An Empirical Analysis of the Determinants of Market Capitalization in Nigeria

Nathanael O. Eriemo, PhD

Department of Economics, Delta State University, Abraka, Nigeria

GSM: 08035720213, e-mail: etekwene@yahoo.com

Abstract

One of the most enduring debates amongst development economists and business decision makers over the years bothers on whether market capitalization causes economic growth or whether it a consequence of increased economic activity or the paradox that stock price movements determine capitalization. Against this backdrop, the objective of this study has been to empirically analyze the determinants of market capitalization in Nigeria using data from the 2010 edition of the Central Bank of Nigeria (CBN) Statistical Bulletin and various issues of the World Bank Indicators for Nigeria between 1980 and 2010 identifying the crucial variables at work as liquidity ratio, value traded, value of equity and the rate of return on investment securities. Using the Ordinary Least Square (OLS) cointegration techniques with its implied Error Correction Mechanism (ECM), the study reveals from the cointegration test results that a long run relationship exists among the variables. The parsimonions ECM result indicates that the return on investment and value traded have the greatest influence on the level of market capitalization in Nigeria. The value of equity also exhibited positively and significant relationship with the level of market capitalization. The error correction showed a satisfactory speed of adjustment. Policies to improve the returns on investment and increase in the value of equity are thus recommended. The monetary authority should further improve the liquidity status.

Keywords: Market Capitalization, enduring debate, stock prices, Error Correction Mechanism

Introduction

The capital market has long been recognized as the centre of investment throughout the world, Nigeria being no exception. One of the most enduring debates in economics and business over the years is whether capital market development as in capitalization causes economic growth or whether it a consequence of increased economic activity. Market capitalization, which shows the market values of shares transactions in a country, is of paramount concern on issue relating to economic growth of nations and as a consequence an analysis of its plausible determinants is discernable. There is also the view by development economists and policy makers that a well developed stock market is crucial for the mobilization of financial resources for long term investment and thus constitutes one of the major pillars of economic growth. A precursor to this paradox and which has earlier been orchestrated by two opposing views of the Samuelson (1965)-led technical and the Fama (1970)-led fundamental market efficiency schools, is the held view that stock price movements propel and maintain equilibrium in the capital market and so determine market capitalization. This lends credence to efficient market hypothesis which according to Fama(1970) considers movements of stock prices as providing accurate signals for allocation in capital markets; that is, firms' production-investment decisions from which investors choose from among alternative securities that represent ownership of firms activities under the assumption that security prices at any time "fully reflect' all available information. Some other authors viewed the causal relationship between stock market development and economic growth for example Ezeoha et al(2009)examined the nature of the relationship between stock market development and the level of investment flows in Nigeria and reports that stock market development has not been able to encourage foreign private investment inflow which lends credence to Alile(1999) assertion that 50% of total capital inflows in developing countries are in the form of portfolio investment in tradable funds; ironically, not much of these inflows are received in Nigeria. The fact is that almost all the private capital flows to African shores are directed to South Africa, leaving Nigeria and other African countries with hardly any private inflow; Hondroyiannis et al (2005) reported a bi-directional relationship between stock market development and economic growth; Ewah et al(2009) appraised the impact of capital market efficiency on economic growth in Nigeria and reported that the capital has the potential to induce growth but has not contributed meaningfully to the economic growth due to low market capitalization, low absorption capacity poor liquidity, misappropriation of funds among others. Okereke-Onyiuke (2000) posits that the cheap source of funds from the capital market remain a critical element in the sustainable development of the economy. She enumerated the advantages of capital market financing to include no short repayment period as funds are held for medium and long term period or in perpetuity, funds to state and local government without

pressures and ample time to repay loans. Baumol (1952) asserts that earnings force stock prices to conform rather closely to these prospective earning opportunities of the firm whose shares they buy.

The Nigerian Stock Exchange, like its counterparts such as the New York Stock Exchange and the London Stock Exchange, is essentially the trading floor of the Nigerian Capital Market. It is fundamentally an institution which makes it possible to collect capital for the purpose of launching new enterprises and those who own shares to sell them through organized machinery without having to seek for buyers through the market capitalization process. Such securities traded openly at the Stock Exchange refer to documentary evidence of entitlement to claim upon the assets of the issuing organization, which may be a government, quasi- government institution or agency, or a business firm (Anyanwu 1997). Meeting this goal has always been met with problems that engendered avalanche of debates so that stock market development thesis has revealed wide disparity in terms of results in recent past.

A study of this nature is imperative at this time because the Nigerian stock market which witnessed a boom in the last few years is now experiencing a meltdown, as market capitalization has declined from over N13trillion in 2007 to N9.918 trillion in 2010. The all-share index has also fallen from 57,990.22 points to approximately 24,770.52 points in the same period (Nigeria Stock Exchange Yearbook, 2012). Moreover, the confidence of shareholders and investors seems to be eroding. This is against progress reported about a decade ago which, according to Nigerian stock exchange year book, indicated that market capitalization for instance, grew from N4.46 billion in 1980 to N661.6 billion at the end of 2001. There has been a progressive improvement in the market capitalization of the exchange price gains and new listings (capitalization issues and initial listing) which accounted for the growth of the market during the period. Gross Domestic Product (GDP) at current factor cost stood at N49.6b has also grown progressively over the years and as at 2001, it stood at a level of N5, 487.99 billion. It is imperative to state that the market capitalization of the stock market is still very low in relation to the gross domestic product, thus making it difficult to use the performance of the market as a barometer of overall economic performance.

Similarly, the NSE All – Share index according to IFC's Emerging Stock Market Fact Book(2001), had recorded impressive gains over the period with 16.6 points in 1984, losing by 27.3 percent to stand at 127.3 points in 1985. In 1994, the NSE All – Share index appreciated by 42.8 percent or 661.2 points to stand at 2205 points compared with 39.4 percent, 41.3 percent and 52.4 percent in 1993, 1992 and 1991 respectively. Transaction in the stock market increased both in volume and value over the period of analysis. In 1980, the volume stood at N388 million, and it has risen to an impressive level of N524 million in 1994 but rose in 2001to N5, 900 million.

The downturn of events that seem to accompany the global economic meltdown live much to desire thus, it is expected that this study would complement the efforts of government and policy makers in reviving the Nigeria stock market and restoring the confidence of shareholders and other participants in the market so as to attract foreign investors and enhance the attainment of higher economic growth. Essentially therefore a critical look at Nigeria's market capitalization behavior is imperative. This paper thus takes a more holistic view of the capital market by analyzing the constituents of the market values of shares transaction, called market capitalization and analyzing the sources of its growth. Thus the rest of the paper is organized as follows: Section 2 discusses empirical literature and theoretical underpinning; section 3 presents model specification and empirical results analysis. Finally, section 4 provides the summary and concluding remarks.

Empirical Literature and Theoretical Underpinning

Following from the debates enunciated here in this study, it is imperative to recapitulate some essential theoretical and empirical ingredients within the context to throw more light on this study. Works on the link between stock prices and other macroeconomic variables have been existence for long (Nwakanma 1983; Smith 1990; Goswami and Jung, 1997, 2012; Okereke-Onyiuke ,2000; Chandra 2004). Nwakanma(1983) carried out a study on Nigeria on stock price behaviour and reports that price movements in unpredictable which seems inconsistent with economic theory. Smith (1990) did a study on the United States' economy and found that stock prices jump immediately after (and sometimes before) the Federal Reserve announces a cut in the interest rate or discount rate, or Chase Manhattan announces a drop in its prime loan rate. Similarly, Goswami and Jung (1997), in a study on Korea economy found that stock prices are negatively correlated to long-term interest rate. Chandra

(2004) submits that a rise in interest rate depresses corporate profitability and also leads to an increase in the discount rate applied to equity investors; notes also that the effect of inflation rate on stock prices are negatively related and the theoretical postulation states that there is a positive relationship between exchange rate and stock prices while Okereke-Onyiuke (2000) posits that the cheap source of funds from the capital market remain a critical element in the sustainable development of the economy. She enumerated the advantages of capital market financing to include no short repayment period as funds are held for medium and long term period or in perpetuity, funds to state and local government without pressures and ample time to repay loans. Similarly, the study by Maku and Atanda(2009,2010) shows that stock prices and depreciating Naira rate are positively related while all share index is more responsive to changes in macroeconomic variables herein referred to as external shock. Thus the search continued: Asaolu and Ogunmakinwa (2010) maintain that a weak relationship exists between Average Share Price and macroeconomic variables in Nigeria.

It needs be emphasized that the foregoing observations are by no means exhaustive in the discussion of relevant literature in stock market analysis but are just pointer to the concept thus creating a preamble for understanding this study. Consequently there is the view that by development economists and policy makers that a well developed stock market is crucial for the mobilization of financial resources for long term investment and thus constitutes one of the major pillars of economic growth. It is the macroeconomic impact on market capitalization that is of more relevance in this study which only a few studies have emphasized. The belief that stock market predicts capitalization may have been reasoned from the fact that decisions made by microeconomic units affect macroeconomic fluctuations. In other words, business cycles, which reflect aggregate economic changes, occur as a result of decision made by individual investors and other economic units. On the other hand, the belief that the economy may influence stock market changes stems from the effects of macroeconomic policies. For instance, a tight monetary policy would have the effect of reducing investments and vice versa. This is the crux of the issue that informed the ideas of this paper. Scholars who have tested this theory include among others, Boyd and Schenfeld (1972),. While the debate lasts, some studies have resorted to the use of disaggregated measure anyway. Some of these studies rely on cross country regressions which can at best provide only a broad-brush picture of the relationship between stock market development and growth without sorting out country-specific effects as may be dictated by institutional characteristics and circumstances (Arestis, Demetriades, & Luintel, 2001; Filer, Hanousek, & Campos, 2003).

Going from the above, it can be argued that the theoretical basis on which this paper stands is on the liquidity preference theory in which the Cambridge school in their search for the causes of demand for money balances rest. The Cambridge led by Pigou and Marshall(1943) posits that real balances are held for security and convenience as well as transactional motives which when evaluated shows close resemblance to Keynes postulations of transactional, precautionary and speculative motives for holding real assets at any given point in time. The speculative demand for money sees money as an asset that is capable of yielding returns for future benefit. Individuals and businessmen having funds, after keeping enough for transactions and precautions like to make a speculative gain by investing in stock and bond. Accordingly, Baumol (1952) contends that "earnings do ultimately and solely determine the value to be derived from shareholding and if shareholders do learn at all well from their experience, their purchasing patterns will in the long run, force stock prices to conform rather closely to these prospective earning opportunities of the firm whose shares they buy.

These ideas tended to borrow from the early schools (fundamental and technical) led by Fama and Samuelson. However, academic criticism of fundamental and technical analysis commenced over forty years ago, with the idea that share prices follow a random walk and that the financial markets behave in accordance with efficient market hypothesis. The efficient market hypothesis provides a theoretical framework which lends support to the random walk characters of share prices. In this consideration market participants are assumed to act in an intelligent, self-motivated manner and to assess and act upon available information about share prices when formulating their buying and selling decisions. Thus individuals or organizations act upon this information so that the share prices will adjust accordingly until there are no further profit opportunities.

Model Specification and Results Analysis

The theoretical basis on which this paper stands is the macroeconomic approach using the liquidity preference theory: (Pigou and Marshall (1943); Baumol (1952). Consequently the model for the study is estimated using the following specification:

 $LMCAP = b_0 + b_1 LROI + b_2 LLR + b_3 LVEQ + b_4 LVT + V_t$

$b_1, b_2, b_3, b_4 > 0$

Where,

MCAP = Market Capitalization LR = Liquidity ratio VEQ = Value of equity VT = Value traded ROI = Return on investment L = Natural Logarithm

Vt = Random Variable

The data for the above variables were generated from the Central Bank of Nigeria's statistical Bulletin, 2010 edition and various issues of the World Bank Indicators for Nigeria. The result of the Augmented Dickey Fuller (ADF) Unit root test used to test whether the variables are stationary or not and their order of integration is shown in table 1 below.

Table 1: Summary of ADF Unit root test result

Variables	Level	First	1%	5%	10%	Order of
	Data	Diff	CV	CV	CV	Integration
ROI	-2.22	-6.58*	-3.69	-2.97	-2.62	I (1)
VEQ	-2.61	-5.82*	-3.69	-2.97	-2.62	I (1)
VT	1.62	-6.12 [*]	-3.69	-2.97	-2.62	I (1)
MCAP	-0.91	-4.83*	-3.69	-2.97	-2.62	I (1)
LR	-2.87***	-5.63	-3.69	-2.97	-2.62	I (0)

N.B: * Indicates significant at the 1% level

** Indicates significant at the 5% level

*** Indicates significant at the 10% level

The ADF result shows that all the variables except LR are non stationary, but they however became stationary after taking the first difference. The LR was stationary at the levels because it is a ratio variable. However following Gujarrati (2005), both I (1) and I (0) variables can be carried forward to test for cointegration. The result of the Johansen cointegration test which is used to assess the presence or otherwise of a long run relationship among the variables reveals robust results. The result of the Johansen cointegration test is shown in table 2 below:

Table 2: Summary of Johansen Cointegration test

Hypothesized No. of CE(s)	Eigenvalue .	Trace Statistic	5 Percent Critical Value	1 Percent Critical Value
None **	0.827802	96.10755	68.52	76.07
At most 1	0.591694	46.85252	47.21	54.46
At most 2	0.407200	21.77186	29.68	35.65
At most 3	0.224303	7.130697	15.41	20.04
At most 4	0.000674	0.018880	3.76	6.65

*(**) denotes rejection of the hypothesis at the 5%(1%) level Trace test indicates 1 cointegrating equation(s) at both 5% and 1% levels

Hypothesized No. of CE(s)	Eigenvalue		Max-Eigen Statistic	5 Percent Critical Value	1 Percent Critical Value
None **	0.827802	1	49.25502	33.46	38.77
At most 1	0.591694		25.08067	27.07	32 24
At most 2	0.407200		14.64116	20.97	25.52
At most 3	0.224303	•	7.111817	14.07	18.63
At most 4	0.000674		0.018880	3.76	6.65
		۰.			

*(**) denotes rejection of the hypothesis at the 5%(1%) level

Max-eigenvalue test indicates 1 cointegrating equation(s) at both 5% and 1% levels

11.

The result of the Johansen Cointegration test indicates that a long run relationship exists among the variables. This is because both the max-eigen test and the trace statistic indicates one cointegrating equation in each case.

The existence of at least one cointegrating equation per units is to estimate the overparameterize and the parsimonions ECM results. The summary of the overparameterize ECM result is shown in table 3 below:

Table 3: Summary of Overparameterize ECM result

Dependent Variable : DLMCAP

and adjusting one.							
Variable		Coefficient	Std. Error	't-Statistic	Prob.		
 DLROI		7.027244	1.428501	4.919312	0.0000		
DLROI(-1)		-0.112064	0.147506	-0.759724	0.4600		
DLROI(-2)		0.146615	0.153339	0.956150	0.3552		
DLLR		-0.175633	0.336507	-0.521930	0.6099		
DLLR(-1)		-0.223158	0.360861	-0.618404	0.5462		
DLLR(-2)		6.321476	2.198161	2.875802	0.0072		
DLVEQ		0.027109	0.043911	0.617369	0.5469		
DLVEQ(-1)		1.841905	0.748327	2.461363	0.0196		
DLVEQ(-2)		0.002145	0.039709	0.054017	0.9577		
DLVT		0.844961	0.300682	2.810148	0.0089		
DLVT(-1)		0.287126	0.134284	2.138194	0.0506		
DLVT(-2)		-0.286161	0.145979	-1.960291	0.0702		
ECM(-1)		-4.709084	0.608709	-7.736177	0.0000		
C		0.261795	0,100235	2.611820	0.0205		

 $R^2 = 0.65$, F statistic = 20.82, prob (F statistic) = 0.0000, DW = 2.06, AIC = 0.82, SC = 1.48

The overparameterize ECM involves two lags each of the variables. The parsimonions ECM result was gotten by deleting the insignificant variables by deleting the insignificant variables from the overparameterize ECM model. The result of the parsimonions ECM result is shown in table 4 below:

Table 4: Summary of Parsimonions ECM result

Dependent Variable : DLMCAP

Variable	Coefficient	Std. Error	t-Statistic	Prob
DLROI	0.889766	0.181262	4.908717	0.0000
DLLR(-2)	0.721014	0.304142	2.370651	0.0242
DLVEQ(-1)	0.466654	0.111772	4.175055	0.0003
DLVT	0.903765	0.203370	4.443951	0.0001
ECM(-1)	-0.694378	0.057300	-12.11823	0.0000
С	0.274195	0.069287	3.957381	0.0007
R-squared	0.688683	Mean dependent var	0.257709	
Adjusted R-squared	0.676162	S.D. dependent var	0.303890	
S.E. of regression	0.319614	Akaike info criterion	-0.744003	3
Sum squared resid	2.247367	Schwarz criterion	n -1.029476	5
Log likelihood	-4.416048	F-statistic		23.81746
Durbin-Watson stat	2.039590	Prob (F-statistic)	0.000000	

 $R^2 = 0.69$, F statistic = 23.82, DW = 2.04, AIC = -0.74, SC = -1.03, DW = 2.04

The parsimonions or preferred ECM result showed that the return on investment which is a key global stock market indicator was statistically significant and positive linear relationship with the level of market capitalization in Nigeria. The high elasticity which is almost unity validated this finding. The result showed further that the liquidity ratio which is another key global indicator is statistically significant. The result showed that an increase in the liquidity ratio by 1 percent increased the level of market capitalization by 72 percent. This finding indicates the increasing significance of the liquidity ratio in the global economy in the capitalization in Nigeria. The value of equities also had a positive and significant relationship with market capitalization. The value traded in the stock has also significantly influenced the level of capitalization in Nigeria. The statistical significance of the ECM which is also negatively significant provides an indication of a satisfactory speed of adjustment. It suggests that about 69 percent of the error is corrected each year. The relevant section of the VEC result indicates that the market capitalization equation represents the true cointegration equation. The others are statistically flawed. They are either not significant or wrongly signed.

The result of the variance decomposition appears in table 5 below:

Table 5: Variance Decomposition Result

Peri	-					
		28 100 0000		0.00000		
1						
43	0.43510					
4						
5	0.75926					
6	0.83059					7.580799
7					9.533617	6.623823
8					11.16123	5.886318
5		97 70.48301			12.53842	5.332459
1	0 1.08472	69.72415	5 10.02142	1.520107	13.85692	
		Var		position of LLF		
Peri	S.E.	LMCAP	LLR	LROI	LVEQ	LVT
1		37 1 769493	00 00160	0.00000	0.00000	0.000000
	0.23030					
2	0.29824					
З						2.262687
4		•		0.214833	5.650555	. 1.894847
5	0.39914				6.137935	2.435963
6					6.919032	
7		41 0.834692	89.80020			
. 8	0.48578	0.752066				
g						
1						
						2.290010
	S F			osition of LRC		
Peri	od S.E.	LMCAP	LLR	LROI	LVEQ	LVT
	····		P		· • • • • • • • • • • • • • • • • • • •	
• 1						0.000000
2					0.952994	7.465832
З			4.249038	3 73.75550	0.897275	8.058863
4		56 18.66245	3.322388	65.31589		
5	0.9109					
e	0.99373					
. 7						
8						5.717891
9						
10						
			The second s			4.150490
	S.E.			osition of LVE		
Peri		LMCAP.	LLR	LROI	LVEQ	LVT
*		the second s		with the second	in the state of th	
1						
2	1.75490				64.26884	2.471750
3					54.17855	6.625241
4				20.17850	47.16523	
5			11.56534	20,58608		
6		92 18.58684	12.89712			
. 7						
8						
9						
10						
		22.43724	12.99395	21.18697	37.82339	5.558399
		- vunting	e Decomposi			
eriod	S.E.	LMCAP.	LLR	ĹROI	LVEQ	LVT
1	0.582693	7.143995	1.297309	0.329150	35.51423-	55.71532
2	0.918522	7.178759	1.098164	0.837817	54.52488	36.36038
2				2.832909	58.76248	29.37186
3	1.148787	5.674150	3.358592	4.080207	58.59359	28.21623
4	1.420149	4.63488.1	4.475096			26.79721
5	1.642126	4.473393	3.371188	3.967646	61.39057	
6	1.829121	4.668473	2.998138	4.006224	62.21113	26.11603
7	2.032583	4.760433	3.313804	4.223896	61.68621	26.01566
8	2.203159	4.675029	3.010154	4.346052	62.57142	25.39735
9	2.348733	4.616852	2.898054	4.440041	63.00209	25.04297
10	2.499398	4.651034	2.852469	4.484881	62.90528	25.10634
	the second	Cholesky Orderi		LRLROUVE	and the second s	
	<u></u>	noiesky orden	ING. LINIOAF L			

The result of the variance decomposition show that about to shocks to market capitalization which explained 100 percent of changes in itself, shocks to the value traded explained about 17 percent of the changes in market capitalization in the second period, but this decreased to about 10 percent in the fourth period. Shocks to the other variables did not explain significant percentages of changes in the market capitalization. Shocks to market capitalization however explained some good percentage of changes in the return on investment, value of equities and the value traded.

The Diagnostic test encompasses the Jarque-bera normality test, serial correlation LM test, white heteroskedasticity test and the Cumulative Sum of Squares (CUSUM) and Cumulative Sum of Squares of Recursive Residuals (CUSUMQ) stability test.

Table 6: Diagnostic test result

	Jarque-bera			
Jorque-bera	1.44	Probability	0.49	
	Brensch-God	frey Serial Correlation LM	test	
F statistic	0.18	Probability	0.83	
	White Hetero	skedasticity		
F statistic	1.14	Probability	0.39	

The result of the Jarque-bera normality test indicates an acceptance of the null hypothesis that the errors are normally distributed. The Brensch-Godfrey Serial Correlation LM test indicates that the errors are not serially correlated and the white heteroskedasticity test result show that the errors are homoskedastic. The stability test is shown in figure 1 and figure 2 below





Figure 2: CUSUM Q Stability test



Both the CUSUM and CUSUMQ stability tests indicate that the errors are stable since both the CUSUM and CUSUMQ lines lie within the two standard deviation bands and did not cut the 5 % significance.

Summary and Concluding Remarks

From the foregoing therefore, amongst the four macroeconomic variables estimated using the Ordinary Least Square technique, only value traded and rates of return on securities are significantly of great influence on stock price variations and hence capitalization in the Nigerian capital market. Conducting the structural stability of the model in the spirit of cumulative sum both the CUSUM and CUSUMQ stability tests indicate that the models are stable since both the CUSUM and CUSUMQ lines did not cut the 5 percent significance. It is however hoped that with concerted efforts aimed at developing the capital market and the pursuit of policies of deregulation already begun in the economy, the Nigerian stock price index would be a good instrument for measuring the pulses in the economy as is the case with the industrialized countries of the world. Based on the findings, it is recommended among other things, that the Nigeria Stock Exchange should explore ways and means of changing the buy-and-hold attitude of the Nigerian investing public, ensuring that prices of new issues as well as securities being traded on the exchange are market determined especially in line with the current deregulation and globalization drive within the financial market operations at least as way of cushioning the unpalatable effects of the global economic meltdown.

References

Akhamiokor G. A. (1988) "Financing Small Scale Enterprises on the Stock Exchange Market,

Lagos: CBN Bullion, April/June.

- Akinnifesi, O. E. (1987): "The Role and Performance of the Capital Market," *Economic Development in Nigeria,*" in Afedotun, P. O. and E Ndekwu,. (Ed), Journal of Nigerian Institute of Social and Economic Research, Ibadan.
- Alile, A H.(1984), The Nigerian Stock Exchange: Historical Operations and Contribution to Development, *CBN Bullion* Silver Jubilee Edition P.67.
- Alile, A H. (1999), Portfolio Investment in Nigeria in the *Proceedings of the Eight Annual Conferences of the Zonal Research Units*, CBN, Abuja.
- Alile, A H. (1999): The Nigeria Stock Exchange in Operation, Lagos: Jeromelaino and Associates.

Anyanwu, J. C. (1997): The Structure of Nigerian Economy, Onitsha: Joanee Educational Publishers Ltd.

- Appiah-Kusi, J. and Menyah, K. (2003)"Returns Predictability in African Stock Markets, *Review of Financial Economics* Vol 12 Pp247-270.
- (1998): "Stock Market Development and Economic Growth," Journal of Business perspective Vol. 2 P. 33 38.
- Arestis, P., Demetriades, P. O., & Luintel. K. B. (2001). Financial Development and Economic Growth: The Role of Stock Markets, Retrieved from Journal of Money, Credit and Banking. <u>http://www.accessmylibrary.com/coms2/summary/0286-10601330.html</u>
- Ashaolu T.O, Ogunmuyima M.S (2011). An econometric analysis of the impact of macro economic variables on stock market movement in Nigeria. Journal of Business management, (2011), 3 (1): 72-78.

Ayadi, O.(1984) "The Random Walk Hypothesis and the Behaviour of Share Prices in Nigeria'. *Nigerian Journal of Economic and Social Studies*, Vol 26 Nol March.Pp57-71.

- Baumol, W. J(1952), The Transaction Demand for Cash: An Inventory Theoretic Approach, *Quarterly Journal* of economics, 66: 545-556
- Bosworth B. O. (1995): "The Stock Market and Economy's Broking Paper on Economic Activity" P. 257 290, CBN 2001 Statistical Bulletin.
- Bower, R.S. and Bower, D. H. (1969): "Risk and the Valuation of Common Stock". Journal of political economy, May June.
- Box, G. E. and Jenkins, G. M. (1970): *Time Series analysis, forecasting and Contral.* San Francisco: Holden day
- Boyd, J. H. and Schenfeld E. P. (1972): The effect of Financial Press Advertisement on stock price. *Financial management* vol. 16, No. 2
- Central Bank of Nigeria (1997), "Glossary of Selected Terms". CBN Briefs
- Chandra, P (2004). Investment Analysis and Portfolio Management. New Delhi: McGraw-Hill.
- Cohin, R. and Lessard, D. R. (1981), "The effect of Inflation on Stock Prices: International Evidence," *Journal* of Finance vol. XXVI, No. 2

Demirguc-Kunt, A., & Levine, R. (1996). Stock Markets, Corporate Finance and Economic Growth: An Overview. *World Bank Economic Review*, 10(3), 223-239.

- Dernburg T.F and McDougall,D.M (1960): *Macroeconomics: The Measurement, analysis and Control of Aggregate Economic Activities.* McGraw-Hill, Japan Kogakusha Ltd, 6th Edition
- Ewah et al (2009). Empirical Analysis of the Impact of Market Efficiency on Economic Growth in Nigeria, International Journal of Research in Economics and Management Sciences, Vol 6 No3
- Ezeoha et al (2009). The Impact of Capital Market and Economic Growth in Nigeria, Europian Journal of Business and Management, vol 4 No 2
- Fama, E. (1965). The Behaviour of Stock Prices, Journal of Business Vol. 38, No. 1.
- Fama, E. (1970) "Efficient Capital Market: "A review of theory and empirical work" in Journal of Finance Vol. 25 No. 2 Pp. 383 – 417

Fama E. and G. W Schwert, (1977), Asset Returns and Inflation, Journal of Financial Economics, Pp. 115-146.

Filer, R. K., Hanousek, J., & Campos, N. F. (2003). Do Stock Markets Promote Economic Growth? Vienna, *Vienna Stock Exchange*.

Golop J. E. and Bishop (1997) "What long investor expects from the Stock Market" *Economic Review*, Fed. Reserve Bank of Kansa City Vol. 82 No. 3P 41-52

Goswami G, Jung S.C (2012). Stock Market and Economic Forces: Evidence from Korea. *IMF Working Paper*. From <u>http://papers.ssm.com/sol3/Delivery.cfm?</u> abstractid=1937914 (Retrieved on April 6, 2012).

Hondroyiannis G, Lolos S, Papapetron E (2005). Financial market and economic growth in Greece, 1986-1999. *Journal of International Financial Markets, Institutions and Money*, (2005), 15(2), 173-178.

IFC (2001), Emerging Stock Market: Fact Book.

Johansen, S. (1988), Statistical Analysis of Cointegration Vectors. *Journal of Economic Dynamics and Control*, 12(2), 231-254.

- Khoury, S. J. (1983): Investment Management: Theory and Application, New York: Macmillan Publishing Company Inc.
- Kraft, J. and Kraft A. (1977): Theory of Econometrics. A time Series Analysis, *Journal of Finance*, Vol.XXXII, No. 2.

Levine, R. (1997). Financial Development and Economic Growth. Views and Agenda. *Journal of Economic Literature*, 35, 688-726

Levine, R., & Zervos, S. (1998). Stock Markets, Banks and Economic Growth. *American Economic Review*, 88, 537-558.

Lipsey R. G. el at (1981): *Positive Economic* (6th Ed) New York Harper and Row Publishing Inc.

Maku O.E, Atanda A.A (2009). 'Does Macroeconomic Indicators Exert shock on the Nigerian Capital Market?, online at <u>http://mpra.ub.uni-muenchen.de/17917/</u>

Maku OE, Atanda AA (2010). Determinants of stock market performance in Nigeria: Long run analysis, *Journal of Management and Organizational Behaviour*, (2010). 1(3): 1-16.

Modigliani, F. and Cohin, R. (1979): Inflation, Rational Valuation and the Market. *Finance Analyst Journal*, Vol. 35.

More, H. G. (1975): "Stock Prices and the business Cycle," Journal of Portfolio Management;. Spring .

Nelson, R. C. (1976): "Inflation and Rates of Return on Common Stock," Journal of finance. 31, May 1976.

Nwakanma, P. C. (1983), "Pricing in the Nigerian Capital Market – theory and Evidence". Port-Harcourt Research Project (Unpublished), University of Port-Harcourt.

Nurock, J. R. (1980), An Explanation of the Wall Street Week Technical Market Index 2nd Revision Feb. 28.

Odife, D. (1989): "Limitations of the Nigerian Capital Market" in Business Times, July 23.

Okah, G. O. (1980), "Nigerian Capital market and Development Process," CBN Bullion, Vol 5 No. 4 October – December.

Okereke-Onyiuke, N. (2009), A review of Market Performance in 2008 and the Outlook in 2009. *The Nigerian Stock Exchange*

- Okey O. O (2012). Stock Market Development and Economic Growth in Nigeria: Market Size versus Liquidity. *Canadian Social Science*, 8(5), 71-76
- Palmer, M. (1970): "Money supply, Portfolio Adjustments and Prices," *Financial Analyst Journal. Vol. 25, No. 4 July August, 1970.*

Pesando, J. E. (1974) "The supply of money and common stock prices: Further observation on Econometric Evidence" *Journal of Finance*. Vol. 29, June 1974, Pp. 909 – 921.

Philip, T. (1983):"The Capital Market in Nigeria" CBN Bullion Vol. 7, No. 3, July/Sept.

- Pindyck, R. S. (1984): "Risk, Inflation, and the Stock Market," American Economic Review. Vol. 74, No. 3 June 1984.
- Sandler,L. (1987): "Crash topples Bullish Analyst" Pedestals Role May Diminish," *The Wall Street Journal. Vol. 13 Nov. 1987.*
- Samuelson, Paul (1965): "Proof that proper anticipated price fluctuate randomly", *Industrial Management Review* Vol. 6 Pp. 41 48
- Smith, G. (1990) Investments' Glenview, Illinois, McGraw-Hill Book Coy.
- Summers, L. H. (1981), "Inflation, the Stock Market, and owner-occupied Housing. *American Economic review* Proceedings. Vol. 71, May 1981.

Vincent, O. O. (1979): Twenty Years of Central Banking in Nigeria, Research Department, CBN Lagos.

Williams P. S. (1966): "Mutual Fund Performance" Journal of Business Vol. 39, Pg. 121.

The IISTE is a pioneer in the Open-Access hosting service and academic event management. The aim of the firm is Accelerating Global Knowledge Sharing.

More information about the firm can be found on the homepage: <u>http://www.iiste.org</u>

CALL FOR JOURNAL PAPERS

There are more than 30 peer-reviewed academic journals hosted under the hosting platform.

Prospective authors of journals can find the submission instruction on the following page: <u>http://www.iiste.org/journals/</u> All the journals articles are available online to the readers all over the world without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. Paper version of the journals is also available upon request of readers and authors.

MORE RESOURCES

Book publication information: <u>http://www.iiste.org/book/</u>

Recent conferences: http://www.iiste.org/conference/

IISTE Knowledge Sharing Partners

EBSCO, Index Copernicus, Ulrich's Periodicals Directory, JournalTOCS, PKP Open Archives Harvester, Bielefeld Academic Search Engine, Elektronische Zeitschriftenbibliothek EZB, Open J-Gate, OCLC WorldCat, Universe Digtial Library, NewJour, Google Scholar

