CAPITAL MARKET GROWTH AND EQUITY FINANCING OF QUOTED SMALL AND MEDIUM SCALE ENTERPRISES IN NIGERIA

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ABSTRACT

This study examined the effects of capital market growth on equity financing of quoted small and medium scale enterprises in Nigeria. In carrying out this research, a panel data was used with the adoption of ex-post facto design. Secondary data were extracted from the annual reports and accounts of the ten quoted small and medium firms for the period 2009 to 2018. The study has equity capital of small and medium scale enterprises as the function of market liquidity, transaction cost, and market turnover and market size. The study found that market liquidity and market size have positive and not significant effects while market turnover and transaction cost have negative and not significant effects on equity financing of quoted Small and medium scale enterprises in Nigeria. We conclude that capital market have no significant effect on equity financing of quoted small and medium scale enterprises. There need to set up a system to ensure that small and medium scale enterprises comply with regulatory requirements cum compliance with regulatory requirements should be monitored more closely. A special team for direct monitoring of small and medium scale enterprises compliance could be set up. However, proportional and lighter regulation for small and medium scale enterprises does not mean that supervision should also be lighter for small and medium scale enterprises.

Keywords: Capital market growth, equity financing, market liquidity, transaction cost, market size and market turnover

INTRODUCTION

Small and medium enterprises contribute to the business growth and economic

development of Countries; however, the funding of small and medium enterprises is fundamental to this growth and development (Neagu, 2016). Financing small and medium enterprises in Nigeria is necessary for encouraging enterprises development (Gbandiand Amissah, 2014). Small and medium enterprises are an important part of Nigeria's economy and account for approximately 96% of the country's businesses. A developing country like Nigeria requires sustained economic growth, and paying attention to the small and medium enterprises sector is essential to harnessing the potential of the small and medium enterprises for greater output diversification. Small and medium enterprises in Nigeria are classified according to capital involved, revenue, and the number of workers. One of such classification of a small and medium enterprises is an enterprise with an asset base (without land) of between N5 million to N500 million and with a labor force of between 11 and 300 employees. Sufficient capital needed to stay in business is often unavailable to small and medium enterprises in Nigeria, and they are often forced to close shops because they are not able to access the necessary funds. Banks find it challenging to cover the high costs of credit associated with lending to small and medium enterprises because of the weak capital base, poor financial records of small and medium enterprises, and market competition.

The Securities and Exchange Commission (SEC) had recently put together a package of reforms. According to Oteh (2014), one of them, of course, is working with the Nigerian Stock Exchange (NSE) to revamp the second and third-tier securities markets. Equity finance is limited especially for SMEs without strong growth prospects (Oluwajobaand Oluwagbenga, 2005). However, interest in upper-tier SME investment by other private equity has increased in recent years, as low interest rates have pushed investors to seek yields and diversification within their portfolios (Cusmano, 2015). Small and Medium Enterprises are heterogeneous in terms of size; growth potential; formalization; stage of development; industry; and owners' motives, ability and sophistication and these affect their potential to access and work with different types of external financiers.

Access to affordable long-term finance is one of the biggest barriers to development of small and medium enterprises, which are the main source of jobs and incomes for the population of Nigeria. In the past four decades, innovations in delivery of microfinance have partly alleviated this problem among micro enterprise operators, especially in densely populated urban areas.

However, in Nigeria, growth oriented small and medium enterprises face a momentous challenge of raising capital. Debt finance is not only expensive and difficult to get, but also inconvenient given the relatively short maturities of loans. Formal equity finance in Nigeria is grossly underdeveloped. Yet, it offers an opportunity for SMEs to raise capital, share risks, complement knowledge and skills.

Many reasons have been put forth to explain why it is difficult for SMEs to access and use equity finance from capital market. Part of the problem is that the private equity industry has not sufficient adapted to the local institutional environment in developing economies like Nigeria. The venture capital model relies on expensive investment analysts and fund managers, which necessitates investment thresholds that are too high for virtually all small and medium enterprises. Traditional equity funders also expect a certain level of governance and managerial capacities in the investee, and a readiness to share business information and ownership with other investors. Financing of small and medium scale enterprise has long been a research interest, however, studies such as Olowe (2016) examined the effect of small and medium financing on the growth of the industry, the effect of capital market growth on the equity financing of small and medium scale enterprises is lacking in literature, therefore this study examined the relationship between capital market growth and equity financing of quoted small and medium scale enterprises in Nigeria.

LITERATURE REVIEW

Equity Financing

Equity finance refers to the sale of an ownership interest to raise funds for business purposes. In order to grow, any company will face the need for additional capital, which it may try to obtain through debt or equity. If the company opts for equity, the owner sells a stake to others. During early growth stages of a company, especially when the company does not have sufficient equity financing can provide capital from investors who are willing to take risks along with the entrepreneur (Berger &Udell, 1998). Similarly, when a company has prospects of explosive growth, it can raise substantial capital through equity financing. Various types of equity financing are available. Equity investors may combine equity with convertible debt or straight debt. This is done either as a form of extended due diligence, or to meet cash flow requirements while limiting dilution of the principal owner's shareholding.

Shares are the universal and typical forms of raising capital from the capital market. The capital of a company is divided into certain units of a fixed amount. Share' means a share in the share capital of a company. It includes stock except where a distinction between stock and share is expressed or implied. Stock is merely a name for the aggregate ownership of a company, which is divided into a number of units, each unit called a share1.The holders of common stock are called shareholders or stockholders. The capital represented by common shares is called share capital or equity capital. Authorized share capital represents the maximum amount of capital, which a company is permitted to raise from shareholders. A Company may however change its authorized share capital by altering its Memorandum of Association.

Capital Market Growth

Stock market growth may influence corporate control. Jensen and Murphy (1990) show that efficient stock markets help mitigate the principal-agent problem. Efficient stock markets make it easier to tie manager compensation to stock prices. This helps align the interests of managers and owners. Furthermore, Laffont and Tirole (1988) and Scharfstein (1988) argue that takeover threats induce managers to maximize the firm's equity price. Thus, well-functioning stock markets that ease corporate takeovers can mitigate the principal-agent problem and promote efficient resource allocation and growth.

Opinion differs on this issue too. Stiglitz (1985) argues that outsiders will be reluctant to take over firms because outsiders generally have worse information about firms than existing owners. Thus, the takeover threat will not be a useful mechanism for exerting corporate control; stock market development, therefore, will not importantly improve corporate control Stiglitz (1985).

Indicators of Capital Market Growth

Turnover Ratio: Liquidity is the ease and speed with which economic agents can buy and sell securities. With a liquid market, the initial investors do not lose access to their savings for the duration of the investment project because they can easily, quickly, and cheaply, sell their stake in the company. Thus, more liquid markets could ease investment in long term, potentially more profitable projects, thereby improving the allocation of capital and enhancing prospects for long-term growth. The ratio measures the market liquidity which is usually given as total value of shares traded divided by total value of listed shares or market capitalization. Beck and Levine (2004) prefer this measurement to other measurement of stock market variables. This is because unlike other measures,

the numerator and denominator of turnover ratio contain prices.

Total Value of Shares Traded Ratio: Rousseau and Wattle (2000) and Beck and Levine (2004), used this measurement and it is given as the ratio of total value of shares traded to GDP. It measures the degree of trading relative to the size of the economy. Therefore, it reflects stock market liquidity on an economy wide basis.

Market Capitalization Ratio: Capital Market capitalization refers to the total naira market value of a company's outstanding shares. Commonly referred to as market cap is calculated by multiplying a company's shares outstanding by the current market price of one share, the investment community uses this figure to determine a company's size, as opposed to using sales or total asset figures (Osinubi, 2004). In this study, capital market capitalization is measured in relationship to Broad Money Supply which signifies percentage of Broad Money Supply that is invested in the Nigeria capital market.

Capital Market Liquidity

Liquidity is used to refer to the ability of investor to buy and sell securities easily. It is an important indicator of stock market development because it signifies how the market helps in improving the allocation of capital and thus enhancing the prospects of long-term economic growth. This is possibly reducing the risk of their investment and facilitating investments in projects that are more profitable though with a long gestation period. Two main indices are often used in the performance and rating of the market: total value traded ratio; and turnover ratio. Total value traded ratio measures trading of equities as a share of national output, turnover ratio is used as an index of comparison for market liquidity rating and level of transaction costs. This ratio equals the total value of shares traded on the stock market divided by market capitalization (Osinubi, 2004).

The Pecking Order Theory

Adherence of SMEs to a pecking order of finance is dependent on the sources of finance available at the time of the investment decision, which is typically dependent on the age and stage of development of the firm. Therefore, it is necessary to incorporate the financial growth lifecycle approach into consideration of agency and pecking order theories (POT hereafter). Myers (1984) and Myers and Majluf (1984) proposed the POT based on the premise that 'inside' management are better informed of the true value of the firm than 'outside' investors. When financing investment projects, firms seek to use sources

of funds least susceptible to undervaluation due to information asymmetries. Thus, the POT predicts that firms have a preference to finance investment projects with internal equity. When internal equity is exhausted, firms use debt financing before resorting to external equity.

The Agency Theory

The agency theory provides a different perspective. Jensen and Meckling (1976) outlined a number of potentially costly principal agent relationships in publicly quoted corporations that 16 may arise because the agent does not always conduct business in a way that is consistent with the best interest of the principals. The firm's security holders (debt holders and stockholders) are seen as principals and the firm's management as the agent, managing the principals' assets. Whilst a number of these relationships are relevant for SMEs, the primary agency conflict in small firms is generally not between owners and managers, but between inside and outside contributors of capital (Hand et al., 1982).

The Capital Constraint Model

The capital constraint model describes the behavior of banks restrain to gives out loans to SMEs because of the limitation of available financial recourses banks. According to Obamuyi (2007), banks are subjected to both market- and regulator –imposed capital requirements. For prudential purposes, banks regulators generally require banks to maintain capital at not less than a stated fraction of the bank's total assets. For instance, banks are expected to meet the capital adequacy 19 requirement of the Basel Accord of ten per cent. Early empirical work on financial constraints explored the investment behavior of firms and its sensitivity to changes in internally generated funds.

Empirical Review

Anymaobi and Lucky (2017) examined corporate characteristics and value creation of quoted manufacturing firms in Nigeria. The objective was to examine if factors within the control of management affects corporate value. Cross sectional data was sourced from financial statement of twenty quoted manufacturing firms. Market value was proxy for dependent variable while asset tangibility, return on investment, risk, liquidity, firm size, debt equity ratio, dividend payout ratio, retention ratio, corporate governance, management efficiency and cost of capital was proxy for independent variables. After cross examination of the validity of the pooled effect, fixed effect and the random effect, the study accepts the fixed effect model. Findings reveals that assets

tangibility, return on investment, debt equity ratio, retention ratio, management efficiency and cost of capital have positive effect on the market value of the quoted manufacturing firms while risk, liquidity, firm size and corporate governance have negative effect on the market value.

Lucky, Akani and Anyamobi (2015) examined the prudential determinant of stock prices of commercial banks in the Nigeria: application of the fundamentalists and macroeconomic view from 1980 – 2014. The study used aggregate value of end of the year stock prices of the commercial banks as dependent variables. The micro prudential variables are ratio of retain earnings, ratio of dividend payout, profitability, and commercial banks capital to total assets, lending rate and bank size while the macro prudential variables are monetary policy rate, inflation rate, all share price index to gross domestic product, real gross domestic product, exchange rate and broad money supply. The Ordinary Least Square Method of Co-integration test, Augmented Dickey Fuller Unit Root Test, Granger Causality test and Vector Error Correction Model was used to examine the nature of relationship that exist between the dependent and the independent variables in the regression models. The study found that all the micro prudential variables have positive effects on the stock prices of the commercial banks except lending rate. The model summary shows a strong relationship between the dependent and the independent variables with an R2: 69.4% explained variation, 12.43051 overall significant and the probability of 0.000004, from the micro prudential variables while the macro prudential variables revealed an R2 of 52.0% explained variation, 8.788310 over significant and probability of 0.000004, this proved that the micro prudential variables have positive and significant relationship while macro prudential variables exhibits positive average and significant relationship with stock prices in Nigeria. The findings validate fundamentalist and macroeconomic view.

Bains, Wooder, and Guzman (2014) examined VC funding patterns of biotechnology corporations, from which a startup today may require little VC funding. Venture capital funding led SMEs to conclude that the era of biotech start-ups funding was over outside the USA (Bains et al., 2014). The company's financial records showed adoption of economic models based on angel investment, grants, and revenue, moving away from business models that needed substantial investment (Bainset al., 2014). TheVC virtually fled from backing up new companies of biotech start-ups in Europe, particularly in the UK (Bainset al., 2014). The trend of flight of VC could increase because internet-mediated

angel investing, such as crowd-funding arrangements explored other sectors as evolving force in the next decade (Bains et al., 2014). Firms assembled ideas from customers for transformation and integration into the early stages of the innovation process (Guardo&Castriotta, 2014).

Guardo and Castriotta (2014) examined three crowd sourcing models: contest, collaborative, and moderated. In an open innovation paradigm, small firms could use internal and external concepts during the innovation development (Guardo & Castriotta, 2014). Explanations for the increased importance of markets for technologies were emerging in various industries while the need for crowd sourcing is evolving (Guardo & Castriotta, 2014).The survey of SBA of 2003 indicated security increase to lenders by 90% (Geho &Frakes, 2013). Elimination of fees encouraged SMEs interest to borrow and banks interest in lending to SMEs (Geho&Frakes, 2013). Access to capital with highly attractive terms and the environment created demand for funds by a small business community (Geho&Frakes, 2013; Krishnan, Nandy, &Puri, 2014). South Africa adopted business incubation as one vehicle for upgrading the SMME sector (Masutha&Rogerson, 2014). Masutha and Rogerson noted that 67% of mainstream SMMEs leaders financed their start-up businesses from private or family savings, while 33% funded through bank credits. Masutha and Rogerson also noted that 90% of the SME entrepreneurs reluctantly joined the incubation program (Masutha&Rogerson, 2014).The World Bank account reported that 15% of the small business in Malawi used bank financing, which was higher than the 10% of firms using bank funding in the Sub-Saharan Africa (L. R. Caceres & Caceres, 2015; Mulaga, 2013).

Hoque, Sultana, and Thalil (2016) examined the credit rationing of SMEs in the city of Chittagong, Bangladesh using a sample of 200 SMEs. The Bangladesh government established an SME Foundation (SMEF) in 2007, to support in promoting the financing of SMEs to grow to their full potential (Hoqueet al., 2016). The Central Bank of Bangladesh encourages lending to SMEs through a refinancing window for business directly involved in the SME sector (Hoqueet al., 2016). The outcome of the study revealed that 89 % of the SMEs obtained loans from microfinance institutions, while 60 % obtained credits from the banks, and 48 % obtained less than desired to obtain (Hoqueet al., 2016).Taiwo, Yewande, Edwin, and Benson (2016) explored the roles of microfinance banks on SMEs and the benefit derived from the credit scheme of microfinance banks.
Taiwoet al. (2016) interviewed 15 SMEs leaders across Lagos state in Nigeria.

They indicated that the recapitalization of microfinance banks in Nigeria would improve the capacity to granting credit to SME for growth and development. Hoqueet al. (2016) noted that improving the accessibility of credit facility to SMEs was significant to the development of SMEs in Bangladesh. Erdog an (2015) examined firm-level determinants of the funding sources and structure of operational funds of Turkish SMEs (Erdog an, 2015). Erdog an used a crosssectional data set of 1,278 SMEs for the year 2013. Larger firms and businesses with international standard quality certification had a lower proportion of working capital from internal sources (Erdog an, 2015).

Adel, Tarek, Affes, and Jarboui (2016) examined VC as a source of financing SMEs in Tunisia. Tunisia created an Investment Company with VC called SICARs. The motivation for VC financing was because new businesses often found it difficult to obtain loans from commercial banks (Abe, 2015; Abdulazeez, Suleiman, &Yahaya, 2016; Adel et al., 2015; Bomyr&Wabo, 2015; Oke& Aluko,2015).

Popa and Ciobanu (2014) examined the financial factors that affected the functionality and profitability of SMEs in Romania, taking into consideration the financial indicators from 2009 to 2012 on investment capital and profitability. The SMEs contributed significantly to the developments of the SME sector and the economy, which characterized about 99% of all businesses in Romania, provided around 50% of GDP and approximately 65% of employment (Neagu, 2016; Popa&Ciobanu, 2014).

KumarandRao (2015) examined the funding preferences of SMEs and what influences the financing decisions of SMEs in India. The inadequate finance faced by SMEs was a result of demand and supply gap (Kumar &Rao, 2015). There was also a lack of information on the accessibility to sources of finance and the unwillingness of financial institutions to provide SMEs with funding (Kumar &Rao, 2015). Kumar and Raoproposed a conceptual framework that could analyze the financing preferences of SMEs, through incorporating the fundamentals of capital structure theories elements.

Literature Gap

Nosa and Ose (2010) also found that STD has a positive impact of the corporate performance. This study does include capital market indices but dealt with debt financing and performance of quoted small and medium scale enterprises. The

present study will focus on the relationship between capital market indices and equity financing of quoted Small and medium scale enterprises in Nigeria. Patel & Bhatt (2013) examined the impact of the capital structure on the performance of the firm. Also this study does include capital market indices but dealt with debt financing and performance of quoted small and medium scale enterprises using multiple regression. The present study will focus on the relationship between capital market indices and equity financing of quoted Small and medium scale enterprises in Nigeria employing a panel data regression analysis

METHODOLOGY

This study adopted the ex post facto design. This research design is preferred when the goal is to establish cause and effect relationships using quantitative method. It is also useful in modeling positivist research paradigm where the study assumes to be distinct from the researcher and the outcome of the research is free from bias and subjectivism. The population of this study consists of all the listed Small and Medium Scale Enterprises listed on the Nigerian Stock Exchange and have complete financial records on their websites or Nigerian Stock Exchange for the period of 2010 – 2018. As at 31st December 2018, ten listed small and medium scale enterprises are listed and all the ten firms have their financial statements available either on their website or available at the Nigerian Stock Exchange throughout the study period. This study used secondary sources of data collection. The data was obtained from the annual reports and accounts of the ten (10) listed small and medium scale enterprises in Nigeria Stock Exchange (NSE) for the period 2010 to 2018 and Central Bank of Nigeria Statistical Bulletin, various issues

The regression models are presented as follows;

$$EQC = b_0 + b_1MS + b_2MTR + b_3TC + b_2EP + b_3MLIQ + \mu \quad \text{..... (1)}$$

Pooled regression specification

$$EQC = a_0 + a_1MS + MTR + a_3TC + a_4EP + a_3MLIQ + eL_{it} \quad \text{..... (2)}$$

Fixed Effect Model Specification

$$EQC = a_0 + a_1MS + MTR + a_3TC + a_4EP + a_3MLIQ + \sum_{i}^{9} = 1a_i idume1_{it} \quad ...(3)$$

Random effect model specification

$$EQC = a_0 + a_1MS + MTR + a_3TC + a_4EP + a_3MLIQ + m_i + e1_{it} \quad ....(4)$$

Where,

EQC	=	Equity capital to total capital of the quoted SMEs
MS	=	Market size
MTR	=	Market turnover
TC	=	Transaction cost
MLIQ	=	Market liquidity
e1	=	Stochastic or disturbance / error term.
t	=	Time dimension of the variables
a_0	=	Constant or intercept

Prior Expectation of the Result

The a-priori expectation of the variables proposes that an increase in the explanatory variables lead to increase in the dependent variables equity financing of small and medium scale enterprises. Therefore it can be mathematical stated as follows:- a1,a2,a3 a4.>0.

Technique for Data Analysis

In order to determine the best choice of analysis technique, the study run three types of regression; Ordinary Least Square (OLS), Fixed Effect and Random Effect regression. All these methods have various assumptions and conditions that must be fulfilled in order to achieve efficient estimates. However, the best techniques were decided by the Hausman Specification test (either fixed effect or random effect regression) and Lagrangian Multpiplier Test (either random effect or OLS). The random effect has the advantage of accounting for the panel effect in the data as opposed to OLS, which pools the data and treats it as if it were obtained from a single entity. In order to achieve reliability of the result, robustness tests like Multicolinearity test, Hausman test, Lagrangian multiplier test for random effect and Heteroscedasticity test will be conducted.

T-test The t-test was used to test the hypothesis that a particular coefficient is significantly different from zero or whether the estimated coefficient value occurred by chance in equation (2). The tests were performed at both 95% and 99% levels of confidence.

F-test

The F-statistic is important to test the hypothesis that the whole relationship

provided by the equation (2) is significantly different from zero, i.e. whether the independent variables' characteristics scores explain the variation in growth indicators for each of the individual firms. The test was performed at both 95% and 99% levels of confidence.

R^2 - Change The R-squared (R^2) value ranging from '0' to '1' or the 'corrected R-squared' (R^2) which is adjusted for degrees of freedom indicates the explanatory power (goodness of fit) of the model.

Unit root test for stationarity test of time series

This involves testing whether a stochastic process is stationary or non-stationary and the order of integration of the individual series under consideration. Currently, the most accepted method for the testing for unit root is Augmented Dickey-Fuller (ADF) test due to Dickey and Fuller (1979, 1981), and the Phillip-Perron (1988) and Phillips (1987). One advantage of ADF is that it corrects for higher order serial correlation by adding lagged difference terms on the right hand side. It relies on rejecting a null hypothesis of unit root (the series are non-stationary) in favor of the alternative hypotheses of stationarity (Engel and Granger, 1987). The tests are to be conducted with and without a deterministic trend (t) for each of the series. For the purpose of this study, the ADF unit root will be adopted and the general form of ADF test to be estimated by the following regression:

$$y_t = a^0 + a^1 y^{t-1} + \sum_{i-1}^{n} a D y_i + e^t \qquad .....(5)$$

$$Dy_t = a_0 + a_1 y_{t-1} + \sum_{i-1}^{n} a_1 Dy_i + d_t + e^t \qquad .....(6)$$

Where Y is the time series, t is the linear time trend, ? is the first differential operator, a_0 is the constant, n is the number of lags in the dependent variable and e is the random error term.

Cointegration Test

For the cointegration test, the maximum likelihood test procedure established by Johansen and Juselius (1990) and Johansen (1991) will be used. In the test, if Yt is a vector of n stochastic variable then there exist a P-lag vector auto regression with Guassian errors. Johansen methodology takes its starting point in the vector auto regression (VAR) of order of P given by;

$$y_t = m + Dy_{t-1} - - - + DPy_{t-p} + e_t \qquad .....(7)$$

Where y_t is an (nX1) vector of variables that are integrated of order commonly denoted (1) and is an e_t(nx1) vector of innovations. In order to determine number of co-integration vectors, Johansen (1989) and Johansen and Juselius (1990) suggested two statistic tests, the first one is the trace test (trace). It tests the null hypothesis that the number of distinct cointegrating vector is less than or equal to q against a general unrestricted alternatives q=r the test calculated as follows:

$$l\ trace(r) = T \sum_{I=R+1} (In1 - l_t) \qquad .....(8)$$

T is the number of usable observations, and the bI is the estimated eigenvalue from the matrix. The second statistical test is the maximum eigenvalue test (b max) that is, calculated according to the following formula; max(r, r+1) = T In (1-br + 1). The test concerns a test of the null hypothesis that there is r of co-integrating vectors against the alternative that r +1 co-integrating vector.

Granger Causality Test

The test of cointegration ignores the effect of the past values of one variable on the current value of the other variable. So, the study will try the Granger causality test to examine such possibilities. Granger causality test whether lagged values of one variable predict changes in another, or whether one variable in the system explains the time path of the other variables (Granger, 1969). The test for Granger causality is performed by estimating equations of the following form;

$$Dy_t + a_0 + \sum_{i-1}^{m} a_{1,i} Dy_{t-i} + \sum_{i=o}^{m} a_{2,i} Dx_{t-1} + dECM_{t-1} + e_t \qquad .....(9)$$

$$Dy_t + b_0 + \sum_{i-1}^{m} b_{1,i} Dy_{t-i} + \sum_{i=o}^{m} b_{2,i} Dy_{t-1} + l\ ECM_{t-1} + m_t \qquad .....(10)$$

Where et and mt are white noise disturbance terms (normally and independently distributed), m is the number of lags necessary to induce white noise in the residuals, and $ECMt_{-1,}$ is the error correction term from the long-run relationship. x_t is said to Granger-cause y_t, if one or more a_2, i(i = 1, ….m) and d are statistically different from zero. Similarly, yt is said to Granger cause xt, if one or more $b_{2,i}$(i=1,m) and d are statistically different from zero. A feedback or

bi—directional causality is said to exist if at least $a_{2,i}$ and $b_{2,i}$ (i=1,m) or d and b are significantly different from zero. If on the other hand, $a_{2,0}$ and $b_{2,0}$ are statistically significant.

DATA ANALYSIS AND RESULTS

Table I: Presentation of Level Series Result

Variable	Pooled Effect			Fixed effect			Random effect		
	β coefficient	T. stat	p. value	β coefficient	T. stat	p. value	β coefficient	T. stat	p. value
MLIQ	0.145007	0.228437	0.8198	0.145007	0.252202	0.8014	0.145007	0.252202	0.8014
MS	0.043040	0.068867	0.9452	0.043040	0.076032	0.9396	0.043040	0.076032	0.9395
MTR	-0.576391	-0.782315	0.4358	-0.576391	-0.863702	0.3899	-0.576391	-0.863702	0.3897
TC	0.572846	0.764781	0.4461	0.572846	0.844344	0.4006	0.572846	0.844344	0.4004
C	60.15836	1.166622	0.2460	60.15836	1.287989	0.2008	60.15836	1.287699	0.2007
R-squared	0.024727			0.268450			0.029977		
AdjR²	0.012427			0.169385			0.006976		
F-statistic	0.665531			2.709856			0.811208		
F- Prob	0.617322			0.002695			0.520755		
D W	1.281695			1.780807			1.579908		

Hausman Test Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	32.763907	4	0.0000

Source: Extract from E-View

The formulated regression model on the effect of capital market growth on the equity financing of small and medium scale enterprises in Nigeria found that market liquidity, market size, transaction cost and market turnover can predict 26 percent variation on the equity financing of the quoted small and medium scale enterprises. The formulated panel data model validates the use of fixed effect model as the probability of the Hausman test is less than 0.05. in testing the model, the study found that, the model is significant as the f-statistics is less than 0.05. The regression coefficient proved that market liquidity, market size has positive effect on the dependent variables while transaction cost and market turnover have negative effect on the dependent variable.

Table 2: Panel unit root test: Summary

Series: D(EQC)

Method	Statistic	Prob.**	Cross-sections	Obs
Levin, Lin & Chu t*	-8.66732	0.0000	10	80
Im, Pesaran and Shin W-stat	-4.33748	0.0000	10	80
ADF - Fisher Chi-square	59.2675	0.0000	10	80
PP - Fisher Chi-square	90.2171	0.0000	10	90
Series: D(MLIQ)				
Levin, Lin & Chu t*	-9.19553	0.0000	10	80
Im, Pesaran and Shin W-stat	-4.21918	0.0000	10	80
ADF - Fisher Chi-square	59.4066	0.0000	10	80
PP - Fisher Chi-square	76.2612	0.0000	10	90
Series: D(MS,2)				
Levin, Lin & Chu t*	-6.35508	0.0000	10	70
Im, Pesaran and Shin W-stat	-2.24120	0.0125	10	70
ADF - Fisher Chi-square	39.3145	0.0061	10	70
PP - Fisher Chi-square	91.4908	0.0000	10	80
Series: D(MTR)				
Levin, Lin & Chu t*	-6.30378	0.0000	10	80
Null: Unit root (assumes individual unit root process)				
Im, Pesaran and Shin W-stat	-2.02507	0.0214	10	80
ADF - Fisher Chi-square	35.4460	0.0179	10	80
PP - Fisher Chi-square	37.3133	0.0107	10	90
Series: D(TC,2)				
Levin, Lin & Chu t*	-9.74072	0.0000	10	70
Im, Pesaran and Shin W-stat	-5.11982	0.0000	10	70
ADF - Fisher Chi-square	70.1745	0.0000	10	70
PP - Fisher Chi-square	112.975	0.0000	10	80

Source: Extract from E-View

Table 3: Pairwise Granger Causality Tests

Null Hypothesis:	Obs	F-Statistic	Prob.
MLIQ does not Granger Cause EQC	90	0.45123	0.6384
EQC does not Granger Cause MLIQ		1.97719	0.1448
MS does not Granger Cause EQC	90	0.99102	0.3754
EQC does not Granger Cause MS		0.36282	0.6968
MTR does not Granger Cause EQC	90	2.35981	0.1006
EQC does not Granger Cause MTR		0.01701	0.9831
TC does not Granger Cause EQC	90	0.97097	0.3829
EQC does not Granger Cause TC		0.11203	0.8942

Source: Extract from E-View

Table 4: Pedroni Residual Cointegration Test
Series: EQC MLIQ MS MTR TC
Alternative hypothesis: common AR coefs. (within-dimension)

	Statistic	Prob.	Weighted Statistic	Prob.
Panel v-Statistic	-1.079928	0.8599	-1.866284	0.9690
Panel rho-Statistic	2.239349	0.9874	2.363028	0.9909
Panel PP-Statistic	-4.642614	0.0000	-5.237621	0.0000
Panel ADF-Statistic	-0.508984	0.3054	-0.504910	0.3068

Alternative hypothesis: individual AR coefs. (between-dimension)

	Statistic	Prob.
Group rho-Statistic	3.519848	0.9998
Group PP-Statistic	-9.016220	0.0000
Group ADF-Statistic	-0.564102	0.2863

Source: Extract From E-View

Table 5: Augmented Dickey-Fuller results (parametric)

Cross ID	AR(1)	Variance	Lag	Max lag	Obs
Afrip	-0.583	15.72243	1	--	9
Aimino Plc	-0.804	13.46548	1	--	9
Capital Oil Plc	0.425	10.45530	1	--	9
CHEILARAM PLC	-0.556	6.322108	1	--	9
JULI PLC	-1.472	10.10762	1	--	9
MCNICHOLS PLC	-0.103	24.29527	1	--	9
OMOLUABI MB PLC	-0.905	8.223357	1	--	9
KAK UNITY PET. COMP. PLC	-0.042	16.94259	1	--	9
SMART PRODUCT NIG. PLC	-0.131	5.067220	1	--	9
THE INITIATIVES PLC	-0.598	24.19542	1	--	9

Source: Extract from E-View

DISCUSSION OF FINDINGS

The study revealed that market liquidity and market size has positively but not significantly correlated with the equity financing of listed SMEs firms in Nigeria. The beta coefficient of the variable is 0.145007 and the p-value is 0.8014 which is not significant at 5% level of significance. When market liquidity is used as the dependent variable, it shows a positive insignificant effect on equity financing of SMEs, The result a coefficient of 0.043040 and at. value of 0.9396 which is not significant at 5%. Overall, given that firm value as measured by stock price has a significant effect; it indicates that retained earnings plays a significant role on the market value of firms.

The implication of this finding is that the SMEs have of the firms the higher the equity financing. The result provides a basis for rejecting the first hypothesis, which states that firm market size has no significant effect on equity financing of SMEs firms in Nigeria. The finding is not consistent with the findings of Muneesh and Sanjay (2004) who found a positive significant positive relationship between market size and market share performance, and inconsistent with those of Panu, Peng and Dennis (2007) and Lan (2012), who found a significant negative relationship between firm size and market share value.

Furthermore, the result exhibits evidence of negative not significant relationship between transaction cost and market liquidity and equity financing of listed SMEs firms in Nigeria. The result shows a beta coefficient of -0.576391 with p-value of 0.5839indicating a statistically insignificant relationship at 5% significant level. This implies that ordinary share capital as one of the proxies of firm equity capital significantly affects the firm value of listed SMEs firms in Nigeria.

However, it has an inverse and significant effect of market turnover with a coefficient of 0.57639 and t. value of 0.136. Thus, because the findings on the relationship between market turnover and equity financing is contingent on measure of value adopted, this study proffers that it impacts on market turnover on equity financing was based on the capital market of the developed countries, therefore, the results serve as basis for rejecting the second hypothesis, which states that market turnover has no significant impact on the equity financing of listed SMEs in Nigeria. This conforms to the findings of Cheung, Chung and Fung (2012) who reported negative significant association between liquidity and

firm's financial performance.

The findings on the effect of market turnover on equity financing suggest that there is a tradeoff between equity and firm value. Firms that are highly liquid tend to have idle cash that could have been channeled to profitable investments. Also, high equity serves as motivation for corporate managers to pursue self-enhancing activities such as increase in perks and executive compensations which may not be commensurate with current performance of the firm. Consequently, firms that are highly levered may signal to the market the management's inefficiency in channeling the firms' resources to value maximizing projects. The combined and overall effect of the predictor variables on the explained variable showed the model is adequate. This is close to the result of the second model, which has an F statistics of 2.97, which is significant at 5%. Furthermore, the coefficient of determination R2 which stands at 22% respectively for the average share price and indicates that the proportion of the total variation in market value that is explained by the independent variables.

CONCLUSION AND RECOMMENDATIONS

The study examined the effect of capital market growth on equity financing of listed SMEs in Nigeria. Based on the study's findings, it is concluded that market liquidity has positive and not significant impact on equity financing of listed SMEs in Nigeria. This implies that SMEs enjoy more investors' confidence and patronage relative to their smaller counterparts. Also, market size has positive and not significant influence on the equity financing of listed SMEs in Nigeria. This signifies that high capital market considered counterproductive by investors, which is reflected in the lower value of these firms. Market turnover has negative insignificant effect on the capital market of listed SMEs firms in Nigeria. The capital market of the firms as the result showed is inadequate. This means that any further effort of the SMEs firms in the area of asset utilization will not enhance equity financing of the firms. Finally, transaction cost has negative but insignificant influence on the equity financing of listed SMEs in Nigeria. This suggests that firm market turnover is sufficient for equity financing and lead to value enhancement.

In line with the findings of the study, the following recommendations are made:

1. There is need to set up a system to ensure that SMEs comply with regulatory requirements. Compliance with regulatory requirements should be monitored more closely. A special team for direct monitoring

of SMEs' compliance could be set up. However, proportional and lighter regulation for SMEs does not mean that supervision should also be lighter for SMEs. This will increase market size of the stock exchange.

2. Regulators should explore setting up an internal working group or development team to promote SME access to capital market financing. It is important for regulators to set up training and education initiatives in order to promote SMEs compliance. Regulators could consider setting up teams to respond to SME questions relating to regulatory requirements. This will reduce transaction cost and enhance equity financing of quoted SMEs.
3. SMEs may be reluctant to explore the benefits of capital markets owing to a lack of professional staff that are able to comply with technical regulatory requirements. To inform, educate, publish analyst reports and assist SMEs and investors, Policymakers could consider setting up a website
4. Regulators and policymakers should organize promotional campaigns, public seminars and conferences to increasing public awareness on the importance, benefits and the need for SMEs' financing that enhance market liquidity.

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