	0.008457	0.041771	0.202471	0.8410
DCPI(-1)	4.08E-05	0.000291	0.140116	0.8895
CKG(-1)	-0.467861	0.131215	-3.565602	0.0013
MS(-1)	-0.006454	0.002493	-2.588558	0.0149
MI(-1)	0.007176	0.005044	1.422547	0.1655
MD(-1)	-0.005380	0.007020	-0.766335	0.4497
GOVT(-1)	0.253932	0.126604	2.005715	0.0543
GDPKC(-1)	5.60E-05	0.000685	0.081839	0.9353
SPREAD(-1)	1.68E-05	0.001289	0.013003	0.9897
SHX(-1)	0.039984	0.048228	0.829069	0.4138
CPI(-1)	0.000497	0.000347	1.433588	0.1624
R-squared	0.636578	Mean dependent var		0.000472
Adjusted R-squared	0.411006	S.D. dependent var		0.028095
S.E. of regression	0.021562	Akaike info criterion		-4.547994
Sum squared resid	0.013483	Schwarz criterion		-3.807310
Log likelihood	128.1519	Hannan-Quinn criter.		-4.268088
F-statistic	2.822059	Durbin-Watson stat		2.066717
Prob(F-statistic)	0.006256			

Using the Stepwise Least Squares approach¹⁴⁵, with a unidirectional selection method, the model was adjusted and the redundant variables removed from the regression for the

¹⁴⁵ This is an automatic variable selection procedure, which chooses jointly most relevant explanatory variables from a set of candidate variables. The forward unidirectional procedure starts with no variables in the regression and then it selects first the variable with the lower p-value (largest t-ratio), if it were included in the model, then the variable with

sake of parsimony, and to avoid unnecessary over-parameterization. The regression was then re-estimated without the redundant variables, *MD*, *GDPKC* and *SPREAD* variables, both in levels and in differences. Furthermore, the differenced one period lag versions of the remaining variables were dropped in the re-estimated model because they were also insignificant. The result of the re-parameterised regression is presented in the table below

Table 17 – Re-parameterised unrestricted-ARDL error-correction analysis result

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.029433	0.018312	-1.607325	0.1170
DCKG(-1)	0.397888	0.139553	2.851165	0.0073
DMI	-0.004408	0.008068	-0.546283	0.5883
DMS	0.002453	0.003812	0.643528	0.5241
DGOVT	-0.092078	0.128562	-0.716209	0.4786
DSHX	0.018886	0.032362	0.583587	0.5632
DCPI	0.000370	0.000287	1.290867	0.2052
CKG(-1)	-0.489261	0.113913	-4.295056	0.0001
MI(-1)	0.012004	0.003725	3.222770	0.0027
MS(-1)	-0.006543	0.001832	-3.570670	0.0011
GOVT(-1)	0.278573	0.090756	3.069464	0.0041
SHX(-1)	0.063698	0.033860	1.881239	0.0683
CPI(-1)	0.000810	0.000310	2.612588	0.0132
R-squared	0.560027	Mean dependent var		0.000472
Adjusted R-squared	0.409179	S.D. dependent var		0.028095
S.E. of regression	0.021596	Akaike info criterion		-4.606844
Sum squared resid	0.016323	Schwarz criterion		-4.100061
Log likelihood	123.5643	Hannan-Quinn criter.		-4.415330
F-statistic	3.712524	Durbin-Watson stat		2.039364
Prob(F-statistic)	0.001182			

the second lowest p-value conditional upon the first variable already being included, and so on. The procedure continues until the next lowest p-value relative to those already included variable is larger than some specified threshold value, then the selection stops, with no more variables being incorporated into the model.

In view of the conditions that must be fulfilled for the bounds test to be valid – i.e. the independence of the residual (this is the 2nd assumption in Pesaran, *et al*, 2001 [the 4th assumption was fulfilled given that none of the regressors are integrated of order two]) – the residual from the re-estimated regression was thus tested to see if they are independent. The result of the LM test of the re-parameterized model, with the null of no serial correlation, is presented below.

Table 18 - Breusch-Godfrey Serial Correlation LM test

F-statistic	1.293709	Prob. F(2,33)	0.2878	
Obs*R-squared	3.489888	Prob. Chi-Square(2)	0.1747	
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.000878	0.018450	0.047606	0.9623
DCKG(-1)	0.016079	0.182182	0.088260	0.9302
DMI	-0.000982	0.008133	-0.120770	0.9046
DMS	-0.000425	0.003924	-0.108394	0.9143
DGOVT	-0.015595	0.133391	-0.116911	0.9076
DSHX	0.008511	0.032591	0.261159	0.7956
DCPI	2.27E-06	0.000291	0.007815	0.9938
CKG(-1)	0.146774	0.148340	0.989446	0.3296
MI(-1)	-0.001207	0.003841	-0.314267	0.7553
MS(-1)	0.000631	0.001926	0.327689	0.7452
GOVT(-1)	-0.079301	0.105294	-0.753132	0.4567
SHX(-1)	-0.005679	0.034682	-0.163742	0.8709
CPI(-1)	-4.70E-05	0.000309	-0.152222	0.8799
RESID(-1)	-0.212317	0.292810	-0.725100	0.4735
RESID(-2)	-0.349111	0.221122	-1.578819	0.1239
R-squared	0.072706	Mean dependent var	2.57E-17	
Adjusted R-squared	-0.320691	S.D. dependent var	0.018636	
S.E. of regression	0.021417	Akaike info criterion	-4.598996	
Sum squared resid	0.015136	Schwarz criterion	-4.014245	
Log likelihood	125.3759	Hannan-Quinn criter.	-4.378018	
F-statistic	0.184816	Durbin-Watson stat	2.158459	
Prob(F-statistic)	0.999198			

The results (from the above table) shows that there are no problems of serial correlation in the re-parameterised model within the specified lag length (the null of no serial correlation could not be rejected). With the relevant assumptions met, the bounds test was then computed to see if there is evidence of a long-run relationship (cointegration) between the variables. Using the Wald coefficient restriction test, the coefficients of the

level variables in the model were examined to see if they are equal to zero (that is under the null of no long-run relationship).

Table 19 - Wald test

Test Statistic	Value	df	Probability
F-statistic	5.201720	(7, 35)	0.0004
Chi-square	36.41204	7	0.0000

Null Hypothesis: $C(1)=C(8)=C(9)=C(10)=C(11)=C(12)=C(13)=0$

The Wald test results (see Table 19 above) suggests that there exist a long-run relationship between y_t and x_{it} – i.e. between the variables. Using the F-statistic from Table 19 above (which is approximately 5.2), I proceeded to test if there is a non-degenerate long-run level relationship (i.e. cointegration) between the endogenous and exogenous variables. The F-statistic was used to compare the critical value bounds provided in Tables C1.i-v in Pesaran *et al* (2001); Pesaran *et al* showed that if the computed Wald or F-statistic fall outside the critical value bounds that conclusive decision could be reached. Similarly, they noted that if the computed F-statistic falls within the critical value bounds, then the result would be inconclusive. The Pesaran, *et al* (2001) bounds testing rule is summarised as follows –

- F-Statistic > I(1) upper bound = There is cointegration
- F-Statistic < I(0) lower bound = There is no cointegration
- $I(0) < \text{F-Statistic} < I(1)$ = Result is inconclusive

The lower bound [I(0)] and the upper bound [I(1)] critical values for our model from Pesaran *et al*'s tables are (2.43, 3.50), for 90% significance level, and (2.78, 3.94) for 95%. The calculated F-statistic in our model is 5.2. Since the calculated F-statistic falls outside the critical value bounds (F-statistic > I(1) upper bound), it is concluded that the test supports the evidence of a long-run relation between the variables.

I also applied the bounds procedure to the cointegration test proposed in Banerjee *et al.* (1998), which is based on the t-ratio of the coefficient of the lagged dependent variable. The critical value bounds for the t-test are also presented in Pesaran, *et al* (2001). From Table 17A above, the t-statistic for the lagged dependent variable (*CKG* [-1]) is -4.295. From table C2.iii in Pesaran *et al (ibid)*, the lower bounds [I(0)] and upper bounds [I(1)] at 90% and 95% significance levels are [-2.57, -3.86] and [-2.87, -4.19] respectively. Again, the calculated t-statistic falls outside the upper bounds of the critical values at both 90% and 95%. This also validates the finding of a long-run relationship between the variables in the model.

To test the robustness of the model, the Ramsey RESET test used to test for model misspecification, under the null that the current form is not miss-specified. The result of the test is presented in Table 20A below. Most significantly, the test failed to reject the null hypothesis. In other words, the form employed in the model could be said to be the appropriate functional form.

Table 20 - Ramsey's RESET test

Specification: D(*CKG*) C D*CKG*(-1) DMI DMS DGOVT DSHX DCPI *CKG*(-1) MI(-1) MS(-1) GOVT(-1) SHX(-1) CPI(-1)

	Value	df	Probability
t-statistic	0.031488	34	0.9751
F-statistic	0.000992	(1, 34)	0.9751
Likelihood ratio	0.001400	1	0.9702

I also tested the model to see if the regression coefficients are generally stable over the sample period. In particular, I employed the CUSUM and the CUSUM of squares tests. Their results, presented in Figures 28 and 29 below, confirm that the regression coefficients in the model are stable over the sample periods examined. Furthermore, the

adjusted R^2 indicator shows that the retained regressors in our model explain 41% of the variation in the share of capital stock in GDP.

Figure 28 - CUSUM test

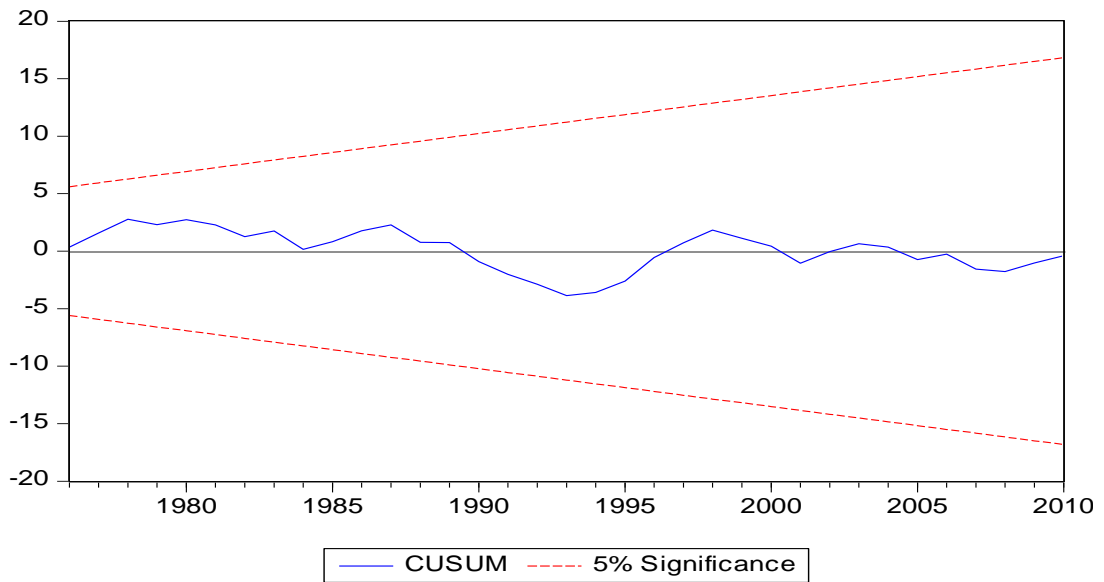
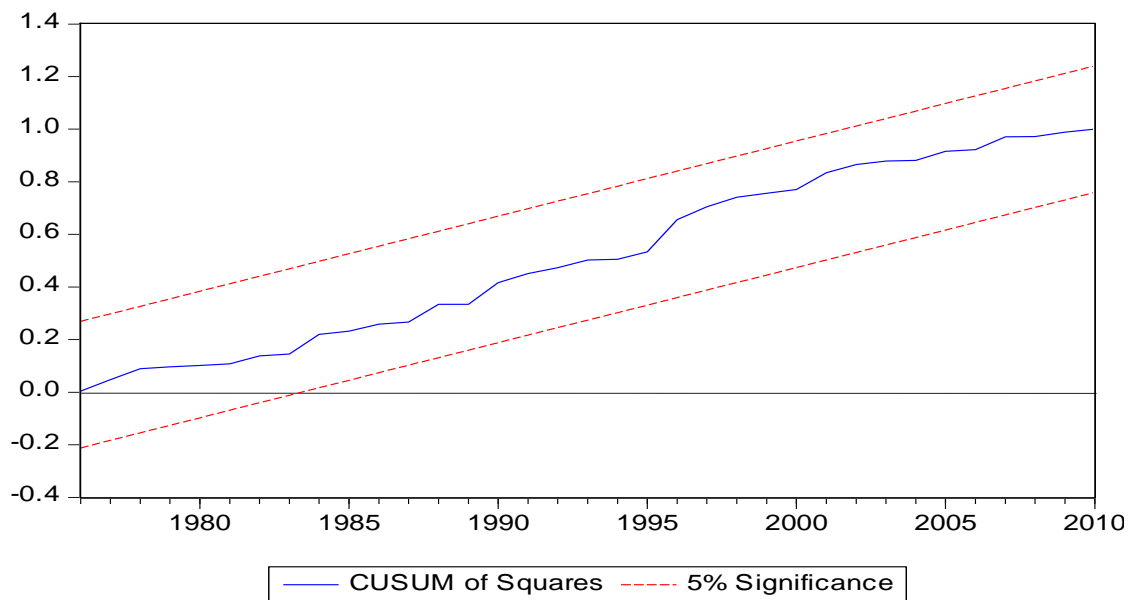


Figure 29 - CUSUM of squares test



Using the ADL approach to the estimation of the long-run relations as discussed in Pesaran, *et al (ibid)* – [Eq. 7.4], I obtained the following level long-run capital accumulation equation –

$$CKG_t = \beta_1 MI_t + \beta_2 MS_t + \beta_3 GOVT_t + \beta_4 SHX_t + \beta_5 CPI_t + \mu_t \quad [\text{Eq. 7.5}]$$

(Where β_i ($i = 1$ to 5) are calculated as $[-(\theta_i/\theta_0)]$).

Equation 7.5 can be re-written as –

$$CKG_t = 0.02454MI_t - 0.0134MS_t + 0.5694GOVT_t + 0.13SHX_t + 0.0017CPI_t + \mu_t$$

[0.0037]	[0.0018]	[0.0907]	[0.0338]	[0.0003]
(0.0027)	(0.0011)	(0.0041)	(0.0683)	(0.0132)

The standard errors of the long-run estimates are given in the square brackets and the p-values in round brackets. All the long-run estimates are highly significant at 5% level except export, which is significant at 10% level. In view that the share of capital stock in GDP in Nigeria has averaged 0.111 from 1961-2010 (see Table 23A in Appendix 2), these results suggests the following:

- (1) That a one-unit increase in *MI* (the measure of the relative importance of the financial institutions – that is the share of assets of domestic banks in total financial system assets) will bring about 0.02454 increase in the average share of capital stock in GDP (i.e. an increase from an average of 0.111 to 0.13554). This result shows that, on aggregate, the increase in the size of banks in relation to central banks is relevant for overall expansion of capital stock. Therefore, when the central bank is not contracting banks' reserves via reserve requirements and other restrictive measures, there is a possibility that banks can increase loans to the private sector.
- (2) For *MS* (measure of the overall size/depth of the financial system – measured as the share of the financial deepening variable [financial system assets] in GDP), a

one-unit increase in this indicator relates to a 0.0134 decline in the average share of capital stock in the country's GDP (i.e. a 1-unit increase in *MS* will reflect a decline in the average share of capital stock in GDP from 0.111 to 0.0976). This result shows that the increase in financial assets reflects a decrease in the level of capital stock in the economy. This negative relationship between financial size (assets) and the stock of capital has been observed by related studies also (see Odedokun, 1992, for instance).

- (3) The results also showed that expanded fiscal policy (increased share of government expenditure in GDP) has a positive long-run relationship with the level of capital stock in the country. A one-unit increase in the share of government expenditure in GDP will induce a 0.5694 increase in the share of capital stock in GDP (i.e. an increase from an average of 0.111 to 0.6804). This result corroborates the theories put forward by Kalecki (1954, 1971) and Minsky (1986), which asserts that government spending makes up the profit accumulated by the capitalist, and which in turn induces him to accumulate more capital.
- (4) Similarly, a one-unit rise in the ratio of exports to GDP reflects a 0.13 rise in the share of capital stock in GDP (i.e. an increase of the average share from 0.111 to 0.241). This is also in consonance with the theories put forward by many scholars (as have been discussed earlier, net exports [increases of exports over imports] reflect increases in profit, which in turn induces further capital accumulation). This result is also similar to that obtained by many past empirical results (see Roubini and Sala-i-Martin, 1991 and Odedokun, 1992 for instance).
- (5) Finally, the result suggests that a one-unit change in the *CPI* variable (the average annual average rate of inflation – used to proxy monetary policies: following Roubini and Sal-i-Martin's (1991) view, the higher the inflation rates, the lower

the real rates and vice versa, this policy was adopted to represent interest rate management) reflects around a 0.0017 rise in the share of capital stock in GDP (i.e. an increase from 0.111 to 0.1127). In other words, the result implies that a lower interest rate (a higher level of inflation) has a positive relationship with the level of capital stock in an economy. Again, this corroborates the traditional economic theory of the trade-off between unemployment and inflation – which holds that higher inflations reflect lower unemployment and higher unemployment (which reflects a lower pace of capital accumulation) mirror lower levels of inflation. Arestis and Demetriades (1997) obtained a similar result. They also concluded that increased real rate of interest has a negative effect on aggregate national output.

The error correction regression associated with the above (level) long-run relationship is presented in the table below –

Table 21 - Restricted ARDL error-correction model

Dependent Variable: D(CKG)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.91E-05	0.003284	-0.005801	0.9954
DCKG(-1)	0.543451	0.130391	4.167867	0.0002
DMI	0.000135	0.007748	0.017470	0.9861
DMS	0.003519	0.003449	1.020296	0.3137
DGOVT	0.050170	0.110706	0.453181	0.6529
DSHX	0.004037	0.028723	0.140545	0.8889
DCPI	7.72E-05	0.000232	0.333015	0.7409
ECT(-1)	-0.569406	0.109587	-5.195911	0.0000
R-squared	0.464071	Mean dependent var		0.000472
Adjusted R-squared	0.370283	S.D. dependent var		0.028095
S.E. of regression	0.022295	Akaike info criterion		-4.617890
Sum squared resid	0.019883	Schwarz criterion		-4.306023
Log likelihood	118.8294	Hannan-Quinn criter.		-4.500035

F-statistic	4.948108	Durbin-Watson stat	1.879472
Prob(F-statistic)	0.000427		

The error-correction term (*ECT*) provides further direct evidence on the long-run cointegration dynamics that exist between capital stock and its regressors in our model. The error correction coefficient is estimated to be -0.5694 (0.0000), which is reasonably large (and highly significant). This suggests that 56.94% of any disequilibrium between the share of capital stock in GDP and the regressors are corrected within one period (a year). The robustness of the restricted error-correction model was also verified, and the results¹⁴⁶ confirm that the model is robust. Overall, the equation presented in this paper has a number of desirable features that substantiates its main findings.

iii. Verification of the main findings

Previously, I relied on composite indicators, *MS*, *MI* & *MD*, as proxies for financial deepening in our analysis. While the use of these composite indexes yields some advantages such as mitigating the problems of multicollinearity, and that of under-representing some relevant variables, it also has some form of shortcomings such as limited interpretability. Consequently, I re-estimated the model, this time using the traditional proxies that have been widely employed in related studies. I used *BCD*, *BPC*, *DMBFA* and *FSL* in place of the composite variables to assess the validity of the main empirical estimation that used composite indexes. I followed the same econometric

¹⁴⁶ See Tables 24A and 25A in the appendix

procedure, with the x_{is} as *BCD*, *BPC*, *DMBFA* and *FSL*, including the usual conditioning variables.

The result¹⁴⁷ of the new model, presented below, also confirms my earlier findings. The F-statistic is also above the I(1) upper critical bound, and this suggests the existence of cointegration (a long-run relationship between the variables). Furthermore, the LM test shows no serial correlation and Ramsey's RESET test fails to reject the null hypothesis.

Table 22 - Unrestricted ARDL error-correction model

Dependent Variable: DCKG

Method: Least Squares

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.055869	0.025534	-2.188044	0.0354
DCKG(-1)	0.334940	0.151038	2.217589	0.0332
DBPC	0.000695	0.001361	0.510377	0.6130
DDMBFA	-0.000178	0.000494	-0.360959	0.7203
DGOVT	-0.064835	0.129824	-0.499404	0.6206
DSHX	0.019877	0.033759	0.588801	0.5598
DCPI	0.000151	0.000287	0.527281	0.6013
CKG(-1)	-0.434108	0.118925	-3.650256	0.0008
BPC(-1)	-0.001837	0.000625	-2.940784	0.0058
DMBFA(-1)	0.000994	0.000289	3.438005	0.0015
GOVT(-1)	0.195147	0.093978	2.076513	0.0453
CPI(-1)	0.000585	0.000288	2.031531	0.0498
SHX(-1)	0.041100	0.031845	1.290635	0.2053
R-squared	0.534392	Mean dependent var		0.000472
Adjusted R-squared	0.374755	S.D. dependent var		0.028095
S.E. of regression	0.022216	Akaike info criterion		-4.550214
Sum squared resid	0.017274	Schwarz criterion		-4.043430
Log likelihood	122.2051	Hannan-Quinn criter.		-4.358700
F-statistic	3.347543	Durbin-Watson stat		1.938527
Prob(F-statistic)	0.002585			

¹⁴⁷ Following the strategy adopted in the main analysis, after the initial regression, it was observed bcd, spread, and gdpkc (both in levels and in differences) were not significant. They were subsequently dropped and the regression re-parameterised accordingly.

More significantly, the regressors have the same signs with their composite counterparts in the original model. The *BPC* variable (which measures the size of the financial system credit contribution to the economy) has a significant negative relation with a share of capital stock in GDP as was the composite index *MS* in the original regression. Ujunwa, et al (2012), obtained a similar result. They also concluded that banks activity (which they also measured as the ratio of bank credit to the private sector) in Nigeria does not promote growth in the economy. The measure of the importance of institution (*DMBFA*) also has a positive relation with *CKG*, as was the composite index, *MI*, in the original regression. The conditioning information datasets – *GOVT*, *CPI*, and *SHX* – also have the same signs as they had in the original regression.

7.5 Conclusion

The results of this econometric analysis provide weak support to the view that deepening in the financial system will effectively accelerate capital accumulation *cum* economic growth in the longer-run.

Firstly, it is clear that the average levels of capital stock in Nigeria have been significantly lower in the market-led period than in the state-led period. Secondly, the econometric results showed that deepening of the financial system, particularly the expansion of the financial system (captured by the *MS* variable that measures the size of the financial system in relation to the GDP), has a negative relationship with capital accumulation in the long-run. This conclusion was also reached by many past studies that have examined the long-run relationship between macroeconomic variables and financial development indicators (e.g. Demetriades and James, 2011; Ujunwa *et al*, 2012).

Interestingly, the findings provide support for the view that deepening in the financial system reflects stagnation in the real sector (see Hilferding, 1910; Sweezy and Magdoff, 2009; Kotz, 2013). Furthermore, this analysis provides econometric evidence for active state participation in economic activities. The empirical results show that increased government expenditure has a positive and significant long-run relationship with capital accumulation.

Additionally, the analysis shows that increased interest rate, reflected in the lower rate of inflation (i.e. the *CPI* index) has a negative relation with the rate of real capital accumulation. Again, this finding is in consonant with findings by related studies (see in particular the theoretical assumption made by Udoh and Ogbuagu, 2012, and the empirical finding by Arestis and Demetriades, 1997). Once more, this contradicts traditional neoliberal precepts that suggest that repressed interest rate (which may have, as a corollary, a high level of inflation) has a negative relation with real capital accumulation.

With regards trade openness, the empirical result supports the argument that export orientation promotes expansion in capital accumulation (see Kalecki, 1954, 1971; Roubini and Sala-i-Martin, 1991; for example). Without a doubt, the more market capitalists find for their products, the more surplus value they accumulate, and the more profit they make and as such, the propensity to accumulate more capital increases (as have been advanced by Kalecki).

Overall, the empirical results provide weak support to the neoliberal theses for a deregulated and liberalised financial system; which is often conceived will induce expansion in capital accumulation, and thus accelerate development in the economy. Rather, the results show that some of these expansions, in the size of the financial

institution and the rate of interest, are significantly negatively correlated with the expansion of capital accumulation. In sum, the econometric analyses support the argument in this paper that a re-think of the philosophy that is used to organise the economic system is highly needed if sustainable development is to be achieved in Nigeria.

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Appendices

Table 23A - Covariance analysis: ordinary

Sample: 1961 2010

Included observations: 50

Correlation	BCD	BPC	CBN	DMBA	DMBFA	FSL	M2	QM
t-Statistic								
Probability								
BCD	1.000000							

BPC	0.270720	1.000000						
	1.948362	-----						
	0.0572	-----						
CBN	-0.085502	0.159835	1.000000					
	-0.594552	1.121789	-----					
	0.5549	0.2675	-----					
DMBA	0.107331	0.962361	0.198972	1.000000				
	0.747929	24.53311	1.406643	-----				
	0.4582	0.0000	0.1660	-----				
DMBFA	0.060785	0.128127	-0.889009	0.128083	1.000000			
	0.421913	0.895066	-13.45134	0.894752	-----			
	0.6750	0.3752	0.0000	0.3754	-----			
FSL	-0.006885	0.938945	0.291354	0.967467	0.016168	1.000000		
	-0.047701	18.90682	2.110105	26.49377	0.112031	-----		
	0.9622	0.0000	0.0401	0.0000	0.9113	-----		
M2	-0.099164	0.749659	0.477304	0.826456	-0.194307	0.879390	1.000000	
	-0.690431	7.847691	3.763186	10.17023	-1.372355	12.79685	-----	
	0.4932	0.0000	0.0005	0.0000	0.1763	0.0000	-----	
QM	-0.142162	0.823492	0.419839	0.899341	-0.105289	0.928896	0.929403	1.000000
	-0.995031	10.05647	3.204866	14.25006	-0.733539	17.37746	17.44696	-----
	0.3247	0.0000	0.0024	0.0000	0.4668	0.0000	0.0000	-----

Table 24A - Breusch-Godfrey serial correlation LM test

F-statistic	0.281154	Prob. F(2,38)	0.7565	
Obs*R-squared	0.699926	Prob. Chi-Square(2)	0.7047	
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.99E-06	0.003351	0.000595	0.9995
DCKG(-1)	-0.070297	0.177863	-0.395233	0.6949
DMI	0.000867	0.008060	0.107610	0.9149
DMS	-0.000249	0.003589	-0.069313	0.9451
DGOVT	0.017382	0.115236	0.150838	0.8809
DSHX	0.002107	0.029427	0.071614	0.9433
DCPI	-1.06E-05	0.000242	-0.043752	0.9653
ECT(-1)	0.010894	0.165080	0.065992	0.9477
RESID(-1)	0.121071	0.301347	0.401767	0.6901
RESID(-2)	-0.098931	0.226835	-0.436138	0.6652
R-squared	0.014582	Mean dependent var	6.51E-19	
Adjusted R-squared	-0.218807	S.D. dependent var	0.020568	
S.E. of regression	0.022707	Akaike info criterion	-4.549246	
Sum squared resid	0.019593	Schwarz criterion	-4.159412	
Log likelihood	119.1819	Hannan-Quinn criter.	-4.401927	
F-statistic	0.062479	Durbin-Watson stat	2.021179	
Prob(F-statistic)	0.999930			

Table 25A - Ramsey's RESET test

Equation: UNTITLED

Specification: D(CKG) C DCKG(-1) DMI DMS DGOVT DSHX DCPI ECT(-1)

Omitted Variables: Squares of fitted values

	Value	df	Probability
t-statistic	0.176259	39	0.8610
F-statistic	0.031067	(1, 39)	0.8610
Likelihood ratio	0.038221	1	0.8450

Table 26A - Descriptive statistics

Year	Mean	Median	Maximum	Minimum
1961-1985	0.156963	0.13592	0.267116	0.068517
1986-2010	0.065165	0.061162	0.113576	0.035638
1961-2010	0.111066	0.091834	0.267116	0.035638

