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The Role of Financial Engineering in the Growth of the Financial Market

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Abstract

The article evaluates the role of financial engineering in the growth of the financial market. The study explores the plausibility of the assumption of the research topic stated above, using the financial market as a focal point. Specifically, this paper reports a theoretical examination that simultaneously considers the effects of these relationships between financial engineering, financial market and growth of the financial market, and the role of corporate governance as financial engineering and derivatives market growth, mergers and acquisitions. It encapsulates the role of technological innovation, market restructuring and capitalization, e-banking, cashless economy in that engineering financial market. The paper appraisals sound empirical ideals and opinions, and stimulate financial engineering expertise into philosophical interaction which imbibes laws and regulations into sequential growth and qualitative financial market. The paper holds, therefore that financial market enjoyed accelerated growth with holistic turn around when the objectives of these image makers are adequately aligned. It therefore recommends that policy makers should domesticate frameworks in that encouraging as well as supporting financial markets for accelerated growth and development. It however concludes that the policies reformation has not been properly enunciated with a corresponding framework to guide the objectives of ensuring stability and growth financial markets.

Keywords: Financial engineering; Financial market; Corporate governance; Technological innovation

Introduction

The financial system in an economy plays a considerable role in stimulating economic development. It channels funds (like credit, loans) to the various economic agents that need them for productive uses. This function is very imperative for any economy that intends to be viable with respect to economic growth because it creates and makes contractual arrangements that link borrowers and lenders more efficiently than if they had to trade directly [1]. While financial engineering is engineering discipline which deals with the creation of new and improved financial products through innovative design or repackaging of existing financial instruments. They consider financial engineering as pervasive spanning across design of innovative financial instruments, financing merger and acquisition deals, corporate restructuring, derivative trading strategies etc. Financial engineering and its innovative products have played an important role in expanding sources of finance and meeting investors and Issuers requirements [2].

In this assertion, financial engineering combines a rigorous study of computative mathematics with economics and quantitative finance. Financial engineers are the specialists who deal with the quantitative aspect of the derivatives market. Hence, financial engineering is the use of financial Instruments to restructure an existing financial profile into one having more desirable properties. Economic reforms were engine for financial development which amount to benefits to the economy.

Financial reform in predominant economic resulted in higher financial deepening and that savings responded positively to financial variables. In his view, consolidation is a welcome development in that engendering growth in the financial market but recommends among others that price stability is essential for efficient savings mobilization. For instance, corporate governance plays it highest roles as stimulus financial engineering with ideal desire objectives in that enforcing its corrective prospects for progressive financial system. Financial engineering is a useful tool for economic planning and in effect a tool for economic transformation. Financial engineering is usually employed in valuation of securities, and management of risks, financial management, Insurance, taxation, derivative accounting, commodity trading and other financial decision applications.

Objectives

The main aim of this paper is to examine the role of financial engineering in the growth of the financial market. This in effect emphasizes the relationship between financial engineering, financial market and growth of the financial market, the role of corporate governance as financial engineering and derivatives market growth, and mergers and acquisitions. It encapsulates technological innovation, market restructuring and capitalization, e-banking, cashless economy as financial engineering in the growth of financial market. Hence, sound values that stimulates corporate prowess, culture, interplay which imbibes laws and regulations as well as forestall symmetrical growth and qualitative financial market.

Relationship between Financial Engineering, Financial Market and Growth of the Financial Market

Financial system is a conglomerate of various institutions, markets, instruments and operators that interact within an economy to provide financial services [3]. The significance of finance and financial system in the drive for economic growth and development is fairly well established and generally accepted. The availability of adequate financial resources and regular acquisition in proper mix of the needed funds from alternative sources for investment purposes are part of derivable benefits from an efficient financial system [4].

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Accordingly, financial engineering enunciates robust financial economic with systemic financial renaissance and branded financial market growth. It stirs derivatives and entrench framework for proper financial market system. These services, among others, include resource mobilization and allocation, good corporate governance, laws, financial intermediation and facilitation of foreign exchange transactions to boost international trade. In Nigeria, the financial system comprises the regulatory/supervisory authorities' bank and non-bank financial institutions. Over the years, the country's financial system has undergone remarkable change in terms of ownership structure, the depth and breadth of instrument employed, the number of institutions established and the regulatory framework within which the system operates. However, Money and capital market are components of any economy.

Financial engineering is also intended to split risk and return components of financial products/instruments and offering the combination which is best suited to Investor's risk-return profile. Jonathan Nwagboso, [5] disclose that banks provide financing for commercial enterprises, basic financial services to broad segment of the population and access to payments systems. It essential to note that some banks are expected to make credits and liquidity available in difficult market conditions and however have strong financial engineering with quality corporate Governance, best practices and high ethical standard in their operations. Capital Market on the other hand, is a market for longer term funds and securities whose tenure extends beyond one year. It is the prime motor that drives any economy on its path to growth and development because it is responsible for long-term-growth capital formation. Gaumnitz and Dougall [6]collects that the capital market is a "complex of institutions and mechanisms through which intermediate funds and long-term funds are pooled and made available to business, government and individuals and instruments already outstanding are transferred". These institutions which traditionally play one role or the other in the transfer of funds from savers to users include stock exchanges, stock registrars, issuing house, stockbrokers and underwriters and the Securities and Exchange Commission.

Esosa Bob Osaze [7] inferred that the money market only complements the capital market by providing the necessary working capital to support gross fixed capital formation. The commercial and merchant banks control the money market, Securities and Exchange Commission with the stock exchanges, stockbrokers/dealers and issuing houses predominate in the capital market. However, that the Central Bank, dictates the demand for and the supply of funds, interest rates, foreign exchange rates, the rate of inflation and the shift from investing in physical asset to financial assets. There have been extensive empirical evidences supporting the assertion and belief that financial developments lead to economic growth

Accordingly, Osuoha [2] deduced that financial engineering products and derivatives are product of financial development and that factors underlying financial development have been identified by Andrianaivo and Yartey [8] "in their study, according to Osuoha [2],informed that using a panel of 53 countries for the period 1990-2006, they examined the impact of income level, macroeconomic stability, financial liberalization and institutional quality on both banking sector and the stock market development. He noted that they found empirically the determinants of financial market development in Africa with an emphasis on the banking system and stock market.

To ensure adequate delivery and robust financial institutions of these interplays for sustainable market growth and accelerated economic development, financial engineering enunciate policy direction that encourage innovation, reconstruction with timeliness for desirable market. Financial Engineering improves the effectiveness of monetary policy in managing inflation and driving economic growth Ernest Simeon Odior and Fadiya Bamidele Banuso [9]. According to Cole [10], financial engineering provides potential in reducing consumption fluctuations and lower adoption of risk management technology during selected seasons. Financial Engineers are responsible for combining, designing, researching, developing and implementing a range of innovative financial instruments for commercial use.

The work of financial engineers covers a wide variety of sophisticated financial instruments. However, financial engineering has been drifted towards electronic money, which is quite difficult to define because it blends technological and economic characteristics [11,12]. Humphrey, Pulley and Vesala [13], analyzed patterns in which the use of cash and other e-payment instruments in most developed countries, including the US fast-track financial market growth. Whilst treating payment instruments as if they were traditional goods, the authors construct measures of the cost (analogous to prices) of various payment methods in order to study whether differences in cashless instrument usage across countries can be explained by differences in the relative prices of such instruments.

The Role of Corporate Governance in Financial Engineering and Derivatives Market Growth

In order to traversed the Abuses and inefficiencies of management and manipulation of all sorts of market interplays and derivatives, mergers and acquisitions deal, ineptitude in conduct of corporate affairs by Majority stakeholder over minority Stakeholders has become an increasingly important issue in maintaining the integrity of financial Market across the board. Corporate governance is the relationship among various participants in determining the direction and performance of corporations [7]. He further states that the essence of good corporate governance is to protect shareholders value and assure market integrity through greater vigilance by regulators, enforcement and compliance of market rules and regulations, introduction of greater internal controls etc. To synchronize the term "corporate governance" in the words of the Institute of Chartered Accountant of Nigeria Study pack [14] deduced that corporate governance is as the system by which the affairs of companies are directed and controlled by those charged with the responsibility.

According to Tricker [15] the origin of the word governance can be found in the Latin word "*gubernare*" meaning "to rule" or "to steer" and the Greek word, "*kybernetikos*" which means steering. Isenmila, Eragbhe and Ogiedu [16] said corporate governance is a complex network of activities which tends to portray the image of an organization in a good light. It transcends the functional areas of management in a wider perspective. Corporate governance is most often viewed as both the structure and the relationships which determine corporate direction and performance. Maaseen [17] asserted that corporate Governance is a field in economics that investigates how to secure, motivate efficient management of corporations by the use of incentive mechanisms such as contracts, organizational designs and legislations. This is often limited to the question of improving financial performance. Cooperate governance is concerned with holding the balance between economic and social goals and between individual and communal goals. The corporate governance framework is there to encourage the efficient use of resources and equally to require accountability for the stewarding of those resources. The aim is to align as nearly as possible the interest

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of individuals, corporations and society [18]. In Maria-Cristina Ungureanu [19] words were that the integration of financial markets, the developments in cross-border banking activity, the diversification and complexity of financial activities have addressed systemic implications at the European Union (EU) level. These frameworks lead to the banking industry being heavily regulated and supervised in every country. This, in turn, he said establishes a unique corporate governance system for banks, different from the traditional corporate governance of non-bank firms.

In White Papers released by US Round Table (1997) on corporate Governance noted that corporate Governance is not an abstract goal, but exists to serve corporate purposes by providing a structure within which stockholders, Directors and management can pursue most effectively the objectives of the corporation. However that corporate Governance structure specifies the distribution of rights and responsibilities among different participants in the corporation, such as the board, managers, shareholders and other stakeholders, and spells out the rules and procedures for making decisions on corporation affairs. By doing this, it also provides the structure through which the company's objectives are set and the means of attaining those objectives and monitoring performance [5].

In Nigeria, as in most developed countries observance of the principle of corporate governance has been second through a voluntary and mandatory mechanism in 2003 the Atedo Peterside committee set up by the securities exchange commission (SEC), developed a code of best practice for public companies in Nigeria. The code is voluntary and is designed to entrench good business practices and standards for boards and directors, CEO's, auditors etc of hosted companies, including banks [20]. Accordingly, Julian W. Francis [21] said corporate governance is a nebulous concept but it is safe to say that it is all about manner in which corporation are directed, controlled and held to account. It is concerned with effective leadership corporations to ensure that they deliver on their promise as the wealth creating organ of society and that they do so in a sustainable manner. He iterated that from the Bank industries perspective corporate governance demands that Banks will operate in a safe and sound manner, and will comply with applicable laws and regulations that will promote the interest of depositors.

It will interest to know that it mandatory that corporate governance provisions relating to Banks are contained in the companies and allied matters Act (CAMA) [22], the Banks and other financial institution Act (BOFLA) 1991, the investments and securities Act 1999, the Securities and Exchange Commission Act (SECA) 1988 with their accompanying Rules and Regulation etc. In the recent time CBN has issued a code of conduct for directors of corporate governance for Banks in Nigeria post consolidation 2006. Some of the responsibilities, extant laws and codes of SEC and CBN and as affect corporate governance for adequate performance which in essence engineering the financial market. Inam [20] speculates that these principles are as follow; separation of the roles of the CEO and the board chairman, prescription of non-executive and executive directions on the board, improving the quality and performance of board membership, introducing merit as criteria to hold top management, positions, transparency on financial and non-financial reporting, protecting of shareholder right and privilege and defining the composition, role and duties of the committees, etc. However, the fortune of any financial Market lays not just on board but good and quality corporate governance with extemporary virtue. The quality and character of the board will in effect tell the extent the system is being engineered for sustainable growth and development in the financial market as well as its respective economy.

Nwagboso [5], assessing corporate governance intends of promote growth in the Bank as the base of money market deduced that from banking industry perspective, corporate governance involves the manner in which the business and affairs of individual institutions are governed by their boards of directors and senior management affecting how Banks by setting corporate objective (including generating economic returns to owners), Run the day to day operations of the business, consider the interest of recognized stakeholders,he said, align corporate Banks will operate in a safe and sound manner and in compliance protect the interest of depositors.

In the Figure 1 above, corporate governance investigates how incentive mechanisms can help principals to get return on their exchanges with the management. In terms of transaction cost economics which deals with the institutions that may help to minimize the transactions of Managerial Agency Problem. According to Agency theory, absence of corporate governance institutions, one should expect that managerial control will result in the insufficient allocation of resources.

Accordingly, Agency theory (Figure 2) is concerned with analyzing and resolving two limitations that occur in making allocation decisions or relationships between principals (owners/shareholders) and their agents (top management)

i. The cognitive limitation is "hidden information" (also known as "adverse selection" or "bounded rationality" prevents investors from knowing a Prior whether the managers whom they have employed as their agents are good or bad resource allocators. That is the desires or objectives of the owners and the agents' conflict, or it is difficult or expensive for the owners to verify what the agent is actually doing. One example is when top management is more interested in raising its own salary than in increasing stock dividends.

ii. The behavioral limitation is "hidden action" (also known as "moral hazards" or "opportunism") that reflects the proclivity. Inherent in an individualistic society, of managers as agents to use their positions as resource allocators to pursue their own interest and not necessarily the interests of the firms' principals. The risk-sharing problem that arises when the owners and agents have different attitudes toward risk. Executives may not select risky strategies because they fear losing their job if the strategy fails. These managers may allocate corporate

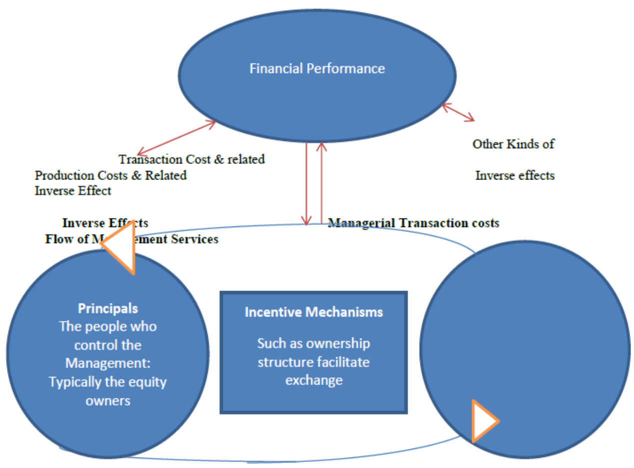

Figure 1: Flow of Management Remuneration.

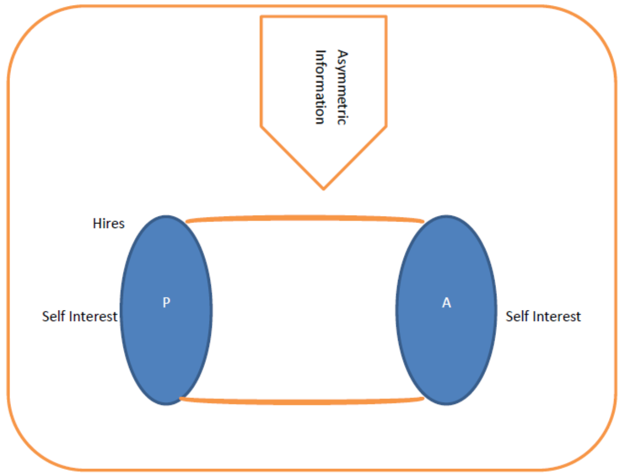

Figure 2: Basic Idea of Agency Theory. .

(P: Principal, A: Agent).

resources to build neither their own personal empires regardless of nor whether the investments they make and the people they employ generate sufficient profits for the firm. Or they may hoard surplus cash or near-liquid assets within the corporation, thus maintaining control over resource allocation to hire their own pockets. According to Agency theory, absence of corporate Governance institutions, one should expect that managerial control will result in the insignificant allocation of resources.

Market Restructuring, Capitalization and Mergers and Acquisitions Systemic Financial Engineering in Financial Market Growth and Development

Bank consolidation is not a new concept in the world of banking; it has been practiced in advanced nations especially in Britain and the United States of America usually in form of M and A [23]. The financial system performs quite a number of unique functions within the Nigerian economy. Chief amongst which is ensuring adequate stock of money to service the needs of the economy as well as facilitate the transfer of money between economic units. The transfer is usually from areas of surplus to areas where there are deficits or needs. The financial system also helps to mobilize the collection and storage of savings Larry Uffot [24]. Finance is the bedrock of an economy and the intermediation function of banks is an essential ingredient for rapid economic growth. According to Pandey [25], a merger is said to occur when two or more companies combine into one entity. One or more companies may merge with an existing company or they may merge to forms a new company. Isenmila[16] noted that Mergers and acquisitions are the major ways by which external growth is delivered by companies. The terms mergers and take ours are very often used interchangeably in the discussion of acquisitions.

Chief OyeAkinsulire [26] gathered that the term merger and takeover are often used synonymously in discussing acquisition, that in general use, have a merger or an amalgamation is viewed as the situation where two or more companies combine together to form a large business organization while a takeover or an acquisition involves the purchase of controlling shares in another company. Reinhart and Tokatlidis [27] found that financial liberalization produces higher interest rates and higher savings, which will boost investment and economic growth of a Nation. The policy changes on bank consolidation are the summation of those variations that occur in the direction of a comprehensive banking system. This will lead to the evolution of a banking system that will be part of the global financial change in which depositors can have rest of mind and investors can rely on for the supply of needed credits for the enhancement of economic growth. It is also believed that with the present consolidation being implemented, Nigerian banks could expand their scope of operations and network of branches to cover the various Nigerian localities, which will help to integrate the informal financial sector [28].

Consolidation is the joining of two or more companies, generally of equal size and market power, to form an entirely new entity. Akinsulire [26] added that a merger or an acquisition is usually a scheme that is carefully planned to achieve a synergistic effect and therefore defined synergy as a genetic term used in the field of business acquisitions and mergers to covers the economies of scale through greater output, wide technological marketing, and financial base, cheaper and wide financial market which can result through integration. It therefore follows that market restructuring, capitalization, mergers and acquisitions are systemic financial engineering for a cohesive financial Market growth and Development.

The reason for a rise in capital base was to ensure adequate capitalization of banks against the background of rapid increase in activities, restrict entry of promoters without sound financial base. The cross-country study indicates a strong positive link between financial development and economic growth. In addition, it has a predictive power for future economic growth and it explains causal relationship that runs from financial development to economic growth. The high rates of interest might not considerably increase savings in an economy that is characterized by low level of income by households and in an under-banked economy where the bulk of financial intermediation takes place in the informal sector.

However, Pandey [25] denoted that corporate restructuring includes mergers and acquisitions (M and A), amalgamation, take-overs, spin-offs, leveraged buy-outs, buy-back of shares, capital reorganization, sales of business units and assets etc. mergers and acquisition are the most popular means of corporate restructuring or business combinations. He stressed that they have played an important role in the external growth of a number of leading companies in the world over. In the United State, according to Pandey [25] the first merger wave occurred between 1890 and 1904 and the second began at the end of the World War 1 and continued through the 1920s. The third merger wave commenced in the latter part of World War 11 and continues to the present day. About two-thirds of the large public corporations in the USA have merger or amalgamation in their history. In India, 1180 proposals for amalgamation of corporate bodies involving about 2,400 companies were filed with the High court during 1976-86. ICAN [29] in debugging the views of Pandey [25] described Business Combination as an arrangement where two or more business owned and operated as separate entities come together to become a single entity under the same ownership. It further says the implication is that these businesses discontinues their ownership and come under a single ownership which will eliminates or reduces competition and benefits of scale or control price and market. Hence, Business combination can take two forms such as amalgamation and absorption.

Adopting Two of the Integration Market Model, Euronext's views (Figure 3) denotes Linkages and Alliances between exchanges operating autonomously on a single platform: the model generates cost synergies

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from using a single system platform and information technology using a single rule book to regulate its operations, direct access to a full range of products, enjoyment of 'domestic like' transaction costs, non-disruption of domestic' markets and greater international exposure.

There is no doubt that link-ups, either through alliances or outright mergers, do make a lot of sense simply because the owners of exchange want to make more money through an expansion trades, trading in hedge funds and other derivatives is expanding faster than trading in shares and they expand distribution networks and add new revenue streams which boosts profits

Accordingly, as Osaze [7] sites in Paul Chow,deduced that the director-General of the Hong Kong Stock Exchange argues that the success of a single or linked securities market would depend on the key drivers of Market Quality, Enhanced Investor Confidence, Attraction of Order Flow and Increased Liquidity (Figure 4).

There should also be a common regulatory regime for listed issues, opportunity for dual listing and cross-market information flow, sharing and dissemination. Furthermore, a successful single market should have identical securities traded at the same price. There must be no restrictions to trading. There should also be a single system, single trading platform, same operating rules and same environment.

Technological Innovation, Institutional Regulators, Laws and Regulations in Financial Engineering Enshrined Financial Market Growth and Development

In the world over money and capital markets have made a significant and remarkable stride through technological advancement. The deployment of proper regulatory framework has intensely leaned the financial market into well embraced market worldwide. Other innovative products, Institutional Regulators, laws and regulations, e-Banking, cashless economy have tremendously evolved the fundamentals of the Market which in effects provide vibrant market for investor to strive and be dependable. These ideas are systemic financial engineering in that rebranding and bouncing back the lost growth and development in the financial Market in the recent times.

According to Federal Reserve consumer help [30], the health of the economy and the effectiveness of monetary policy depend on a sound financial Market, through supervising and regulating financial institutions. Bank supervision involves policy decisions, monitoring and examining the condition of banks and their compliance with laws and regulations. Regulation is seen as a body of specific rules of agreed behavior either imposed by some government or implicit agreement within the industry that limits the activities and operations of financial institutions. The regulatory authorities may differ from one country to the other but the goal of promoting and ensuring efficient, safe and sound financial system is similar and paramount to them all. Two main approaches to regulation of financial institutions, especially banks and non-bank financial institutions could be identified, namely, statutoryregulation and self-regulation.

Accordingly, Steven [31] asserts that they have over the time, been using electronic and telecommunication networks for delivering a wide range of value added products and services, managers in Banking industry in Nigeria cannot ignore Information Systems because they play a critical impact in current banking system, they point out that the entire cash flow of most fortune Banks are linked to Information System. On his parts, Olorunsegun Shittu [32] said that the Banking industry of the 21st century operates in a complex and competitive environment characterized by these changing conditions and highly unpredictable economic climate. Information and Communication Technology (ICT) is at the Centre of this global change curve of Electronic Banking System in Nigeria today. He reasons further that the application of information and communication technology concepts, techniques, policies and implementation strategies to banking services has become a subject of fundamental importance and concerns to all Banks and indeed a prerequisite for local and global competitiveness Banking.

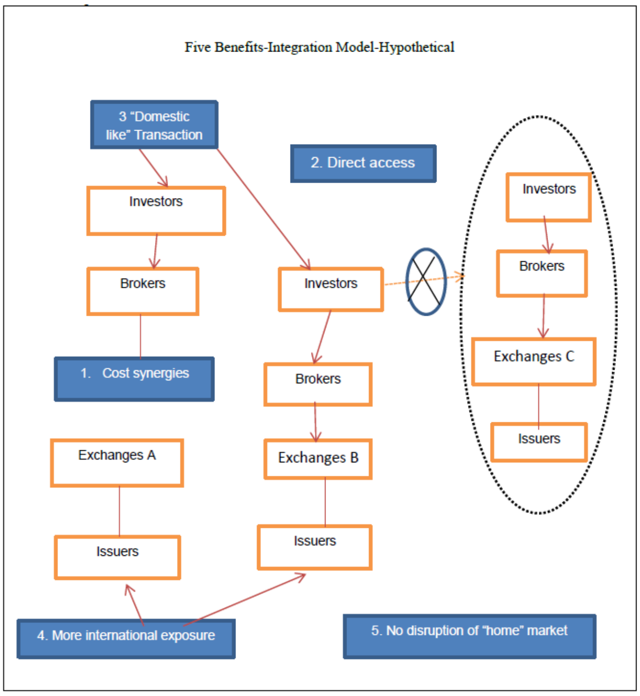

Figure 3: Adopted Euronext' Integration Model.

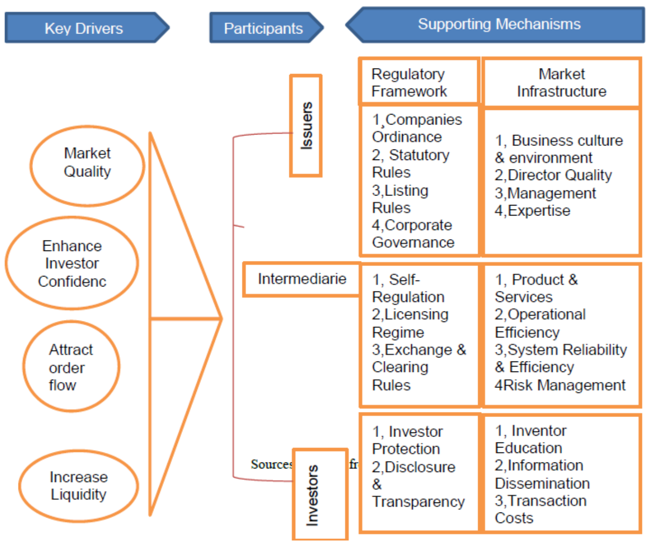

Figure 4: Success of a single securities Market depends on market quality, Investor confidence, order flow, and Liquidity.

The advancement in Technology has played an important role in improving service delivery standards in the Banking industry. In

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its simplest form, Automated Teller Machines (ATMs) and deposit machines now allow consumers carry out banking transactions beyond banking hours. In Maria-Cristina Ungureanu [19] an increased market orientation of banks has led to changes in authorities approach to regulation and supervision. He then said financial risk is a key factor for improving corporate governance in the banking sector. Banks must set their corporate objectives and risk profile with the aim of protecting not only the interest of shareholders, but also the interest of depositors and other stakeholders. Most banks "stakeholders are involved in. On affirmative note Marco and Bandiera [33] argue that increased usage of cashless banking instruments strengthens monetary policy effectiveness and that the current level of e-money usage does not pose a threat to the stability of the financial system. However, it does conclude that central banks can lose control over monetary policy if the government does not run a responsible fiscal policy.

However, the companies and allied matters act (2006) inserts that Principal Law regulating the incorporation of businesses. The Administration of the companies act is undertaken by the corporate Affairs commission (CAC), which undertakes the administration of the Companies act, and its functions include the regulation and supervision of the foundation, Incorporation, registration, management and winding up of Companies. It therefore iterate that the maintenance of a company's registry and the conduct of investigation into the affairs of any company in the interest of shareholders and the public engender or if you like call it financial market variability.

In other words, regulatory and supervisory authorities must ensure competitive equality through prudential requirements, avoiding arbitrage, which increases systemic risk [34]. This approach is possible through consisting regulatory philosophies for different types of financial institutions that avoid potential conflicting views, consistency in defining and managing risks and prudential requirements for different types of financial institutions, establishing consistent, and eliminating differences in the cost of regulation for the respective financial institutions and coordination between regulatory and supervisory authorities in the financial sector. European Central Bank [35] infers that electronic money is broadly defined as an electronic store of monetary value on a technical device that may be widely used for making payments to undertakings other than the issuer without necessarily involving bank accounts in the transactions, but acting as a prepaid bearer instrument. Analogous to this definition according to Costa and De Grauwe, [36] is that of cashless economy wherein there exist no notes and coins issued by central banks but by private financial institutions. However, several scholars have attempted to analyze the cashless system or e-banking. It becomes clear that few studies present a comprehensive evaluation of cashless banking implications in developing countries. Most ignore its economic benefits of the equation while some do incomplete examination of its negative implications. This is often due to unreliable panel data for monetary and macroeconomic indicators [37].

Accordingly, Central Bank of Nigeria as captured in Odior [37] is that the new cash policy was introduced for a number of key reasons, including, to drive development and modernization of our payment system in line with Nigeria's vision 2020 goal of being amongst the top 20 economies by the year 2020. An efficient and modern payment system is positively correlated with economic development, and is a key enabler for economic growth. To reduce the cost of banking services (including cost of credit) and drive financial inclusion by providing more efficient transaction options and greater reach and to improve the effectiveness of monetary policy in managing inflation and driving economic growth.

The capital market was not also left out in the technology and innovation as an engine to market growth, in his views Osaze [7] debunks that there are greater advances in technology and innovation in the capital market than before. This he said has resulted in electronic trading platforms, improved trading software and more sophisticated financial products. However, what makes a market efficient and attractive is not the system in place but trading capability of its operators. Technology is no doubt important and essential to advances in the capital market, but it will never replace confidence and trust upon which a vibrant market is built. Innovation in the securities market is all about engendering efficiency and creating volume and value to participants. There is little doubt that customer-oriented innovation always expands securities markets faster and generates competitive advantage. However, any resulting competitive advantage should be passed on to the client and investing public.

Challenges Encounter by Financial Engineering in the Growth Financial Market

The financial market and those mechanisms in place to ensure adequate growth in both markets have over the years not received enough and adequate supports from the public, investors and successive government in terms of directives, promotion, maintenance and compliance. In Nigeria particular, the aforementioned policies, agencies and institutions tend to engineer the financial market for a subsistence growth and development have in one way or the other faced with so many devastating challenges. The controlling state of these institutions, and there policy direction, response and implementation have not been so embracing in terms of what they are set to achieved.

Onah [38] noted that Central Bank of Nigeria is the apex regulatory/supervisory financial institution empowered to promote monetary stability (through the control of money supply) and a sound and healthy financial system). He further said that finance houses generally were under no specific regulatory and supervisory body they began to perform like banks but unlike banks they were not regulated. In his words, Ojo [39] said by 1973, there were at least 23 companies that provided consumer credit facilities. Even though they did not function in any consistent and formal manner, they were nevertheless in existence to give assistance to companies which were unable to finance the purchases of leasing arrangements. Etim [40] was not left out, he deduced that these turn around mechanisms could be faced with systems operational risks; Bank IT rests on computers and telecommunications which could be susceptible to system failure, internal manipulations and inconsistent regulatory policies. However, financial engineering an as well made suffers thus:

1. Policy inconsistency – Divergence in policies that are tend toward promoting financial markets growth by various government, capacity reduction, and cancelation of projected mission statements which enslaved the capabilities to mentor vision.

2. Bureaucratic Bottlenecks in financial policy implementation and inadequate support for the institutions that ensure measures are adheres to.

3. Violations of Ethnical standard by the operation of financial institution and deliberate frustration enabled by these financial market players, regulators and of course the owners.

4. Institution Framework – The Nigeria financial market and these mechanisms or framework in place so as to ensure adequate financial market are weaken and always not aligned with policy direction of the Government. All efforts to revive and direct actions in that achieving the initial goals had been sabotage through political propagandas.

5. Political Instabilities/Structure – political instabilities, the structure of Nigeria politics, and the value system have in all material evidence disrupted plans, programme and programmes that had been engineered to engender the financial market.

Recommendations

The following recommendations are therefore made;

1. All stakeholders should work towards sensitizing government agencies/parastatals, corporate entities and the public to the opportunities and dynamics of financial market and its importance to achieving economic growth.

2. Government agencies, regulators and official should adequately harmonize their publicly expressed views, and also fiscal and monetary policy decisions while maintaining consistency and a holistic approach in implanting the policies.

3. Increased consultations with operators and other relevant private sector representatives in policy formulation and implementation, especially on the policies that directly impact out financial market.

4. The Nigerian financial market with growing pital markets will be incomplete without financial engineering products like derivatives, which are useful in managing the risks associated with the financial system. Absence of financial engineering and derivatives market leaves the Nigeria financial system vulnerable, risky and unattractive to foreign participants, because of lack of hedging mechanism to manage their risk of investing in Nigeria financial market. The stock market, Agricultural/Commodities market, Energy market and other basic markets will all experience tremendous increase in patronage with development of the derivatives market in Nigeria. There-fore, the Nigeria policy makers should consider putting in place policies aimed at encouraging the growth of the derivatives market to enhance financial engineering and innovation.

Conclusion

The financial engineering, the system of prudential regulation and supervision remains rather poor, such that the free flow of financial information is often impeded. In the Nigeria, financial market complaints from operators have revolved around; manipulation of share prices by stockbrokers, purchases without funds to back it up, share dealing without client mandate, non-remittance of proceeds to the selling clients with non-release of divided warrant and share certificates. On the other hand, corporate governance issues ranging from abuse, compromising, and sharing same values which enunciates non-disclosure of material facts, documents or schemes of arrangements in the case of mergers and acquisitions, consolidations etc breaches the original gains by which it was instituted. However, increasing financial market integration blurs the distinction between various types of financial institutions, enhancing competition in the market. This is possible through the following approaches, consisting regulatory philosophies for different types of financial institutions that avoid potential conflicting views, consistency in defining and managing risks and prudential requirements for different types of financial institutions, eliminating differences in the cost of regulation for the respective financial institutions, coordination between regulatory and supervisory authorities in the financial sector.

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