Issues in Information Asymmetries and Financial Markets: A Review of Literature

Alao, Adeniyi A.
Department of Accounting
Faculty of Administration and Management Sciences
Olabisi Onabanjo University,
P.M.B. 2002, Ago-Iwoye,
Ogun State,
Nigeria
alaoadeniyi07@yahoo.com

Abstract

Financial markets are found world widely, and range from being small with limited participants to those that are large, trading in trillions daily. Hence, this study examined a nexus between financial markets activities and information asymmetries. The paper specifically looked at financial markets and their economic functions, financial intermediation role of financial markets and their relevance in an economy, financial markets and information asymmetries where it was explained that information asymmetry in the stock market occurs when one or more investors posses private information about the firm's value while other investors are uninformed. The study reviewed the efficient market hypothesis and the random walk model. The study gave credence to lots of empirical evidences on the efficiency of financial markets both locally and internationally. The study concluded that the availability of information in the financial markets plays an important role for the participants to make optimal decisions on the choice of securities in the markets. Finally, the study recommended that there should always be an increased level of public enlightenment on the activities of the capital markets and the level at which the regulations for policing and enforcement of disciplinary actions against all forms of market manipulation should be intensified.

Key words: Financial market, Financial intermediation, Information asymmetries, Efficient market hypothesis and Random walk model.

1.0 Introduction

The financial system in any economy of the world plays the key role of stimulating economic growth, influencing economic performance of the actors and affecting general economic welfare. The financial system consists of financial intermediaries, financial markets, financial instruments, rules, conventions and norms that facilitate and regulate the flow of funds through the macro economy. The financial system according to the structural approach comprises three main components - financial markets, financial intermediaries (institutions) and financial regulators. Each of the components plays a specific role in the economy. The financial markets, for example, facilitate the flow of funds in order to finance investments by corporations, governments and individuals. Financial institutions are the key players in the financial markets as they perform the function of intermediation and thus determine the flow of funds. The major types of financial intermediaries are commercial banks, merchant banks, development banks, finance institutions, insurance companies, credit and savings institutions and mortgage institutions. The financial regulators perform the role of monitoring and

regulating the participants in the financial system. In Nigeria, the regulatory institutions within the financial system include the Central Bank of Nigeria, Securities and Exchange Commission, National Pension Commission and National Insurance Commission.

Financial markets are found world widely, and range from being small with limited participants to those that are large, trading in trillions of dollars daily. They offer investors, both domestic and foreign, access to a large array of financial products at low transaction costs and contribute largely to the efficiency of a country's financial system. Typically, the market has two major segments – the money market and the capital market. The money market creates opportunities for raising or investing short-term capital / funds that is lent or borrowed for a period which ranges from as short as overnight up to about one year. Various financial instruments traded on the market include treasury bills, treasury certificates, bills of exchange, commercial papers, certificates of deposit, and bankers' acceptance. Participants in this kind of market include commercial banks, merchant banks, Central Bank of Nigeria, insurance companies, mortgage banks and finance houses. On the other hand, the capital market is the market for raising or investing long-term capital / funds that is lent or borrowed for a period above five years. Various financial instruments traded on the market include equities and debentures. Participants in this market include Nigerian Stock Exchange, Securities and Exchange Commission, and stock broking firms, issuing houses, government and quoted companies (Akinsulire, 2011).

The Nigerian financial market, for example, broadly comprises the capital market for trading corporate shares/stock and long term government debt, the money market for dealings in short-term finance, the foreign exchange market for currency trades and a selection of specialised markets that trade in financial derivatives. The capital market is essentially created to make provisions for easier access to fund which is used for developmental and other purposes. Hence, for a nation to grow there is a dire need for that nation to have a functional and efficient capital market of which the stock exchange is the focus (Nneji, 2013). An efficient transfer of funds is made achievable through the service renders by financial system. However, as one party of the transaction may enjoy superior information than the other party, it can lead to the information asymmetry problem and inefficient allocation of financial resources. Hence, it is against this backdrop that this study examines a nexus between financial markets activities and information asymmetries because it is believed that by overcoming the predicament of information asymmetry, the financial markets facilitate equilibrium between those with funds to invest and those in need of the funds. The study is divided into the following segments – introduction, conceptual literature, theoretical literature, empirical literature, conclusion and recommendation.

2.0   Literature review
2.1   Conceptual literature
2.1.1 Financial market
A marketplace where buyers and sellers engage in the trade of financial securities such as bonds, equities, currencies, derivatives, commodities and other tangible financial items is broadly referred to as financial market. According to Darskuviene (2010), financial markets in any economy render three major economic functions thus;
  (i) Price discovery,
  (ii) Liquidity, and
  (iii) Reduction of transaction costs.

The price discovery function connotes that transactions between buyers and sellers (demand and supply) of financial instruments in a financial market contribute to the determination of the price of traded asset. In the same vein, the required return from the investment of funds is determined by the participants in a financial market. The motivation for those seeking funds (deficit units) depends on the required return that investors demand. It is these functions of financial markets that signal how the funds available from those who want to lend or invest funds will be allocated among those in need of the funds and raise those funds by issuing financial instruments.

The liquidity function of the financial market provides an avenue for investors to sell a financial instrument, since it is referred to as a measure of the ability to sell an asset at its fair market value at any time. Hence, without liquidity, an investor would be forced to hold a financial instrument until conditions arise to sell it or the issuer is contractually obligated to pay it off. Debt instrument for example, is liquidated when it matures, and equity instrument on its own is until the company is liquidated either voluntarily or involuntarily. Therefore, all financial markets provide some form of liquidity. However, different financial markets are characterised by the degree of liquidity.

The function of reduction of transaction costs is performed, when financial market participants are charged and/or bear the costs of trading a financial instrument. In market economies, the economic rationale for the existence of institutions and instruments is related to transaction costs, thus the surviving institutions and instruments are those that have the lowest transaction costs. Hence, all rational investors would ordinarily look for financial markets with moderate transaction costs.

2.1.1.1 Financial intermediation role of financial markets and their relevance in an economy

Onwe (2013), argued that financial intermediation theory was first formalised in the works of Goldsmith (1969), McKinnon (1973) and Shaw (1973) who saw financial markets (money and capital markets) playing an important role in economic development. Invariably, the quantity and quality of services provided by financial institutions in any economy determines the level of growth in that economy. The studies of Nwaogwugwu (2008) and Dabwor (2009) on the stock market development and economic growth in Nigeria revealed that there is a bi-directional causality between growth in capital market activities and economic growth in Nigeria. Financial intermediation can be described as a process through which entities (surplus units) with excess funds make those funds available to those who have potentially more productive ways to invest those funds via the activities of financial intermediaries. It is the means through which financial intermediaries (institutions) provide a linkage between surplus units and deficit units in the economy. The surplus units represent firms / individuals who have excess funds above their immediate needs while those who are in need of this fund for immediate investment opportunities are referred to as the deficit units. The financial intermediaries develop the facilities and instruments which make this lending and borrowing possible. In Nigeria, financial intermediaries include commercial banks, merchant banks, development banks, mortgage banks, finance houses, insurance companies, pension funds etc.

The financial intermediation functions of financial markets can be grouped into four thus;
   (i) Maturity intermediation
   (ii) Liquidity intermediation

(iii) Size / denominational intermediation, and
**(iv)** Risk intermediation.

The maturity intermediation can be described as the ability of banks to satisfy the two contradictory objectives of the depositors and loan seekers. That is, most of the deposits mobilised by banks have short-term maturities and most customers withdraw their deposits on demand and the banks lend this money for a longer period to loan seekers.

The liquidity intermediation referred to a situation where the banks are expected to ensure the liquidity of the economy despite the short duration of the deposits they mobilise and the longevity of the loans given to their customers.

The size/denomination intermediation explains the fact that banks accept both small and large deposits from diverse customers and make these available as loans.

The risk intermediation refers to the fact that banks reduce deposit risk by accepting deposits from heterogeneous depositors of various sizes and also minimise lending risk by making loans available to diverse loan seekers of various sizes (Akinsulire, 2011,). Hence, without financial intermediaries, it would be very difficult for a deficit unit to move from one small surplus unit to another in search of investment funds.

Figure 1: Nexus among surplus units, financial markets and deficit units
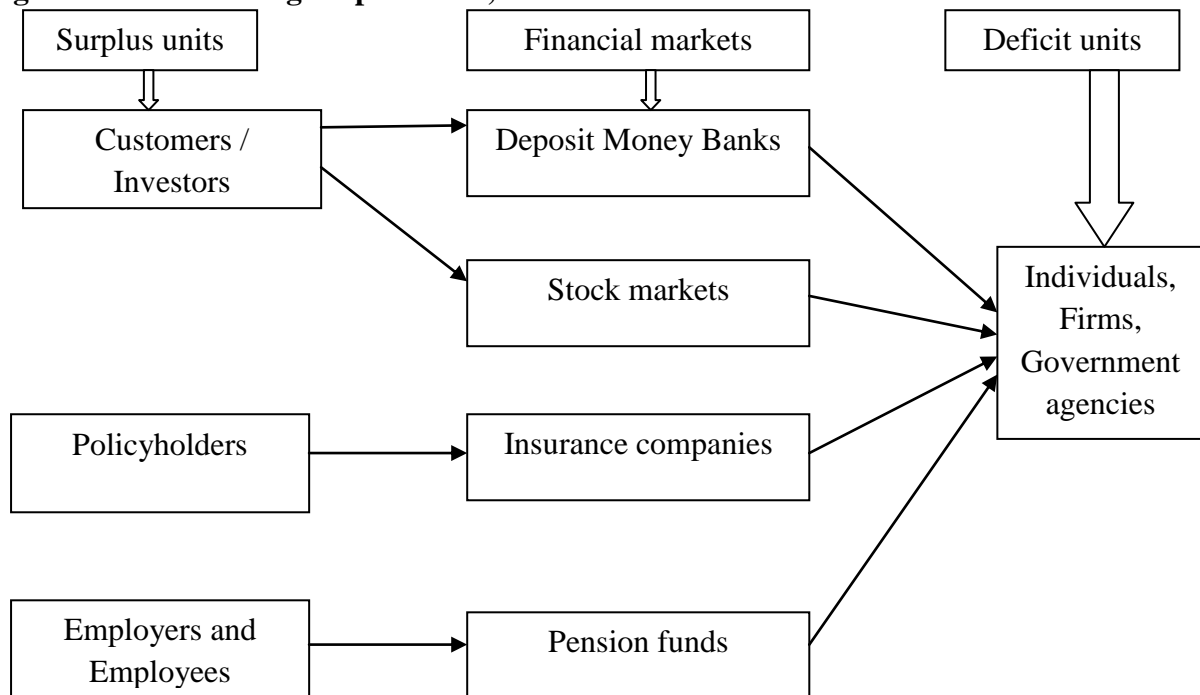
Source: Researcher's model 2017

The diagram above shows a nexus among the surplus units of the economy, the financial markets in operation and the deficit units in the economy. From the surplus units are different outflows (funds) in term of deposits, purchase of shares, premium payments as well as employer / employee contributions into the financial markets; these funds are used by the financial markets through their various intermediation functions to make excess funds available to the deficit units of the economy which comprises individuals, corporate firms and the government.

2.2 Information Asymmetries

Information asymmetry is a situation where some agents to a transaction know the pay-offs better than others (Hens and Rieger, 2010). Asymmetric information in financial contract occurs when the borrower / buyer has information that the lender / seller ignores or does not have access to at all. The asymmetry will concern the lender when the borrower is able to use the information profitably at the expense of the lender and such is connected with some of the following circumstances;

(i) Where the borrower violates the contract by hiding information about the characteristics and revenue of the project / investment,

(ii) Where the lender does not have sufficient information or control over the buyer to avoid cheating, and

(iii) There is debt repayment risk and the borrower has limited liability

According to Hens and Rieger (2010), information asymmetry in any transactions can be revealed either by prices or trade. Information revealed by price occurs in a situation where a vendor, for instance, is too willing to lower prices, in this case, potential customers will think the quality of his products or services is rather low because they do not have adequate and sufficient information as regards the action of the seller and this might lead to the vendor not being able to sell at all. In the same vein, information can also be revealed by the price in the financial market. According to the efficient market hypothesis, all currently known information should be already included in the market process and a consequence of this is the No-trade theorem since nobody has superior information there will be no reason for speculative trade. On the other hand, information revealed by trade occurs through the role of dividends as information revealing signals which can be observed in the case of asymmetric information on the results of an organisation's operations as the payment of dividend may be taken as an indication of profitability. In the same vein, information revealed by trade brings about herding. Herding is an act in financial market where investors buy the shares of certain organisations just because other relevant groups (competitors and traders) had bought as well.

However, in the financial markets, asymmetric information occurs through any of the following:

(i) Adverse selection

(ii) Moral hazard, and

(iii) Monitoring costs.

Adverse selection arises where one of the parties to a transaction takes advantages of the other's ignorance to charge too high a price or to pay too low a price. Therefore, what is at issue is information about the characteristics of an item or a transaction. The concept of adverse selection originated from in insurance where it refers to the problem that arises if an insurer offers, for example, health cover at a uniform premium to all potential customers because of its ignorance of what each potential customer's health problems are. The resulting information asymmetry means that the potential customers who are most likely to take up the offer are those with the most severe health problems. Hence, to cover its losses, the insurer has to raise the premium it charges and this will definitely deter some potential customers especially those with the least severe health problems who happens to be the least likely to make claims. However, as the insurer has to raise its premium again, it will also lose some set of customers. In principle, a position could be reached where it becomes uneconomic to offer insurance at all (ICAEW, 2013). A lender suffers an adverse selection when he is not capable of distinguishing between projects / investments with different credit risk when allocating

credit. Hence, given two projects with the same expected value, the lender prefers the safest one while the borrower takes the riskiest. In this case, those undertaking risky activities find it convenient to hide the true nature of the project / investment thereby exploiting the lender's lack of information.

Moral hazard arises where one of the parties to a transaction or relationship can take advantage of the other's ignorance either by engaging in activities that the other would not have agreed to or probably failing to perform the tasks as expected. The concept of moral hazard also originated in insurance, for instance, where a driver who is fully insured drives more dangerously than he would if he were uninsured, thereby causing losses to the insurer (ICAEW, 2013). Also, moral hazard can be described as the ability of the borrower to apply the funds to different uses than those agreed upon with the lender who is hindered by his lack of information and control over the borrower. Lastly, monitoring costs are connected to hidden actions of the borrower who ordinarily take advantage of his better information to declare lower-than-actual returns / earnings to the lender. Hence, the lender needs to incur additional costs to checkmate the actions / activities of the borrower (Bebczuk, 2003).

2.2.1 Financial market and Information Asymmetries

A capital market is formed when a network of financial institutions work together to mobilize and allot long term funds to productive investment. The long term funds are exchanged for financial assets issued by borrowers or traded by holders of previously issued assets. This implies that the capital market plays an important role of bringing together deficit and surplus units of an economy. Therefore, without this function, the capital market is rendered futile as the opportunity for investment and production of goods and services for development is eroded. The absence of this role also creates a gap where surplus units have idle funds and the deficit units are in search of funds for investment. The capital market thus provides services that are indispensable to a modern economy, mainly by contributing to capital formation through financial intermediation (Nneji, 2013). According to Olowe (1999), the capital market also enhances portfolio diversification which ensures that savers can maximize returns on their assets and reduce risk. However, as good or desirable as the function of financial intermediation of the capital market is, the availability of needed information is also required so as to allow the participants to have adequate knowledge of operations in the market most especially about the stocks' prices.

Hence, market security information can be regarded as information on the economy as a whole, market information, information about the industry in which the company operates and company information. Information about the economy is an indispensable and essential component of the investor's knowledge. Most investors and brokers deduce what is happening in the market by looking at the market indices (market information). Information concerning the entire industry is needed for the understanding of the general movement of events in that industry. The state of the industry forms a foundation for performance appraisal of individual firms. Information about the management, raw material source, products and products' share of the market, past performance record of the firms and the rest will enable the investors to form opinion of the firm and hence determine the value of the firm (Nwezeaku and Okpara, 2010). Brown and Hillegieist (2003) argued that information asymmetry in the stock market occurs when some investors enjoy additional information about the firm while others have only those information that are publicly available. Hence, market players have a tendency to recognise the same product differently and then propose different prices. Hasbrouck (1991) described private information as essentially prior

knowledge of public information which indicates that timing differences account for much of the difference between private and public information. Hence, information asymmetry in the stock market occurs when one or more investors posses private information about the firm's value while other investors are uninformed. This information asymmetry gives insiders the ability to recognise and take advantage of mispricing in the shares of their own firms.

2.2.2   The fundamental and Technical Analysis in the financial markets

According to Nneji (2013), the fundamental analysis states that at any particular point in time, every security possesses an intrinsic value which is determined through a careful analysis of the concerned company that owns the stock, the industry in which such a company operates and the economy at large. Hence, a difference in the intrinsic value and market value of the stock gives room for profit making. However, the extent of the difference and the speed of correction of the difference indicate the level of efficiency of the capital market. On the other hand, the technical analysis assumes that price trends and patterns exist in the trading of stocks. Hence, the trends and patterns can be used by anyone who can recognise them as quick as possible to make gains.

3.0   Theoretical literature

The two theories found relevant to the study are the efficient market hypothesis and the random walk model. The theories are explained thus;

3.1   The Efficient market hypothesis

Efficient market hypothesis (EMH) is a theory in financial economics. The theory was developed by Paul Samuelson (1965) and Professor Eugene Fama (1970). The two researchers pointed out that EMH assumes that share price rapidly adjust to any new information. Consequently, the current prices fully reflect all available information and should follow a random walk process, that is, sequential stock price changes are independent and identical in distribution (Ananzeh, 2014) cited in (Kofarbai and Zubairu, 2016). Furthermore, the theory states that an asset's prices fully reflect all available information. Hence, it would be impossible for any investor to beat the market consistently on a risk-adjusted basis since market prices should only react to new information or changes in discount rates. According to Professor Fama, stocks should always be traded at their fair value thereby making it impossible for investors to either purchase undervalued stocks or sell stocks for inflated prices. Invariably, it should be impossible to outperform the overall market through expert stock selection or market timing and that the only way an investor can possibly obtain higher returns is by chance or by purchasing riskier investments. According to Fama (1970), the EMH can be divided into three thus – the weak form, the semi strong form and the strong form. The division depends on the kind of information that is available on the stocks' prices.

The weak form of EMH assumes that the current stock prices fully reveal all historical market information. This information includes historical sequence of prices, trading volumes and any market generated information. Also, weak EMH suggests that today's stock prices reflect all the data of past prices and no form of technical analysis can be effectively utilised to give support to investors in making trading decisions. Advocates for the weak form efficiency theory allow that if fundamental analysis is used, undervalued and overvalued stocks can be determined, and investors can study companies' financial statements to increase their chances of making higher-than-market-average profits (Kofarbai and Zubairu, 2016). According to Nneji (2013), the weak form of EMH totally kicks against technical analysis,

but lends credibility to fundamental analysis as it indicates that one can surpass the market if one undertakes research into the financial statements of the company under search. Hence, a capital market is therefore weak form efficient if there is no distinct pattern that can be identified in its stock prices over time.

The semi-strong form of EMH states that the current stock prices reveal not only the historical information but also new publicly obtainable information like dividend announcements, economic and political news. Therefore, the semi-strong form efficiency theory believes that because all information that is public is used in the computation of a stock's current price, hence, investors cannot make use of either technical or fundamental analysis to gain higher returns in the market. Those who subscribe to this version of the theory believe that only information that is not readily available to the public can be of assistance to investors in increasing their returns to a performance level above that of the general market (Kofarbai and Zubairu, 2016). Therefore, the prices of stock go through a speedy transformation in order to give room for any new information that becomes publicly available. Invariably, the statement means that one should not be able to profit from something everyone else knows. Hence, semi strong efficiency is in opposition to both fundamental and technical analysis (Nneji, 2013).

The strong-form EMH assumes that stock prices reflects all information from both public and private sources, so that no one investor can gain abnormal rate of return. The strong form description of the efficient market hypothesis states that all information (that is, both the information available to the public and any information not publicly known) is fully accounted for in current stock prices, and there is no category of information that can furnish an investor any undue advantage on the market. Advocates for this degree of the theory suggest that investors cannot make returns on investments that exceed normal market returns, despite any information retrieved or research conducted (Kofarbai and Zubairu, 2016). Therefore, this implies that even the member of a company's top management staff, who is fortunate to have insider information, cannot use such information to surpass the market. In the same vein, the research team of a company cannot gain abnormally if they invest in the company's shares instantaneously after making a discovery that is bound to be of enormous benefit to the company (Nneji, 2013).

3.2   The Random Walk Model
The efficient market hypothesis is connected with the idea of a random walk which is a term used in the finance literature to characterise a price series where all subsequent price changes represent random departures from previous prices. The idea behind the concept of random walk is that if the flow of information is unimpeded and information is immediately reflected in stock prices, then tomorrow's price change will reflect only tomorrow's news and will be independent of the price changes today (Alexakis,1992) cited in (Kofarbai and Zubairu, 2016). According to Fama (1970), an efficient market is a market in which prices reflect all available information. In the stock market, the intrinsic value of a share is equivalently measured by the future discounted value of cash flows that will accrue to investors. If the stock market is efficient, share prices must reflect all available information which is relevant for the evaluation of a company's future performance, and therefore the market price of share must be equal to its intrinsic value. Hence, any new information, that is expected to alter a company's future profitability, must be immediately reflected in the share price because any delay in the diffusion of information to price would result in irrationality, as some subsets of available information could be exploited to forecast future profitability. Thus, in an efficient

market, price changes must be a response only to new information. Since information arrives randomly, share prices must also fluctuate unpredictably (Kofarbai and Zubairu, 2016). According to Mbat (2001) cited in Nneji (2013), the random walk theory connotes a statistically independent relationship between stocks' future prices and their past prices.

4.0   Empirical literature

Egbeonu and Isidore (2016) worked on the title "Finametric analysis of Nigerian stock market and volatility of returns". The study empirically examined the link between efficient capital market and stock return volatility in Nigeria. Data used was extracted from CBN statistical bulletin 2014. The study also employed vigorous econometric tools such as GARCH model, ARCH model, GARCH graph, stationary test, johanse co-integration, Granger causality test, impulse and variance decomposition test. The test result revealed that stock price volatility in an efficient capital market is largely influence by market information which is reflected in all share index and capitalization; the increased in all share index, the greater the return on stocks. The GARCH graph indicated that the stock return will drop drastically in the year 2016 and that a new upward trend will be experience in the year 2017. Also, the test result revealed that stock return is volatile in an efficient market due to announcement of relevant information and that the prices of security in the market is on the downward trend; hence, the study recommended that investors should take due advantage of the low prices of securities in the market.

Ikeora, Charles-Anyaogu and Andabai (2016) in their study titled "The weak form efficient market hypothesis in the Nigerian stock market: An empirical investigation" examined the presence of weak form efficiency in the Nigerian stock market using time series data from 1985 to 2014. The data used to conduct this research is the All Share Index (ASI) converted to stock market returns. Time series econometrics techniques were conducted for the analysis. The study revealed that the large differences between the Mean and Standard deviation of the variables in the descriptive statistics suggested that the stock market is highly risky. The study showed that in the recent period, 2011 to 2014, it is found that stock returns are normally distributed. The results of the test of serial independence or randomness as obtained from Runs ADF tests showed that in periods 1985 to 1992, 1993 to 1999, 2000 to 2010 and the whole period 1985 to 2014, the Nigerian stock market is dependent and not random thus inefficient, which indicated that investors can envisage the markets returns. However, stock returns for period 2011 to 2014, market follow random walk, so investors cannot forecast the market returns in those periods. Finally, the study concluded that the Nigerian Stock Exchange was not efficient in the weak form between 1985 and 2010 and that it has become efficient from 2011 up to 2014.

Similarly, in the study of Pham, Kim and Jurdi (2016) titled "Stock return weak-form efficiency of ASEAN stock markets". The paper investigated the weak form efficiency of five Association of Southeast Asian Nations (ASEAN) stock markets. It applied the automatic portmanteau test and the automatic variance ratio test to moving sub-sample windows of stock market returns. The empirical results showed that the Thai and Singaporean stock markets are weak-form efficient for the period investigated (1999-2015). The other stock markets except for Malaysia shows improvement in efficiency post the global financial crisis of 2007. The findings of the study revealed evidence that support the adaptive market hypothesis and confirmed the positive impact of the ongoing financial liberalisation processes in the ASEAN region.

In the same vein, Obayagbona and Igbinosa (2014) in their study "Test of Random walk hypothesis in the Nigerian stock market" investigated the weak-form market hypothesis in the emerging capital market of Nigeria using the data from January 2006 to December 2011. It used three tests of randomness based on autoregressive technique to check for the presence or otherwise of autocorrelation in daily stock prices and returns from the Nigerian Stock Market. All the tests conducted including the Z-statistics for both stock prices and their returns showed significant indications of dependence in return series and hence, of non-randomness. The overall results of the study suggested that the emerging Nigerian stock market is not efficient in the weak form for the periods under study.

In relation to the work Obayagbona and Igbinosa (2014), Nwidobie (2014) worked on "The random walk theory: an empirical test in the Nigerian capital market" where he investigated the random walk hypothesis in Nigeria. Analysis of all-price-index (API) data of shares of listed firms on the Nigerian Stock Exchange from January 2000 to December 2012 using the Augmented Dickey-Fuller (ADF) test showed that share price movements on the Nigerian Stock Exchange do not follow the random walk pattern described by Fama (1965), and thus the random walk hypothesis is not supported by findings in the Nigerian capital market. Results of the study also indicated the existence of market inefficiencies in the Nigerian capital market necessitating the inflow of cheap and free information about security fundamentals into the market for share pricing by the forces of demand and supply.

In another study titled "Testing the weak-form efficiency market hypothesis: Evidence from Nigerian stock market" undertaken by Gimba (2012), the study tested the weak-form Efficient Market Hypothesis of the NSE by hypothesizing normal distribution and random walk of the return series. Daily and weekly All Share Index and five most traded and oldest bank stocks of the NSE were examined from January 2007 to December 2009 for the daily data and from June 2005 to December, 2009 for the weekly data. The empirical findings derived from the autocorrelation tests for the observed returns conclusively reject the null hypothesis of the existence of a random walk for the market index and four out of the five selected individual stocks. The study concluded that the NSE stock market is inefficient in the weak form for the periods under study.

Also, Okpara (2010) worked on the title "Analysis of weak form efficiency on the Nigerian stock market: Further evidence from GARCH model". In his study, he investigated whether the Nigerian Stock Exchange (NSE) followed a random walk from the year 1984 to 2006. To carry out the research, the study used the Generalised Autoregressive Conditional Heteroskedasticity (GARCH). The results of the study showed that the Nigerian stock market followed a random walk for the period under review and is therefore weak form efficient. However, the results of the study showed that the years 1987 (time of financial deregulation), 1988 (time of public companies privatization, 1995 (time of internationalization of the Nigerian capital market) and the years 2000 to 2006 recorded persistent volatility clustering suggesting weak form inefficiency in the market for these periods.

Correspondingly, Emenike (2008) carried out a study on "Efficiency across time: Evidence from the Nigerian stock exchange". The study examined the Weak-Form Efficient Market Hypothesis across time for the Nigerian Stock Exchange (NSE) by hypothesizing normal distribution and random walk in periodic return series. Monthly all share indices of the NSE were examined for three periods including January 1985 to December 1992, January 1993 to December 1999, and January 2000 to December 2007. The study's Normality tests were

conducted using Skewness, Kurtosis, Kolmogorov-Smirnov, and Q-Q Normal Chart while random walk was tested using the non-parametric runs test. The results of the normality tests showed that returns from NSE do not follow normal distribution in all the periods. Runs test results rejected the randomness of the return series of the NSE in the periods studied. Overall results of the study from the tests suggested that the NSE is not weak form efficient across the time periods of this study.

In another study carried out by Simons and Laryea (2015) in Ikeora et al (2016), the researchers investigated the weak form of the efficient market hypothesis for four African stock markets namely Ghana, Mauritius, Egypt and South Africa. The results of the study for both parametric and nonparametric tests - Kolmogrov-Smirnov (KS) Goodness of Fit Test, Runs Test, Auto-Correlation Test, Variance Ratio Test showed that the South African stock market is weak form efficient, while that of Ghana, Mauritius and Egypt are weak form inefficient. Hence, successive security returns on the South African stock market are independent and follow a random walk. However, the same cannot be said of the other three markets.

Kumar and Singh (2013) in Ikeora et al (2016) investigated in their study on whether Indian stock market is efficient or inefficient particularly at weak form level. The data utilised for the study was the daily closing values of the S&P CNX Nifty and CNX Nifty Junior for the sample period of 1 January 2000 to 31 March 2013, tested with Unit Root Test (ADF & PP), Run Test, Kolmogorov-Smirnov (KS) Test. The results of the study showed that Indian stock markets do not exhibit weak form of market efficiency. In another study on Indian stock market carried out by Shafi (2014) cited in Ikeora et al (2016), the researcher employed a study period of 11 years from 2003 to 2013 with NSE (NIFTY) as a bench mark, a host of tests (parametric as well as non-parametric) to test market efficiency in Indian capital market in the weak-form. Daily return of 50 Nifty stocks for 11 years yields 2742 which have been utilized for various analyses to test the level of efficiency in weak form or not of Indian capital market. All the tests conducted including run tests, autocorrelation tests revealed that Indian capital markets are inefficient in the weak form.

5.0   Conclusion

Stimulating economic growth and development in any economy require both the short and long term funds, far longer than the duration for which most fund owners are willing to commit their funds and this constitutes a barrier to economic growth. In this regards, the financial markets provide an avenue for the mobilization and utilization of funds for development and hence, it is expected that the financial markets should be well regulated and controlled. More so, the issue of information asymmetries in the financial markets (most especially capital markets) should be reduced in order to ensure free movement of share prices and continuous determination of prices of equities and stocks on the stock exchange based on security fundamentals and the interplay of forces of demand and supply. Information asymmetry occurs in the capital markets when some investors enjoy private information about the firms' value which other people are not privileged to have at the same time. Hence, the availability of information in the financial markets plays an important role for the participants to make optimal decisions on the choice of securities in the markets. However, in the real world it might be extremely impossible for full efficiency to exist but it is always possible to attain a level of efficiency that might be close to efficiency. This scenario is possible where sufficient numbers of market participants have equal access to relevant and essential information and possibly make judicious use of the information in

order to guide their buying and selling decisions.

6.0   Recommendation

Hence, in order for the above submission to happen, it is recommended that there should always be an increased and amplified level of public enlightenment on the activities of the markets (most especially capital markets) and more so the level at which the regulation for policing and enforcement of disciplinary actions against all forms of market manipulation should be intensified. Capital market regulators should also ensure that information provided in the market is correct and that there are improvements in NSE trading system. Above all, movement in share prices and continuous determination of prices of equities and stocks in the financial markets should be based on security fundamentals and the interplay of forces of demand and supply.

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