The Impact of External Financing on Dividend per Share of Quoted Manufacturing Firms in Nigeria

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Abstract

The use of external financing is a balancing act between higher returns for shareholders versus higher risk to shareholders. Though external financing can boost stock performance of firms, it is still inconclusive as to its impact on performance of firms in developing economies like Nigeria. It is, therefore, against this background that this study sought to investigate the impact of external financing on dividend per share of manufacturing firms in Nigeria and the result of this study reveals that external financing has negative and non-significant impact on dividend per share. In view of this, the financial decision which the firm makes must enhance value for shareholders, potential investors and stakeholders involved with the firm. Also, as a going-concern, it is the wish of investors and investees that the firm should continually exist; therefore, the financial decision of the firm should ultimately help in achieving the overall objective of the firm that is, enhancing shareholder's wealth maximization.

1   Introduction

In most developing economies like Nigeria, the financing policies of firms may become relevant because managers in a company invest in new plants and equipments to generate additional revenue and income. While the revenue belongs to the owners of the company and can be distributed as either dividend paid to owners or retained in the firm as retained earnings, the retained earnings could be used for a new investment or capitalized by using it to issue bonus shares.   However, where the retained earnings are not enough to support

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all profitable investment opportunities, the company may forgo the investment or raise additional capital, thus altering the financial structure of firms [Olugbenga, 2012].

According to Pandey [2005], the financial structure of a firm is a long term plan, set up as trade-off among conflicting interests and identified as the major function of a corporate manager. They determine the appropriate combination or mix of equity and debt in order to maximize firm value. This major function of corporate managers has generated so much debate along the following lines; the relationship between leverage and profitability; the optimal mix between equity and debt, and the determinants of corporate financial structure. The underlining assumption of these debates is to effectively understand the factors that influence the financing behaviour of firms.

In order to explain and/or understand the financing behaviour of corporate managers, so many theories have emerged. The earliest is the neo-classical view of finance dominated by the Miller-Modigliani theorem, also known as the capital structure irrelevance theory [Miller and Modigliani 1958]. According to the theorem, given the assumption that *firms and investors have the same financial opportunities, under conditions of perfectly competitive financial markets, no asymmetries of information between different agents and the same tax treatment of different forms of finance, the corporate financial policy is irrelevant*. The theory establishes that, the stock market valuation of a firm is based exclusively on the earning prospects of the firm and not on its finance structure. In effect, internal and external finance are viewed as substitutes and firms could use external finance to smoothen investment when internal finance fluctuates [Yartey, 2006].

The complexities of today's business require firms to source funds through internal and external financing for its operations. External financing options involve financing activities through public offerings of equity [Ritter, 1991; Loughran and Ritter, 1995; Spiess and Affleck-Graves, 1995], private placement of equity [Hertzel *et. al* 2002], public debt offerings [Spies and Affleck-Graves,1999] and bank loan [Billett *et al*, 2001]. These options that are available for the financing pattern of firms, though with their disadvantages enable firms to fully tap opportunities and strengths which maximize shareholder's wealth as well as ensure future stock returns.

The implication therefore, is that firms will rely heavily on external financing in the form of external or internal equity and less on bank loans depending on their collateral value. This might also explain the financial mix or structure of Nigerian firms, which is dominated by short-term debt. Unlike developed economies where the financial structure of firms compose of equity and debt, the financing structure of firms in most developing economies is mainly equity based and where debt component is involved, it is usually from deposit money banks or other such financial institutions [Fodio, 2009]. Thus, the payment of dividend becomes relevant to investors as reflected in stock prices. This could be explained through the dividend signaling hypothesis [Bhattacharya, 1979; Miller and Rock, 1985]; they explained that change in dividend payment is to be interpreted as a signal to shareholders and investors about the future earnings prospects of the firm. Generally, a rise in dividend payment is viewed as a positive signal, conveying positive information about a firm's future earnings prospects resulting in an increase in share price. Conversely, a reduction in dividend payment is viewed as negative signal about future earnings prospects, resulting in a decrease in share price.

Also, consistent with bird-in-hand theory argument as developed by Linter [1962] and Gordon [1963], shareholders are risk-averse and prefer to receive dividend payments rather than future capital gains. Shareholders consider dividend payments to be more certain than future capital gains thus a bird in hand is worth more than two in the bush.

Gordon contended that the payment of current dividends resolves investor uncertainty. Investors have a preference for a certain level of income now rather than the prospect of a higher, but less certain, income at some time in the future. The key implication as argued by Linter [1962] and Gordon is that because of the less risky nature of dividends, shareholders and investors will discount the firm's dividend stream at a lower rate of return, thus increasing the value of the firm's shares.

The effect of external financing on stock returns could also explain the residual effect of dividend. As argued by the "dividend as a residual" theory, the pay-out ratio of firms is a function of its financing decision. The investment opportunities should be financed by retained earnings. Thus, internal accrual forms the first line of financing growth and investment. If any surplus balance is left after meeting the financing needs, such amount may be distributed to the shareholders in the form of dividends. Thus, dividend policy is in the nature of passive residual. In case the firm has no investment opportunities during a particular time period, the dividend pay-out should be one hundred percent. A firm may smooth out the fluctuations in the payment of dividends over a period of time. The firm can establish dividend payments at a level at which the cumulative distribution over a period of time corresponds to cumulative residual funds over the same period. This policy smoothens out the fluctuations of dividend pay-out due to fluctuations in investment opportunities [Fuei, 2010].

While the theoretical and empirical standpoints on the above issues have been laid down, few literature are available to reconcile these theories with realities in developing economies. This study strived to contribute to literature by examining the impact of external financing on dividend per share of quoted manufacturing firms in Nigeria.

2 Background

Since the seminal paper of Miller and Modigliani in 1958, the capital structure of firms has been one of the most examined topics in finance and economic literature. For instance, Lemmon and Zender [2004] examined the impact of debt capacity on recent tests of competing theories of capital structure. Controlling for debt capacity, the pecking order according to him appeared to be a good description of financing behaviour for a large sample of firms. Their main results reveal that firstly, internally generated funds appeared to be the preferred source of financing for all firms. Second, if external funds were required, in the absence of debt capacity concerns, debt appeared to be preferred to equity. Concerns over debt capacity largely explain the use of new external equity financing by publicly traded firms. Thirdly, when possible, debt capacity is "stockpiled" they thus, provide evidence of the stockpiling of debt capacity by profitable, low leverage firms that expect to use little external finance in the future. This evidence is directly contrary to predictions of the trade-off theory. Finally, they present evidence that reconciles the frequent equity issues by small, high-growth firms with the pecking order.

Hancock [2009] investigated capital structure theories when capital is sourced through investment by family and friends (F&F) in new venture start-ups. They stated that entrepreneurs typically finance new ventures through self-financing, loans, bootstrapping, and equity investment. About US$196 billion annually was sourced from F&F investors. Firms utilize different forms of finance at different lifecycle stages. Capital structure theories were used to explain how entrepreneurs choose the type and source of their finance at the different stages of firms' lifecycles. Contemporary research into early stage

of equity finance primarily used capital structure theories when examining informal business capital and formal venture capital (VC) investors. F&F finance research using capital structure theory, however, is scanty.

Chen and Chen [2011] posited that pecking order theory of capital structure was one of the most influential theories of corporate finance. The purpose of their study was to explore the most important factors on a firm's capital structure by pecking-order theory. Hierarchical regression is used as the analysis model. This study examined the determinants of debt decisions for 305 Taiwan electronic companies that were quoted on the Taiwan Stock Exchange of 2009. The results indicated that profitability which is a determinant of capital structure negatively affects on capital structure. It implies that firms prefer to use their earnings to finance business activities and thus use less debt capital. Growth rate positively affects capital structure. The greater growth opportunities are the more capital structure to finance the growth.

Huang and Ritter [2004] examined the time-series patterns of external financing decisions of US firms. Consistent with the market timing theory of capital structure, publicly traded U.S. firms fund a much larger proportion of their financing deficit with net external equity when the expected equity risk premium is lower, they reported that the first-day returns of initial public offerings were higher, and prior (post) realizations of the Fama-French value factor were lower (higher). The result was inconsistent with the pecking order theory.

Tayo [2012] posited that the ongoing adjustment and reform efforts of Nigeria, and the recent crisis in the nations' capital market, had made known the importance of finding optimal adjustment path that will maximize the inter-temporal social welfare function of the country, subject to capital structure constraints. He examined speed of adjustment of Nigeria Listed firms to target capital structure. This study made use of panel data from secondary sources collated mainly from annual financial statements and reports of sampled companies quoted on the Nigerian Stock Exchange (NSE) over a study period of 10 years covering 2000-2009. Samples of 85 non-financial manufacturing companies were purposively selected for analysis. The findings of the study showed that firms adjust toward target leverage at a moderate speed, with a half-life of 3.9 years for book leverage, even after controlling for the determinants of capital structure and firm fixed effects. However, if projects appeared with much higher frequency, and if they needed to be financed quickly, even this adjustment seemed slow.

Myers [2002] evaluated the four major theories of corporate financing: (1) the Modigliani-Miller theory of capital-structure irrelevance, in which firm values and real investment decisions were unaffected by financing; (2) the trade-off theory, in which firms balance the tax advantages of borrowing against the costs of financial distress; (3) agency theories, in which financing responded to managers' personal incentives, and (4) the pecking-order theory, in which financing adapts to mitigate problems created by differences in information. He argued that these theories were conditional, not general. He surmised that firms with high profitability and valuable growth opportunities tend to borrow less. Each of these tendencies is consistent with two or more of the major theories of financing. It may be possible to devise sharper tests by exporting the theories to developing economies, where agency and information problems are more severe. Further progress in understanding corporate financing decisions will require a deeper understanding of agency issues when value-maximizing operating and investment decisions cannot be observed or verified. But managers are not just temporary agents motivated by immediate pecuniary compensation or perquisites.

Strebulaev [2007] were of the opinion that in the presence of frictions, firms adjust their capital structure infrequently. As a consequence, in a dynamic economy the leverage of most firms is likely to differ from the "optimum" leverage at the time of readjustment. He explored the empirical implications of this observation and used a calibrated dynamic trade-off model to simulate firms' capital structure paths. The results of standard cross-sectional tests on these data were consistent with those reported in the empirical literature. In particular, the standard interpretations of some test results lead to the rejection of the underlying model. Taken together, the results suggested a rethinking of the way capital structure tests were conducted.

Prasad *et al* [2001] critically surveyed the key literature on corporate financing policy, capital structure and firm ownership in order to identify the leading theoretical and empirical issues in these areas. The theoretical component of the survey attempted to reconcile competing theories of capital structure and appraised recent models which used agency theory and asymmetric information to explore the impact of managerial shareholdings, corporate strategy and taxation on the firm's capital structure. The empirical component focused on univariate analyses as well as multivariate models of capital structure, and made a comparison between theoretical predictions and empirical results.

Buhr, *et al* [2005] examined capital structure theory and how it relates to a firm's financing choices. They used a modified pecking order framework to analyse financing choices for Australian firms. The traditional pecking order model has been extended to allow a non-linear relationship between a firm's requirements for external capital (the financial deficit) and the amount of external debt used to meet these requirements. The pecking order theory predicts that firms will follow a defined hierarchy of financing choices with internal funds being used first, followed by external debt and as a last resort the issuance of external equity. Their main finding is that Australian firm's do not follow the pecking order as closely as in other markets as the model explains less of the variation in debt issuance. Importantly, They also found that this is not related to debt capacity constraints, which has been hypothesized by other researchers as a legitimate reason why firms, small firms in particular, would not appear to be following the pecking order theory.

Jong *et al* [2005] tested the static trade-off theory against the pecking order theory. They measured firms' target leverage and debt capacity in order to discriminate between the theories and when leverage exceeded the target and below the debt capacity, static trade-off predicted a decrease in leverage. They found that the pecking order theory was a better descriptor of firms' financing and repurchasing behaviour than the static trade-off theory. They found firms to be consistent over time in their preference for a specific capital structure theory.

Fohlin [1998] opined that the pecking order theories predict that information asymmetries result in excess costs of, and thus resistance to, outside versus inside finance. He opined that bank relationships should ameliorate information problems, reduce cost differentials, and diminish reliance on internal funds and bank debt. Thus, he supported the pecking order hypothesis generally but found little static effect of bank oversight on firms' capital structure or use of bank debt. The findings cast doubt on the standard perception of interlocking directorates as an important source of information or signals of quality.

Ahmadinia*, et al* [2010] provided a comprehensive review on different theories and hypothesis in regard to achieving an optimal capital structure. They opined that many researchers believed that capital structure includes share issuance, private investment,

bank debt, business debts, leasing contracts, tax debt, retirement debt, deferred compensation for executives and employees, deposits, product related-debt and other probable debt. According to them, by applying these theories, the analysts will be able to reach a maximum return with minimum risk while they increase the value of corporation because of the close relationship between profitability and capital structure. Their study suggested a new model called genetic algorithm model by using support vector regression and profitability factors for obtaining an international range of optimal capital structure.

Miglo [2011] surveyed 4 major capital structure theories: trade-off, pecking order, signaling and market timing. For each theory, a basic model and its major implications were presented and compared to the available evidence. This was followed by an overview of pros and cons for each theory.

Lewellen and Lewellen [2005] argued that trade-off theory's simple distinction between debt and 'equity' was fundamentally incomplete because firms have three, not two, distinct sources of funds: debt, internal equity, and external equity. Internal equity (retained earnings) generally should be less costly than external equity for tax reasons, and may even be cheaper than debt. It followed that, without any information problems or adjustment costs, optimal leverage would be a function of internal cashflows. Debt ratios could wander around without a specific target, and a firm's cost of capital should depend on its mix of internal and external finance, not just its mix of debt and equity. The trade-off between debt, retained earnings, and external equity should depend critically on the tax basis of investors' shares relative to current price.

Frank and Goyal [2002] tested the pecking order theory of corporate leverage on a broad cross-section of publicly traded American firms for 1971 to 1998. Contrary to the pecking order theory, net equity issues tracked the financing deficit more closely than did net debt issues. While large firms exhibited some aspects of pecking order behavior, the evidence was not robust to the inclusion of conventional leverage factors, nor to the analysis of evidence from the 1990s. Financing deficit was less important in explaining net debt issues over time for firms of all sizes.

Bulan and Yan [2009] examined the central prediction of the pecking order theory of financing among firms in two distinct life cycle stages, namely growth and maturity. They found that within a life cycle stage, where levels of debt capacity and external financing need were more homogeneous, and after sufficiently controlling for debt capacity constraints, firms with high adverse selection costs followed the pecking order more closely, consistent with the theory.

Meier and Tarhan [2009] were of the view that a number of studies test the pecking order hypothesis. However, the empirical model used suffers from some specification issues. They conducted a survey of 127 CFOs and found that on average they followed the precise financing sequence predicted by the theory. However, when they estimated the empirical model for the survey firms, as in Frank and Goyal (2003), they found little support for the pecking order hypothesis. Furthermore, testing pecking order by controlling for debt capacity Lemmon and Zender [2009] does not qualitatively change the results and finally suggest that future research need to address the contradictory conclusions of regression based tests.

Agca and Mozumdar [2004] were of the opinion that the relative importance of internal cash, new debt, and new equity in the aggregate financing mix of public firms was as predicted by the pecking order theory and suggested that recent evidence to the contrary was due to scaling by firm size and use of equal-weighted estimators. The poor performance of the pecking order theory for small firms was due to the impact of debt

capacity: small firms had low debt capacities which were quickly exhausted, forcing them to issue equity. The pecking order theory performed satisfactorily for large firms especially firms with rated debt, and when the impact of debt capacity was accounted for. Consistent with the theory, the debt-deficit relationship was found to be concave and piecewise linear with slopes close to predicted values of 1 and 0.

Leary and Robert [2004] empirically examined the pecking order theory of capital structure, while accounting for the value of financial slack. They began by developing an empirical model that was motivated by the pecking order's decision rule and implied financing hierarchy. The model address the statistical power problem associated with previous empirical tests that enabled them to identify those decisions that conformed to and those that violated the theory's predictions. They found that the pecking order was unable to explain why firms turn to external capital markets and, conditional on using external funds, why firms chose to issue equity. Of the firm-year observations where firms used external finance (equity), less than 40% were consistent with the pecking order's prediction. Thus, firms violate the financing hierarchy more often than not and these violations were due neither to time varying adverse selection costs or debt capacity concerns. When compared to a sample of private borrowers for which had detailed loan and firm-characteristic information, the majority of equity issuers were not materially different from their counterparts that turned to the private debt market.

3   Methodology

We adopted the *ex-post facto* research design for this study and the data for this study were obtained from the published financial statements and accounts of quoted manufacturing firms for the period 1999 – 2012. This study adopted Abor's (2008) model. Thus, we specify the model as shown in equation (1).

$$Y_{it} = \alpha + \beta X_{it} + \mu_{it} \qquad (1)$$

with the subscript i denoting the cross-sectional dimension and t representing the time series dimension. The left-hand variable, Y_{it}, represents the dependent variable in the model, which is the firm's debt ratio, X_{it} contains the set of explanatory variables in the estimation model, α is the constant and β represents the coefficients while μ represents the error term.

However, in line with our objective of examining the impact of external financing on dividend per share of quoted manufacturing firms in Nigeria, we hypothesized thus as external financing do not have positive and significant impact on dividend per share of Nigerian manufacturing firms, it was represented as:

$$DPS = a + \beta_1 EF + \beta_2 AS + \beta_3 FS + \mu \qquad (2)$$

where;
DPS   =   Dividend per share
EF   =   External finance
AS   =   Asset structure
FS   =   Firm size

Explanation of Model Variables
External Finance
This variable measures the proportion of permanent capital in the financing mix of a firm. Essentially, this is based on the postulation that in the Nigerian financial system, the market is skewed towards equity financing. Thus, the best measure of external financing in the Nigerian corporate environment is external equity. In line with the works of Abor (2008), this study measures external finance by taking the natural logarithm of total debt (long and short term) of manufacturing firms in Nigeria in line with the works of Abor [2008]. Hence, it was represented as:

External Financing = Log of total debt   (3)

Dividend per share
According to Pandey [2005] dividend payment acts a signal of financial health of firms to outsiders. The payment of dividend decreases the amount of internal funds and increases the need for external financing. As such the dividend policies of firms allows them release resources when a firm has no profitable projects and conveys information about a firm's future expectations to capital markets, thus it is very important in measuring value of firms. According to Frank and Goyal [2004], there is a positive relationship between payout ratio and debt, thus accordingly we expect a positive relationship between external finance and dividend per share of Nigerian firms. DPS is the total dividend paid out over an entire year divided by the number of outstanding ordinary shares issued [Pandey, 2005].   The proxy used in this research to represent DPS as adopted from Pandey [2005] is;

DPS = Dividend Paid/ No of Ordinary shares outstanding   (4)

Assets structure
Assets structure is an important determinant of the capital decision. According to Harris and Raviv [1991], the firm's assets are tangible and have a greater liquidation value. In this study the asset structure of Nigerian firms will be measured by fixed assets divided by total asset in line with the works of Abor [2008]. As asserted by Abor [2008], the more tangible assets are, the more collateral would be. This was predicted by the pecking order theory which assumes that firms holding more tangible assets will be less prone to asymmetric information problems and reduce the agency cost.

Asset Structure = Fixed Assets/Total Assets   (5)

Firm Size
According to Booth *et al* [2001], size plays an important role in capital structure firms strive for external sources of finance only if the internal sources are exhaust. In this study, size will be measured by taking the natural log of total asset. Therefore, in this study we consider size of a firm to be an important control variable.

Firm Size = Log of total assets   (6)

The hypotheses stated were tested based on the Ordinary Least Square model. The signs and significance of the regression coefficients were relied upon in explaining the nature

and influence of the independent and dependent variables as to determine both magnitude and direction of impact.

4   Analysis of Data

Table 4.1 presents the descriptive statistics which is used to explain the movement of the model proxies in line with the objectives of this study.

Table 4.1: Descriptive Statistics

	EXF	DPS	LOGAS	SZ
Mean	0.8425	3.748370	6.3067	5.5348
Median	0.1600	0.685000	6.2800	5.5550
Maximum	52.0100	40.00000	9.1800	7.8600
Minimum	0.0000	0.010000	3.8000	1.6000
Std. Dev.	4.2529	8.248078	1.0178	1.0095
Skewness	10.3723	3.009034	0.0768	-0.2269
Kurtosis	115.379	11.49171	2.7068	3.2882
Jarque-Bera	146918.	1218.670	1.2325	3.2529
Probability	0.0000	0.000000	0.5399	0.1966

Source: Researchers' E-view Result

As revealed from Table 4.1, the mean of the external finance of quoted Nigerian manufacturing firms was 0.8425 while the median was 0.1600. As revealed by the skewness, there was a positive skewness [10.37] of external finance indicating that the degree of departure from the mean of the distribution is positive revealing that in overall terms there was a consistent increase in external finance from 1999 to 2012. Though as indicated by the Kurtosis which was 115.37 > 3 which is the normal value, the degree of peakedness within the period of this study were not normally distributed as most of the values did not hover around the mean. The Jarque-Bera statistic which is an indication of the normality of distributions was 146, 918 and since the probability was equal to zero, the distribution was not normally distributed.

From the Table also, the average assets structure of Nigerian manufacturing firms for the period was 6.3067 while the median was 6.18. The maximum assets structure was 9.18 while the minimum was N3.80 with a standard deviation of 1.0178. As revealed by the skewness, there was a positive skewness [0.0768] while the Kurtosis which was 2.7068. The Jarque-Bera statistic is an indication of the normality of distributions was 1.233. The probability value of 0.53 reveals that 53% of normality can be explained hence, the distribution was normally distributed.

The average size of Nigerian manufacturing firms for the period was 5.53 while the median was 5.555. The maximum size of Nigerian manufacturing firms for the period of this study was 7.86 while the minimum was 1.60 with a standard deviation of 1.009. As revealed by the skewness, there was a negative skewness [-0.227] of size indicating that the degree of departure from the mean of the distribution is negative revealing that overall there was a consistent decrease in size from 1999 to 2012. As indicated by the Kurtosis which was 3.253 > 3 which is the normal value indicates that the degree of peakedness within the period of this study was not normally distributed as most of the values did not

hover around the mean. The Jarque-Bera statistic is an indication of the normality of distributions was 3.253. The probability value of 0.19 reveals that 19% of normality can be explained hence, the distribution was not normally distributed.

Figure 4.1 diagrammatically presents external finance, dividend per share, asset structure and total size of Nigerian manufacturing firms from 1999 to 2012.
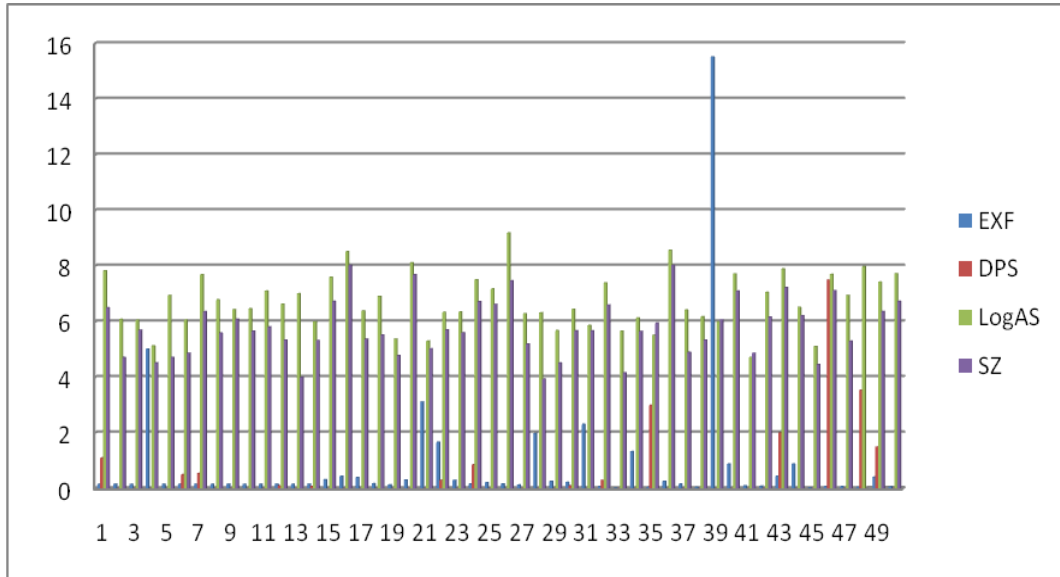

Figure 4.1: External Finance, Dividend per Share, Asset structure and Size
Source: Researcher's E-view Result

The hypotheses stated were tested using four steps. In step one, we restated the hypotheses in null and alternate forms. In step two, we compared the random-effect and fixed-effect regression results to ascertain the choice of result to use for the analysis.   In Step three, we presented and analyzed the regression results while in step four, decision is made. It is however noted that our decision rule for this study is to reject the null hypothesis and accept the alternative, otherwise accept if p value < 0.05.

Ho: External Financing does not have positive and significant impact on dividend per share of quoted Nigerian manufacturing firms.
Ha: External Financing has positive and significant impact on dividend per share of quoted Nigerian manufacturing firms.

Step Two: Comparison of Random and Fixed Effect
Table 4.2 presents the comparison results of the random and fixed-effect regression model.

Table 4.2: Hausman Test Result of Hypothesis

```
. hausman fixed random

                 ──── Coefficients ────
              (b)          (B)          (b-B)      sqrt(diag(V_b-V_B))
            fixed        random       Difference        S.E.

     EXF   -.0036115    -.006969       .0033575            .
    LogAS   -.8213673    -1.1736        .3522326          .056826
      SZ    .2786763     .2076891       .0709871            .

                      b = consistent under Ho and Ha; obtained from xtreg
          B = inconsistent under Ha, efficient under Ho; obtained from xtreg

    Test:  Ho:  difference in coefficients not systematic

                  chi2(3) = (b-B)'[(V_b-V_B)^(-1)](b-B)
                          =      29.65
              Prob>chi2 =      0.0000
              (V_b-V_B is not positive definite)
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Source: Researchers' Stata Result

From the above, the null hypothesis is accepted since p-value < 0.05, hence, the fixed-effect regression model provides better result for the hypothesis.

Step Three: Analysis of Regression Result of Hypothesis

Table 4.3 presents the regression result of the hypothesis

Table 4.3 Regression Result of Hypothesis

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Fixed-effects (within) regression          Number of obs    =        603
Group variable: YEAR                       Number of groups =         19

R-sq:  within  = 0.0115                    Obs per group: min =         1
       between = 0.4293                                   avg =       31.7
       overall = 0.0286                                   max =         51

                                           F(3,581)          =       2.26
corr(u_i, Xb)  = 0.2407                    Prob > F          =     0.0806


        DPS  |    Coef.    Std. Err.     t     P>|t|    [95% Conf. Interval]

        EXF  |  -.0036115   .0076914   -0.47   0.639   -.0187178    .0114948
      LogAS  |  -.8213673   .3339213   -2.46   0.014   -1.477207   -.1655273
         SZ  |   .2786763   .2781199    1.00   0.317   -.2675667    .8249192
       _cons |   5.34795    1.583215    3.38   0.001    2.238427    8.457473

    sigma_u  |  1.6979946
    sigma_e  |  5.655876
        rho  |  .08267882   (fraction of variance due to u_i)

F test that all u_i=0:     F(18, 581) =      2.07           Prob > F = 0.0058
```
Source: Researchers' Stata Result

As revealed from Table 4.3, the impact of the external financing on dividend per share of quoted Nigerian manufacturing firms is negative and non-significant (α = -.003, t = -0.47, p-value 0.639 > 0.05). This indicates that the use of external financing does not impact positively on the dividend per share of Nigerian manufacturing firms. Overall, the coefficient of determination as revealed by R-square (R^2) in between the firms was 42.9%. This indicates that 42.9% of variations observed in the dependent variable dividend per share were explained by variations in the independent variable external

financing and the control variables (asset structure and size). This is understandable given the level of observations in the panel. The Wald Chi^2 which was 2.26 > 0.05 indicates that the F-test result of all the coefficients in the model are not different than zero. The random effect result which was less than zero reveals that the differences across units are uncorrelated with the regressors. For the control variables, the results indicates that asset structure of quoted manufacturing firms in Nigeria also had negative and significant (α = -.82, t = -2.46, p-value 0.014 < 0.05) impact on dividend per share while size of the firm had positive though non-significant (α = 0.28, t = 1.00, p-value 0.317 > 0.05) impact on dividend per share.

Step Four: Decision
From the result of the hypothesis tested, the null hypothesis is accepted while the alternative hypothesis is rejected; hence, external financing does not have positive and significant impact on dividend per share of quoted Nigerian manufacturing firms.

5 Conclusion and Policy Recommendation

In most developing economies like Nigeria, the financing policies of firms may become relevant because managers in a company invest in new plants and equipment to generate additional revenue. This revenue generated belongs to the owners of the company and can be distributed as either dividend paid to owners or retained in the firm as retained earnings. The retained earnings could be used for new investment or capitalized by using it to issue bonus shares. Where the retained earnings are not enough to support all profitable investments opportunities, the company may forgo the investment or raise additional capital, thus altering the capital structure of firms. Unlike developed economies where the capital structure of firms comprise of equity and debt, the capital structure of firms in most developing economies is mainly equity based and where debt component is involved, it is usually from deposit money banks or other such financial institutions.
The effect of external financing on firm performance in developing economies like Nigeria could be explained through several theories such as Miller and Modigliani irrelevance theory, the pecking order theory, the trade-off theory, the signally hypothesis, market mutation hypothesis and the agency theory, amongst other capital structure theories. From these theories, the use of external financing increases returns on equity up to a certain level of operating income not only in a developing economy like Nigeria but also firms in developed economies. Hence, as the firm grows, higher levels of external financing are needed to cover for available investment opportunities. In a perfect world, management would favour more external financing whenever return on capital exceeds the cost of internal financing. However, higher returns could also result in higher risk to the business.
The use of external financing is a balancing act between higher returns for shareholders versus higher risk to shareholders. Though external financing can boost stock performance of firms, it is still inconclusive as to its impact on performance of firms in developing economies like Nigeria. It is, therefore, against this background that this study sought to investigate the impact of external financing on dividend per share of manufacturing firms in Nigeria and the result of this study revealed that external financing had negative and non-significant impact on dividend per share. In view of the finding of this our study, the financial decision which the firm makes must enhance value

for shareholders, potential investors and stakeholders involved with the firm. Also, as a going concern, it is the wish of investors and investees that the firm should continually exist; therefore, the financial decision of the firm should ultimately help in achieving the overall objective of the firm that is, enhancing shareholders wealth maximization.

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