

The Impact of the New Issues Market on Agricultural Productivity in Nigeria

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Abstract

The growth of the agricultural sector in Nigeria has remained a major problem in spite of policies put in place by government to provide the sector with varying windows of investible funds, a major one of which is the capital market. Listed firms in capital market have opportunities to raise fund for investment. Agricultural productivity can be enhanced if sufficient funds can be accessed through primary market window of the Nigeria capital market. It is against the forgoing that this study seeks to examine the impact of the new issues market on agricultural productivity in Nigeria from 1990 to 2009. The study adopted the two variable model and the results reveals that the new issue market had positive and significant impact on agricultural output productivity in Nigeria. The study thus recommends relaxation of stringent conditionalities observed in accessing fund from the capital market should be relaxed especially for agricultural firms. This will encourage firms to tap from the opportunities in the capital market to increase productivity and output.

Keywords: New issues market, Agricultural productivity, Nigerian Economy

1.0 Introduction

The growth of the agricultural sector in Nigeria has remained a major problem in spite of policies put in place by government to provide the sector with varying windows of investible funds, a major one of which is the capital market. Access to surplus funds by real sector firms from the capital market has been constrained due to stringent listing requirements and conditionalities, lack of depth and breadth of the market to cater for the need of real sector firms among other problems (Okafor, 1984).

The listing requirement as contained in the green book of the Nigerian Stock Exchange is documents setting out in detail the terms and conditions to be fulfilled by firms before listing. The conditionality for listings both for the first-tier as well as the second-tier such as; provision of trading record of the applicants; submission of last audited figures not more than nine months; not less than 25% of the issued share capital (first-tier) and 10% (second tier) available to the public; payment of annual quotation fees; amount to be raised depending on the borrowing power of the firms; regular submission of annual statements and accounts and limitations of number of shareholders among other conditionalities restrict firms' ability to raise funds through the capital market mechanism. In addition to the above, firms make a general undertaking to be signed and constantly fulfilled by the applying firms consenting to provide the exchange on a regular basis all pertinent information about its performances and expectations. These requirements are perceived by firms as too stringent thus most firms opt not to be listed and had remained private firms. Hence, the advantages which the capital market provides in terms of fund raising and capital formation are not passed on to these firms. This has limited the growth of these firms.

It is against the forgoing that this study seeks to examine the impact of the new issues market on Agricultural productivity in Nigeria. The remainder of this study is subsequently divided in four sections. Section two review related literature in this area of finance. Section three contains the methodology. Section four presents and analyzes the data while section five concludes and recommends.

2.0 Review of Related Literature

A strong and an efficient agricultural sector would enable a country to feed its growing population, generate employment, earn foreign exchange and provide raw materials for industries. The agricultural sector has a multiplier effect on any nation's socio-economic and industrial fabric because of the multifunctional nature of agriculture (see, Ogen, 2007).

The study of economic history provides us with ample evidence that an agricultural revolution is a fundamental pre-condition for economic development (see, Eicher and Witt, 1964; Oluwasanmi, 1966; Jones and Woolf, 1969).

The agricultural sector has the potential to be the industrial and economic springboard from which a country's development can take off. Indeed, more often than not, agricultural activities are usually concentrated in the less-developed rural areas where there is a critical need for rural transformation, redistribution, poverty alleviation and socio-economic development.

From the standpoint of occupational distribution and contribution to the GDP, agriculture was the leading sector. During this period Nigeria was the world's second largest producer of cocoa, largest exporter of palm kernel and largest producer and exporter of palm oil. Nigeria was also a leading exporter of other major commodities such as cotton, groundnut, rubber and hides and skins (see, Alkali, 1997). The agricultural sector contributed over 60% of the GDP in the 1960s and despite the reliance of Nigerian peasant farmers on traditional tools and indigenous farming methods, these farmers produced 70% of Nigeria's exports and 95% of its food needs (Lawal, 1997).

The agricultural sector suffered neglect during the hey-days of the oil boom in the 1970s. Ever since then Nigeria has been witnessing extreme poverty and the insufficiency of basic food items. Historically, the roots of the crisis in the Nigerian economy lie in the neglect of agriculture and the increased dependence on a mono-cultural economy based on oil. The agricultural sector now accounts for less than 5% of Nigeria's GDP (Olagbaju and Falola, 1996). Agriculture (including hunting, forestry and fishing) contributed an estimated 32% of Gross Domestic Product (GDP) in 1998 to the Nigerian economy. An estimated 35.2% of the labour force was employed in the sector in that year. The principal cash crops are cocoa (which accounted for only 0.7% of total merchandise exports in 1995), rubber and oil palm. Staple foods include rice, maize, taro, yams, cassava, sorghum and millet. Timber production, the raising of livestock (principally goats, sheep, cattle and poultry), and artisanal fisheries are also important. According to World Bank estimates, agricultural GDP increased at an annual rate of 2.9% in 1990-98.

However, the empirical work that established the growth-finance link is King and Levine (1993), which extended the cross-country framework introduced in Barro (1991) by adding financial variables such as the ratios of liquid liabilities or claims on the private sector to gross domestic product (GDP) to the standard growth regression. They found a robust, positive, and statistically significant relationship between initial financial conditions and subsequent growth in real per capita incomes for a cross-section of about 80 countries. In the subsequent decade numerous empirical studies expanded upon this, using both cross-country and panel data sets for the post-1960 period (see Levine, 1997; Levine, 2005; Temple, 1999).

Most existing literature on relationship between the capital market and the economy has focused on the contributions of the financial intermediaries to economic growth (World Bank (1989), in fact, Levine (1997) and Liu (1998) and numerous empirical tests have shown that financial variables have important impact on economic growth. However, recently the emphasis increasingly shifted to stock market indicators due to the increasing role of financial markets in different economies.

For example, Atje and Jovanovic (1993) tested the hypothesis that the stock markets have a positive impact on growth performance. They find significant correlations between economic growth and the value of stock market trading divided by GDP for 40 countries over the period 1980-88 similarly, Levine and Zervos (1996, 1998) and Singh (1997) show that stock market development is positively and robustly associated with long-run economic growth.

In addition, using cross-country data for 47 countries from 1976-93, Levine and Zervos (1998) find that stock market liquidity is positively and significantly correlated with current and future rates of economic growth, even after controlling for economic and political factors. They also find that measures of both stock market liquidity and banking development significantly predict future rates of growth. They, therefore, conclude that stock markets provide important but different financial services from banks.

Furthermore, using data from 44 industrial and developing countries from 1976 to 1993, Demircuc-Kunt and Levine (1996a) investigate the relationships between stock market development and financial intermediary development. They find that countries with better-developed stock markets also have better-developed financial

intermediaries. Thus, they conclude that stock market development goes hand-in-hand with financial intermediary development.

Existing models suggest that stock market development is a multifaceted concept, involving issues of market size, liquidity, volatility, concentration, integration with world capital markets, and institutional development. Using data on 44 developed and emerging markets from 1976 to 1993, Demirguc-Kunt and Levine (1996a) find that large stock markets are more liquid, less volatile, and more internationally integrated than smaller markets. Furthermore, institutionally developed markets with strong information disclosure laws, international accounting standards, and unrestricted capital flows are larger with more liquid markets.

Theories also point out a rich array of channels through which the stock markets such as market size, liquidity, integration with world capital markets, and volatility may be linked to economic growth. For example, Pagano (1993) shows the increased risk-sharing benefits from larger stock market size through market externalities, while Levine (1991) and Bencivenga, Smith, and Starr (1996) show that stock markets may affect economic activity through the creation of liquidity. Similarly, Devereux and Smith (1994) and Obstfeld (1994) show that risk diversification through internationally integrated stock markets is another vehicle through which the stock markets can affect economic growth.

3.0 Methodology

The research design adopted for this study is the *ex-post facto* research design. The adoption of this research design hinges on two reasons. Firstly, the study relied on historic data obtained from the Security and Exchange Commission statistical bulletin from 1990 – 2009. The inability of the researcher to manipulate these variables is a basic feature of *ex-post facto* research design (Onwumere, 2005). Secondly, as described by Kerlinger (1970), the *ex-post facto* research design also called causal comparative research is used when the researcher intends to determine cause-effect relationship between the independent and dependent variables with a view to establishing a causal link between them.

A firm that is listed on the stock exchange raises fund through the new issues market, the funds paid by investors for the newly issued shares goes directly to the firm. A new issues market, therefore, allows a company to tap a wide pool of investors to provide it with capital for future growth, repayment of debt or working capital, performing intermediation function of fund mobilization and allocation. Also firms selling shares is never required to repay the capital to investors. Once a company is listed, it is able to issue additional common shares via a secondary offering, thereby again providing itself with capital for expansion without incurring any debt. This ability to quickly raise large amounts of capital from the market is a key reason many companies seek to go public. In this, the ability of real sector firms to raise fund from the capital is a prerequisite for growth.

The interest in this study is on the impact of new issues market on agricultural productivity in Nigeria from 1990 to 2009. The Beck, Demirguc-Kunt, Levine and Maksimovic (2001) and Levine (2000) growth function model was adopted to test the impact of new issues market on agricultural productivity in Nigeria. The new issues ratio was used to proxy new issues and it was computed as:

$$nir = \text{new issues/ gross domestic product} \dots\dots\dots (i)$$

Agricultural productivity was measured by agricultural GDP contribution and was computed as:

$$Agdp = \text{Agriculture contribution to gdp/ gdp} \dots\dots\dots (ii)$$

Given the above, I hypothesize that the new issue ratio of the Nigerian Capital Market does not have positive significant impact on agricultural productivity in Nigeria, the relevant model is represented as;

$$Agdp = \beta_0 + \beta_1nir + \mu \dots\dots\dots (i)$$

where;

$$Agdp = \text{Agricultural output}$$

$$\beta_0 = \text{Equation constant}$$

β ,	=	Coefficient of the explanatory variable
nir	=	New Issue ratio
μ	=	Error term which takes care of other variables which might affect the behaviour of the model

4.0 Presentation and Analysis of Data

4.1 Presentation of Data

Table 4.1 presents quantum data for the study

Table 4.1 Presentation of General Data for the Study from 1990-2009

Year	Nis (N,m)	Agrp (N,m)
1990	9,964.50	84,344.60
1991	1,870.00	87,503.50
1992	3,306.30	89,345.40
1993	2,636.90	90,596.50
1994	2,161.70	92,833.00
1995	4,425.60	96,220.70
1996	5,858.20	100,216.20
1997	10,875.70	104,514.00
1998	15,018.10	108,814.10
1999	12,038.50	114,570.70
2000	17,207.80	117,945.10
2001	37,198.80	122,522.30
2002	61,284.00	190,133.40
2003	180,079.90	203,409.90
2004	195,418.40	216,208.50
2005	552,782.00	231,463.60
2006	707,400.00	248,599.00
2007	1,935,080.00	266,477.20
2008	1,509,230.00	283,913.10
2009	700,304.00	359,939.20

Source: CBN Statistical Bulletin Various Years, Nigeria Stock Exchange Bulletin Various Years, SEC Nigeria Capital Market Bulletin 2010.

Note:

Nis	=	New Issue
Agrp	=	Agricultural Output

From table 4.1, the new issue market of the Nigerian capital market has show a steady increase in primary market activity. Though, the activities in the market did not actual show much activity until 2005, it however has been increasing as a source of fund for firms listed on the exchange. In 1990, it was N9, 964.5million and in 1991, activities in the new issue market fell by 81.23% from the previous year figure to N1, 870million. It took the market from 1992 to 1997, to rebound just above the figure of 1990.

The total amount raised through the new issue market was N3, 306.3million, N2, 636.9million, N2, 161.7million, N4, 425.6million, N5, 858.2million and N10, 865.7million in 1992, 1993, 1994, 1995, 1996 and 1997 respectively, indicating a percentage increase of 76.81%, -20.25%, -18.02%. 104.73%, 32.37% and 85.65% increase

respectively. The market improved again in its' ability to raise fund in 1998, when the market was able to raise N15, 018.1million revealing a percentage increase of 38.09% from the previous year figure. In 1999, the market activities fell by 19.84%, the market was able to raise N12, 038.5million, a decrease of N2, 979.6million as against the previous year figure. The new issue market from 2000 continued to attract investors and a steady increase was witnessed culminating to a market activity of N1, 935, 080million raised in 2007.

However, in 2008 and 2009, activities in the new issue market slowed as the market was able to raise to N1, 509, 230 and N700, 340 indicating a decrease of N425, 850million and N808, 926million respectively 225 and 53.6% decrease from the previous year figures. Agricultural output of the Nigerian economy has been steadily increasing from 1990 to 2009. In 1990 it was N84.344.6million, and from 1991 to 1998, the growth of the agricultural output of the Nigerian economy hovered between 1% to 4% increases yearly. The In 1999, agricultural output rose by 5.29% to N114, 570.7million however, the increase was not sustained as it increased by 2.95% in 2000 and a further increase by 3.88% in 2001. In 2002, agricultural output of the Nigerian economy had it highest increase for the period of this study when it rose by 55.18% to N190, 133.4million. The following showed a slow increase of 6.98%. The single digit increase in agricultural output was sustain from 2003 to 2008 where the agricultural output has been N203, 409.9million, N216, 208.5million, N231, 463.6million, N248, 599million, N266, 477.2million and N283, 913.1million respectively. In 2009 agricultural output increased at a two-digit figure where it increased by 26.78% to N359, 939.2million in 2009 from the previous year.

Table 4.2 presents the ratio values of the model

Table 4.2: New Issue Ratio and Agricultural Productivity in Nigeria 1987-2010

Year	Nir (new issues/gdp)	Agrp (agricultural gdp/gdp)
1990	0.037244	0.315248
1991	0.007047	0.32973
1992	0.012184	0.329244
1993	0.009595	0.329642
1994	0.007848	0.337022
1995	0.015727	0.341927
1996	0.019943	0.341167
1997	0.03601	0.346047
1998	0.048307	0.350008
1999	0.038562	0.366998
2000	0.052275	0.358301
2001	0.1042	0.343205
2002	0.141467	0.438901
2003	0.377105	0.42596
2004	0.370408	0.409815
2005	0.983718	0.411907
2006	1.187268	0.417237
2007	3.050968	0.420145
2008	2.236264	0.420681
2009	0.971131	0.499138

Source: Excel Spreadsheet Computation

Note:

Nir = New Issue ratio

Agrp = Agricultural Output

From table 4.2, it evident that, the measure of central tendency as measured by the mean of new issues ratio was 53.6%. This value is above average. The median which measures the middle point was 0.043. The maximum value of the new issue ratio is 3.148 which were observed in 2010 and the minimum value recorded in 1998. The result indicates that the lowest impact of new issue on the Nigerian economy was felt in 1998 while the highest impact was in 2010. The risk as measured by the standard deviation of the new issue ratio is 0.95. Agricultural output of the Nigeria economy witnessed its highest contribution to Nigeria's gross domestic product in 2010 (53.3%) while the least contribution of the agricultural sector to the Nigerian economy was in 1990 where the contribution of agriculture to the Nigerian economy was 31.5%. The mean as revealed from the table was 0.378, which indicates that the contribution of agriculture to the Nigerian Economy is at 37.8%.

4.2 Analysis of Results

Table 4.3 Regression Result

Dependent Variable: AGDP				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
NIR	0.043920	0.008569	5.125571	0.0000
C	0.355432	0.009232	38.49851	0.0000
R-squared	0.544244	Mean dependent var		0.378978
Adjusted R-squared	0.523528	S.D. dependent var		0.056837
S.E. of regression	0.039233	Akaike info criterion		-3.558944
Sum squared resid	0.033863	Schwarz criterion		-3.460773
Log likelihood	44.70733	F-statistic		26.27147
Durbin-Watson stat	1.228939	Prob(F-statistic)		0.000039

Source: E-view Results

As revealed from table 4.3, the impact of the new issue ratio on agricultural output is positive and significant (coefficient of NIR = 0.044, t-value = 5.125). This indicates that an increase of a one percent increase in agricultural output is due to 0.043 increases in new issue of the Nigerian capital market. The probability value of $0.00 < 0.05$ indicates that this is significant. On the whole the coefficient of determination as revealed by R-square (R^2) indicates that 0.544 of the variations observed in the dependent variable were explained by variations in the independent variable. This is quite high considering that the ability of investors to influence the growth of the agriculture sector of the Nigerian economy is not solely dependent on their ability to raise fund from the Nigerian capital market. The test of goodness of fit as indicated by R^2 was properly adjusted by the Adjusted R-Square of 0.523. On the whole, the overall probability (F-statistics) is 0.000 which is less than 0.05 properly explains the significance of the model.

5.0 Conclusion and Recommendations

The size of the market determines cost of transactions and constitutes an inducement to investors in the capital market. When a firm listed on the exchange raises fund through the new issues market, the money paid by investors for the newly issued shares goes directly to the company in contrast to a later trade of shares on the exchange, where the money passes between investors. A new issues market, therefore, allows a company to tap a wide pool of investors to provide it with capital for future growth, repayment of debt or working capital. A company selling common shares is never required to repay the capital to investors. Once a company is listed, it is able to issue additional common shares via a primary offering, thereby again providing itself with capital for expansion without incurring any debt. This ability to quickly raise large amounts of capital from the market is a key reason many companies seek to go public.

There are several benefits to being a public company, however, significant legal, accounting and marketing costs; requirement for disclosure of financial and business information; time, effort and attention required of senior management to attend to the Stock Exchange rules and regulations; risk in obtaining required funding; public dissemination of information which may be useful to competitors, suppliers and customers are some of the problems faced by real sector firms hence their inability to raise funds from the market. The second tier market of the Nigeria Stock Exchange provides opportunities for most agricultural firms to get listed. It was against this

window that this study sought to examine the impact of new issues market on agricultural productivity in Nigeria from 1987 to 2010. Result emanating from this study suggests that the impact of the new issue ratio on agricultural output is positive and significant. This indicates that an increase of a one percent increase in agricultural output was due to increases in new issue ratio of the Nigerian capital market.

The new issues market allows firms to tap a wide pool of investors to provide it with capital for future growth, repayment of debt or working capital, performing intermediation function of fund mobilization and allocation, thus the stringent conditionalities observed in accessing fund from the capital market should be relaxed especially for agricultural firms. This will encourage firms to tap from the opportunities in the capital market to increase productivity and output.

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