An Empirical Estimation of Average Return in the Nigerian Stock Market

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Abstract

This study empirically evaluates average return in the Nigerian Stock Market for the period of 2000-2004 as weekly. The objective of the study is to determine the average obtainable return on equity investment in the Nigerian Stock Market. This study employed return model to estimate the quoted firms' returns on their shares. The study revealed that estimated average return on equity investment in Nigerian Stock Market is 7%. This appears to be relatively low compared to the returns from Stock Markets in developed world. The low level of return in the Nigerian Stock Market is a common feature among most emerging Stock Markets in the developing world (Korajezyk 1996; Daniel, Titman & Johnwei 2001; Wakin & Neaime 2002 and Abdullahi 2011).

Keywords: *Average Market Return, Return Model, the Nigerian Stock Market and Emerging Market.*

Introduction

Stock market is a complex institution with mechanism through which intermediate term and long term funds are pooled and made available to business, government and individuals (Daugal & Gaumnitz, 1975). Stock market serves as an economic barometer measuring the wealth or financial well-being of an economy.

Ngumi (2006) posited that stock market tend to foster efficient mobilization and allocation of resources for economic development. Savers, Pension Fund, Insurance Companies, Individuals and the government take advantage of stock market instruments such as corporate bonds, commercial papers, syndicated loans or equity for their purposes. The market provides an easy formalization process whereby owners (lenders) are able to find users (borrowers) of capital at profitable rates sufficient to justify risks taken in giving or renting capital to potential users. The process thus involves not only returns but also risks. The rate of return at which lenders expect to risk their money constitutes the cost of equity to the users and this is market determined.

The return of securities in the stock market may differ because of different factors affecting securities such as differences in structure and managerial capacity of different firms, different sectors in which they operate, the state of the economy, government policies, as well as internal corporate policies, themselves (Oludoyi, 2003).

The Nigerian Stock Market has the potential to be the most dynamic and diversified in sub-saharan Africa (Bamidele, 2007). However, the Nigerian Stock Market which is an emerging market has suffered from several imperfections. International Finance Corporation (IFC, 1996) classified the Nigerian Stock Market as emerging and underdeveloped as it exhibits the characteristics associated with most emerging markets in the world. These include, low ratio of new issues to Gross Fixed Capital Formation (GFCF), thinness is size as confirmed by its low ratio of market capitalization to Gross Domestic Product (GDP), low equity listing, imposition of price caps on share price movement, regulation of interest rates, exchange rate devaluation, political instability which have resulted in low volume of trading and turnover, low and/or negative performance ratios, significant abnormal returns and illiquidity of the market (Inanga & Emenuga 1997; Ogwumike & Omole 1997; Greert, Claude, Campbell & Tades 1998; Oludoyi 1998; Inanga 1999; Osaze 2007 and Adelegan & Ariyo, 2008).

Furthermore, Osaze (2007) posited that Nigerian Stock Market remained an emergent because of the following identified problems in the market. These include unstable macro-economic environment, poor system of supervision and regulation, limited range of securities, predominance of commercial banks in the financial system, paucity of securities on stock exchange, inhibited foreign capital inflow, inadequate access to information, inactive bond/debenture market, tax avoidance, buy-hold syndrome, religions beliefs, price determination, market concentration, faulty share holding structure, prohibition of speculation and paucity of market makers. It is against this background, that this study empirically evaluates the average expected return on equity investment in the Nigerian Stock Market.

Methodology and Data Selection

The most viable estimation procedure used in this study is return model. It is the simplest of the models use in estimating security returns. We collected data on firms' share prices, dividends paid and date of payments, as well as data on trading activities i.e. volume, frequency of trading and trading days. Weekly data were collected from the Nigerian Stock Exchange (NSE). We collected data from January 2000 to December 2004.

For firms to be included in the sample, they must have December fiscal year. Thus firms with other months' fiscal year were not included in the sample. We considered it appropriate to include only firms with common fiscal year in order to ensure reasonable comparability of return estimates of different firms on one hand and the average return of these firms as market on other hand.

Another parameter for including firms in the study is their consistent listing on the Nigerian Stock Exchange between January 1999 and December 2004 inclusive. Such firms must also have data on earnings, share prices, divided and trading activities. Weekly data is used in this study, therefore, Friday closing share prices were collected. Where Friday was public holiday, we used Thursday closing prices. If Friday and Thursday were public holidays, then we used Wednesday closing prices. A total of 181 firms were quoted in the

Nigerian Stock Market as at December 1999. However, after applying the stated criteria above 60 firms qualified for inclusions in the sample.

The Return Model Specification

$$R_{jt} = \frac{P_{jt} + D_{jt} - P_{jt-1}}{P_{jt-1}} \quad \text{.............................(1)}$$

Average Market Return

$$\bar{R}_{mt} = \frac{\sum_{t=1}^{n} \frac{P_{jt} + D_{jt} - P_{jt-1}}{P_{jt-1}}}{N} \quad \text{....................................... (2)}$$

Where

R_{jt} = actual return on firm at period t
P_{jt} = price of firm j at in period t
P_{jt-1}= price of firm j at in period t-1
D_{jt} = dividend paid on each share of firm j at period t

$\sum_{t=1}^{n}$ = summing from the first firm to n^{th} firm' returns

N = number of firms studied
R_m = average market return

If we take the natural log of the series we obtain returns in (1) above by subtracting in period t-1 from those in period t plus dividend to arrive at

$L_nR_{jt} = L_n (P_{jt} + D_{jt} - P_{jt-1}) - L_n (P_{jt-1})$..............................(3)

3. Results and Interpretation

Return Profile of Firms in Nigerian Stock Market

s/n	Company	Return %
1	Okumo oil palm coy Plc	11
2	Dunlop Nig. Plc	1.2
3	R.T. Brisco Plc	8.4
4	Access Bank Plc	4.4
5.	Afri Bank Nig. Plc	4.1
6	ELB International Bank Plc	7.2
7	First Bank of Nig. Plc	8.0
8	Guaranty Trust Bank	8.0
9	United Bank for Africa	5.1
10	Union Bank Plc	4.2
11	Wema Bank Plc	8.0
12	Ashaka Cement Plc.	3.4
13.	West Africa Portland Cement Plc.	0.1
14	Guinness Nig. Plc	10.7

15	Nigeria Breweries	7.7
16	Berger Paint Nig. Plc.	11.6
17	Chemical and Allied Product	10.9
18.	DN Mayer Plc	9.7
19	Triple Gee and Company Plc.	1.9
20	A.G. Leventis (Nig.) Plc	15.5
21	CFAO Nig. Plc	7.6
22	UAC of Nig. Plc	7.4
23	G. Cappa Plc.	0.9
24.	Julius Berger Nig. Plc	1.9
25	Nigerian Wire and Cable Plc	7.0
26.	Seven Up Bottling Company	14.1
27.	Cadbury Nig. Plc	7.1
28	Flour Mills Nig. Plc	5.7
29.	Northern Nig. Plc	15.5
30.	Nestle Nig. Plc	9.6
31	Nigerian Bottling Company Plc	5.9
32	Evans Medical Plc	10
33	May and Baker Plc	4.1
34	Marison Industries Plc.	3.9
35	Neimeth Int' Pharm Plc	0.7
36	Aluminium Extrusion Nig Plc.	4.4
37	B.O.C. Gas Plc.	3.8
38	First Alluminium	8.9
39	Vitafoam Nig Plc.	6.9
40.	Vono Product Plc	5.2
41	Allco Insurance Plc.	3.0
42	Conerstone Insurance Plc.	8.3
43	Crusade Insurance Plc.	5.0
44	Lasaco Assurance Plc	11.7
45	Law Union & Rock Insurance	6.0
46	Niger Insurance Company Plc.	6.8
47	Prestige Assurance Plc.	9.7
48	Royal Exchange Assurance Plc.	4.0
49	Wapic Insurance Plc.	10.8
50	C & I Leasing Plc.	7.5
51	Avon Crown Caps and Containers	5.9
52	Beta Glass Plc.	11.2
53	Mobil oil Nig. Plc.	8.1
54	Texaco (Nig.) Plc.	12.3
55.	Total (Nig.) Plc.	10.3
56	Academy Press Plc	5.2
57.	Longman Nig. Plc	9.2
58.	University Press Plc.	6.7
59	UACN – Property Development	11.3
60	United Nig. Textile Plc.	4.8
	*Average Market Return	7.0

Source: Author's Calculation 2011

From the table above, it was observed from the computation that an average return in the Nigerian Stock Market is estimated to be 7.0%. This return appears to be relatively low compared to the returns from stock markets in developed world, such as New York Stock Exchange (12%), the Tokyo Stock Exchange (13.7%), the London Stock Exchange (18%) and the Germany Stock Exchange (10%) among others. This low return is a common feature in most of emerging markets, probably because of the following characteristics of the market; low illiquidity, unstable macro-economic environment, limited range of securities, inhabited foreign capital inflow, inactive bond market, among other imperfections (IFC 2006, Bamidele 2007 and Osaze, 2007).

Conclusion

It is important to know the level of return on investment in the stock market to enable both domestic and foreign investors to take rational investment decisions. This study attempted to estimate returns of individual quoted firms in the Nigerian Stock Marked and eventually the average market return which appears not have been adequately addressed in the Nigerian Stock Market.

In conclusion, if the implied policy recommendations are implemented, the return in the Nigerian Stock Market will improve as stock investment decision would be taken with greater precision.

Policy Recommendations

Based on the findings of this study, the following recommendations are proffered:

(i) Provision of better economic environment for the quoted firms operation

The all-share index and market capitalization served as barometer of measuring the performance of the market. This study discovered that these variables are relatively low due to difficult economic environment where these companies operated. Their share prices of equities were relatively low. The Federal government and regulatory organs should try to improve on economic environment to reflect the developments in the Stock Market of the developed world through:

(a) Reduction of frequency of issuing of Nigerian Treasury Bills into the market in order to prevent overriding dominance of short-term market over long-term market;

(b) Stock brokers should not be made to play double roles as intermediation in the Nigerian Treasury Bills Market and as well as dealers in stock and shares on behalf of investing public;

(c) Reduction of dominance of commercial banks in the financial system by giving incentive to the use of longer term facilities through further deepening of the treasury bills market by creating longer term discountable treasury bonds;

(d) Creating friendly environment in terms of political stability or incentives for more foreign investors and more companies to go public and thus increasing listing; and

(e) Encourage insurance companies, pension funds and commercial banks to patronize the long term end of the financial system rather than short-term end.

(ii) Publication of returns profile of all quoted firms in the Nigerian Stock Market to the public

The Security Exchange Commission (SEC) should publish the returns of all quoted firms in different sectors operating in the Nigerian Stock Market quarterly in a year in order to guide the public and relevant stakeholders in their investment decisions.

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