

Agency Theory and Value of Agro -Allied Firm in Nigeria

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Abstract

This study evaluates relationships between agency theory and firm value of quoted Agro- Allied firm in Nigeria. The Levin, Lin and Chu (LLC) model was used in analysis for panel unit root, while Johnson's Co -integration tested for long run relationship of variables. Other tests conducted include Error correction model and Pair wise Granger causality which were all employed in processing ex-post panel data obtained from the Nigerian stock exchange for the period 2014 through 2021. Findings from results reveal that Agency cost has a significant and positive relationship with both dependent variables and also shows evidence of long run relationship. As such, the study concludes that agency Cost has an impact on firm value, and recommends that shareholders should be pro active in dealing with agency problems by resolving conflicts with the least possible agency cost ,and also formulate strategic guidelines to cut down on agency costs since optimality rests at the point where Agency cost is at the barest minimal and achieving this will obviously enhance firm value of Agro Allied firms in Nigeria.

Keywords: Agency Theory, Capital Structure, Agro-Allied Firm, Nigeria

Introduction

Corporate organization such as public limited companies allow for the separation of ownership from management and entails that owners do not need to be managers and managers do not need to be owners as well. However, while the owners invest and provide clear guidelines with strategic advice, and sense of direction for implementation with the objective of maximizing return on investment, the management has the function of planning, directing, controlling and organizing the corporate resources to achieve the shareholders and stakeholders' expectations (Ang, Cole and Lin, 2016).

Management is empowered by law to formulate financial policies such as capital structure, investment policies and dividend policy with the objective of maximizing shareholders value. Agency theory has to do with resolving two problems that occur in agency relationships where the actions of the agent negate the interest of the shareholders but to the benefit of the agent.

The first is the agency problem that arises when the desires or goals of the principal and agent conflicts and it is difficult or expensive for the principal to verify what the agent is actually doing (Friedman and Viswanath, 2019). It describes the fundamental conflict between self-interested managers and owners, when the former has the control of the firm but the latter bears most of the wealth effects (Kaijage and Elly, 2014). The agency relationships and the conflicts lead to private

benefit of control and the expropriation of the wealth of owners (Dyck and Zingales, 2004) bankruptcy or liquidation (Jensen and Meckling, 1976) which is agency costs. The agency cost is detrimental to the investors and to the corporation as a whole.

The main assumptions of agency theory are that managers may maximize their own utility instead of enhancing shareholder value (Jensen and Meckling, 1976; Demsetz, 1983); information is distributed asymmetrically between principals and agents; contracts are not costless when writing and enforcing (Fama and Jensen, 1983) and the parties have perfect rationality or limited (bounded) rationality. The performance of firms depends on the extent of the agent's efforts and the risks available (Jahani, Zalgahdr-Nasab and Soofi, 2013). The classic principal-agent model, the divergence of managers from shareholder value maximization and pursuing of their own interests at the expense of shareholders causes agency problems. Due to information asymmetry, owners have no adequate knowledge if managers are making the necessary efforts or the right decisions on their behalf since they bear the consequences of all decisions made. The owners as such incur monitoring costs to gather information on the actions of managers while managers incur bonding costs, by making efforts at the expense of their own utility and implementing the contractual terms in order to reduce the agency conflict (Jensen and Meckling, 1976).

The value of firm is the sum total of its equity and debt, it is determined on the basis of book value or market value. The value of a firm's equity is the discounted value of its shareholders earnings called net income. Debt is value reducing for high growth firms and it is value enhancing for low-growth firms. There are two forms of capital which are equity and debt capital. Miller (1958) stated that firm value is determined by company's asset earnings power and not by capital structure. The positive effect of asset earnings power implies that if the company has higher earning powers, then the asset turnover will be more efficient which will affect corporate value.

The periodic payment of debt servicing charges and principal amount to creditors make managers more cautious regarding taking inefficient decisions that negatively affect profitability of firms (Frierman and Viswanath, 2019). Modigliani-Miller theorem was based on assumption that probability distribution of cash flows to firm is independent of the capital structure. Deducing from the pecking order theory, it is recognized that, existence of positive costs associated with bankruptcy and presence of tax subsidies on corporate interest payments invalidate the irrelevance theorem because the probability distribution of future cash flows changes as the probability of occurrence of the bankruptcy costs changes with ratio of debt to equity rises (Chowdhury and Chowdhury, 2017). The existence of agency costs provides stronger reasons for arguing that the probability distribution of future cash flows is not independent of the capital or ownership structure (Kaijage and Elly, 2014). The counter argument to the monitoring role and value enhancing effect of debt is that firms easily meet their interest payments and principal repayments on their debt obligations and rely on internal financing (Allen and Gale, 2010).

Jensen (1986) argued that the existence of debt in the firm's capital structure acts as a bonding mechanism for the firm's managers. By issuing debt rather than paying dividends, managers contractually bind themselves to pay out future cash flows in a way unachievable through dividends. Higher leverage is expected to lower agency costs, reduce inefficiency and thereby lead to an improvement in firm's value.

The relationship between capital structure and firm's value can be viewed from the perspectives of various theories. The traditionalist theories believe that capital structure is relevant in determining a firm's value. But the irrelevance theory of Modigliani and Miller (1958) posited that there is no relationship between capital structure and firm's value. The static trade-off theory of capital structure states that optimal capital structure is obtained where the net tax advantage of debt financing balances

leverage related costs such as financial distress and bankruptcy, holding firm's assets and investment decisions constant. The static trade-off theory assumes that firm's trade-off benefits and costs of debt and equity financing and ensures optimal capital structure after accounting for market imperfections such as taxes, bankruptcy costs and agency costs. Altman (2002) claimed that issuing equity means moving away from the optimum and should therefore be considered bad news. The consequence is that investors perceive equity issues to only occur if equity is either fairly priced or overpriced. From the above this study examines the agency theory and capital structure in relation to the value of quoted firms in Nigeria.

The organizational framework of large corporations is a setup in which there are separation of ownership and control and the principal-agent relationship, the setting in which the owners (principals) hires managers (agents) to run the firm in the best interest of the owners for a reward for their efforts in return. Conflict of interests arises in the relationship due to the divergence of managers from the shareholder interest. Such a moral hazard behavior may take a variety of forms, including diversion of corporate resources and exertion of insufficient effort.

There have been aged long divergences among scholars on the effect of agency problems, capital structure and corporate value. The Modigliani and Miller theory, proposed by Modigliani and Miller (1958 and 1963) forms the basis for modern thinking on capital structure. In their seminal article, Modigliani and Miller (1958 and 1963) demonstrate that, in a frictionless world, financial leverage is unrelated to firm value, but in a world with tax-deductible interest payments, firm value and capital structure are positively related. Miller (1977) added personal taxes to the analysis and demonstrates that optimal debt usage occurs on a macro level, but it does not exist at the firm level. Interest deductibility at the firm level is offset at the investor level. In addition, Modigliani and Miller (1963) made two propositions under a perfect capital market condition. Their first proposition is that the value of a firm is independent of its capital structure. Their second proposition states that the cost of equity for a leverage firm is equal to the cost of equity for an unleveraged firm plus an added premium for financial risk. However, other theories such as the trade off theory (Myers, 1984), pecking order theory (Myers and Majluf, 1984) and agency cost theory (Jensen and Meckling, 1976) argued that if capital structure decision is irrelevant in a perfect market, then, imperfection which exist in the real world may be adduce for its relevance. Such imperfections include bankruptcy costs (Baxter, 1967, Kraus and Litzenberger, 1982; and Kim, 1998), agency cost (Jensen and Meckling, 1976), gains from leverage-induced tax shields (De Angelo and Masulis, 1980) and information asymmetry (Myers, 1984).

LITERATURE REVIEW

Theoretical Review

Theory of Agency Problem

An agency problem in its most general sense arises when the welfare of one party the principal depends upon actions taken by another party, termed the agent. It is termed as a problem because of the central question as to how to ensure that the agent would act in the principal's interest rather than simply in the agent's own interest.

The problem lies in the fact that because the agent has better information than the principal about the relevant facts of a transaction, the principal is normally not in a position to ensure that the agent's performance was indeed in the best interest of the principal. Consequently, the agent is tempted to act opportunistically, skimping on the quality of his performance or even diverting to himself some of what was promised to the principal.

Firm Value

Corporate value is defined as how well a company utilizes its primary capital to generate returns and optimize its value. It supports the efficient and effective application of a company's resources to achieve general company goals which include stakeholder's wealth maximization and income maximization. Value creation can also be defined as the attainment of predetermined targets, objectives, and goals within a given timeframe (Pandey, 2015). Corporate control affects company's value because it minimizes expropriation by management, increases effectiveness in investments and the improvement of available cash flows for owners. A good performance indicator should be measurable, applicable and important to the company. Performance measures used in this empirical research can be classified as accounting based means or market oriented means. Firm performance was measured by market price of resources acquired and market value by Tobin's Q. Return on asset (ROA) measures the effectiveness of capital employed. It measures how efficient and effective management is in employing company resources to generate corporate value. In this respect, Tobin's Q can be said to be a combination of historical (accounting performance) and futuristic (market value expectation).

Tobin Q is a popular measure of firm value. Tobin's Q was introduced by Tobin as an appropriate measure of performance in 1969. Firm value is calculated as the firm closing price times the number of shares outstanding. Tobin's Q is defined as Firm value of equity plus book value of debt divided by book value of assets. The decision rule for the Tobin's q value is as follows; if the Tobin's q value is between 0 and 1, this means that the firm assets value is higher than the value of the firm stocks, this imply that the firm stock price is undervalued and if the value is higher than, this means that the firm assets value is lower than the value of the firm stocks, this implies that the firm stock price is overvalued.

value of the firm, average share price and Tobin's Q value is used to measure the relationship of the firm stock value to the firm's resources replacement cost (Sahay and Pillai, 2009). It is considered as the best predictor of market correction (Pett, 2013).

Measures of Firm Values

Capitalized Value Measure

The capitalization rate as used in the real estate literature refers to the ratio of net operating Income to property value. The cap rate bears a close relation to the weighted average cost of capital (WACC) as defined in the corporate finance literature (Copeland and Weston, 1988). The WACC is the rate of discount that reflects the average costs of debt and equity capital employed by a firm. Discounting the cash flows from corporate assets at the WACC reveals the value of the firm. The relation between the WACC and firm valuation has extensive theoretical underpinnings extending from the firm valuation work of Modigliani and Miller (1958). Sharpe's (1964) development of the capital asset pricing model (CAPM) revolutionized stock portfolio theory and provided a widely accepted method to empirically estimate the cost of equity, which as this paper shows, is an embedded component in the cap rate.

However, the argument of Miller and Modigliani (1961), the basic idea behind the capitalized value measure is that the value of a firm to its owners at time 0 is equal to the discounted value of net cash inflow from the firm to its owners at time 1, plus the discounted value of the remaining value of the firm. Thus, if V_0 is the value of the firm at time 0, if F_1 is the net cash inflow from the firm to its owners at time 1, if V_1 is the value of the firm at time 1, and if r is the cost of capital between time 0, and time 1, then $F_1 + V_1$

$$V_0 = \frac{F_1 + V_1}{1 + r} \quad (2.8)$$

Likewise, expressing V_1 in terms of F_2 and V_2 , V_2 in terms of F_3 and V_3 and so forth, and then

successively substituting these latter expressions into Equation I, the value of a firm can be express as follow: $F F'$

$$V = \sum_{t=1}^{\infty} \frac{F_t}{(1+r)^t} + \frac{V_{\infty}}{(1+r)^{\infty}} \quad (2.9)$$

Inasmuch as the last term of Equation 2 approaches zero as the number of future periods, «, approaches infinity, Equation 3 can be written concisely as follows:

Net cash inflow to owners, F_t , is the difference between the dividend paid to owners, D_t , and the additional capital supplied by owners, K_t , thus,

$$F_t = D_t - K_t \quad (2.10)$$

Furthermore, the additional capital supplied by owners is the difference between the firm's investment net of depreciation, L_t , and its undistributed earnings, which in turn is the difference between its profit, π_t , and its dividend. Thus, (2.10)

Substituting Equation 6 into Equation 3, the value of a firm therefore is as follows:

$V = \frac{NIPS}{r} + \frac{DINIPS}{r^2} \frac{ECC}{1+ECC}$ Equation 7 reduces to

$$V = \frac{GRY^T - NIPS(1 + ECC)}{r^2 ECC} \quad (2.11)$$

$$MVPS = ECC \quad (2.12)$$

Considering that $MVPS$ corresponds with $V_0/NIPS$ with XQ , GR with g , ECC with r , and FP with m , it follows that the collection within the parentheses of Equation 11 is w . Goosen et al. (1994) also suggested that the profit growth rate, g , should be based on the profits of the last three time periods, but they suggested no objective means of deriving m , "the number of future periods that stockholders are willing to extend growth" (p. 66). Critiquing the method, Gold (2003) suggested exponentially smoothing recent profit figures so that a practical valuation formula cannot depend upon an infinite number of forecasts into the future, so Equation 6 must be simplified. If net investment is set to zero for all periods and if profit is likewise set to a constant, X^* , then Equation 6 reduces to the following:

Goosen, Foote, and Terry (1994) suggested computing the constant profit term, X , by multiplying the most recent profit figure, K_0 , by a growth factor, w , which is derived from a forecast of the profit growth rate, g , projected to an arbitrary future time, m .

Goosen et al. (1994) did not present the growth factor, as given in the Equation, but it can be derived from their work. The computed measure would be less sensitive to the possibly unrepresentative profit of the last period. Nevertheless, the model remains dependent upon m , an arbitrary parameter.

Deductive Judgment Measure

The deductive judgment measure reverses the customary procedure of computing an index of Company performance by combining market value with accounting values. Two such indices have been the subject of recent studies involving business simulations (Suaia & Castro, 2002; Wolfe and Suaia, 2003), the Tobin q (Tobin, 1971) and the Altman Z (Altman, 1968). The Tobin q is the value of capital relative to its replacement cost (Tobin, 1971). If capital is taken to refer to the sum of the true value of the firm, V , and the firm's liabilities, L ; and if replacement cost is taken to refer to the firm's total assets, A , then (2.12) applies.

When the value of the firm's capital ($V + L$) is identical to its replacement cost (A), the Tobin q is unity. When- the firm is managed by especially capable people, the Tobin q should rise

$$q = \frac{V + L}{A} = \frac{P_t - D_t}{B_t} \quad (2-13)$$

where, D_t denotes the dividend per share at time t , P_t denotes the share price at time t , B_t denotes the book value per share at time t , $\mathbb{E}_t$ represents the expectations operator at time t , x_t represents abnormal earnings per share in period t and J is 1 plus the risk tree.

Finally, Ohlson assumes linear information dynamics, that is, abnormal earnings can be estimated with linear regression analysis. Then, the abnormal earnings for period $t+1$ are defined as:

where the non-accounting information for period $t+1$ is defined as:

$$v_{t+1} = yv_t + \epsilon_{t+1},$$

If these assumptions hold the price of a security is defined as:

$$P_t = bv_t + a_1 x_{t+1}^o + a_2 V_t \quad (2.14)$$

where

$$R_1 = \frac{R_f}{R_f - \rho} > 0, \text{ and } a_2 = \frac{[R_f / (R_f - \rho)(R_f - y)]}{Q} > 0 \quad (2.15)$$

Spilioti and Karathanassis (2010) claim that RIVM has three advantages, firstly, special emphasis is given to book value, thus avoiding any economic hypotheses about future cash flows. Secondly, the treatment of investments is such that they are treated as a balance sheet factor and not one that reduces cash flows (Penman and Sougiannis, 1998). Thirdly, as Bernard (1995) has shown, for shorter horizons the Ohlson formulation is more suitable than the dividends valuation model, as the latter underestimates share value.

Financial Earnings Valuation

Evidence obtainable from several studies beginning from late 1960 to first half of 1990 shows that equity value is related to accounting earnings (Ball and Brown, 1968; Barth, Pankoff and Virgil, 1970; Collins and Kothari, 1989). These studies usually rely on Miller and

Modigliani's (1959) discounted dividend valuation model, based on (implicit) assumption that current earnings are an adequate characterization of expected future earnings and dividends (Spremann and Gantenbein, 2002). The theory states that the theoretical value of a company's equity, EV, is the present value of all future dividends (d) or free cash flows to equity (FCE) (Beisland, 2009).

However, Ohlson's Residual Income Valuation Model (RIVM) was adopted for this study. RIVM as discussed under the theoretical framework has important implication for this study as it specifies the relation between equity values and accounting variables such as earnings, dividends and book value. This model in contrast to discounted dividend valuation model that make no appeal to book value or residual income, suggests that, as long as forecasts of earnings, book values and dividends follow clean surplus accounting ($bv_t = bv_{t-1} + x_t - d_t$), security prices should be determined by book value and discounted future abnormal earnings.

where, c_t denotes the dividend per share at time t ; P_t denotes the share price at time t , bv_t denotes the book value per share at time t , E_t represents the expectations operator at time t , x_{t+1}^o represents abnormal earnings per share in period $t+1$ and $1+r_f$ is 1 plus the risk free. Ohlson

assumes linear information dynamics, that is, abnormal earnings can be estimated with linear regression analysis. Then, the abnormal earnings for period $t+1$ are defined as:

$$x_{t+1}^o = \alpha_0 + \alpha_1 v_t + \epsilon_{t+1}, \quad (2.16)$$

where the non-accounting information for period $t+1$ is defined as:

If these assumptions hold the price of a security is defined as:

$$P_t = bv_t + a_1 x_{t+1}^o \quad (2.17)$$

where

$$a_1 = \frac{[R_f / (R_f - \rho)]}{Q} > 0, \text{ and } a_2 = \frac{[R_f / (R_f - \rho)(R_f - y)]}{Q} > 0 \quad (2.18)$$

Net Book Value

In the mid of the 1990s, lots of researchers began to examine the role of book value of equity. using a valuation framework by Ohlson (1995) and Ohlson and Feltham (1995), which expresses share prices under certain conditions as a function of both earnings and book value of equity. Recent

empirical work based on Ohlson and Feltham (1995) valuation framework provides evidence for the incremental relevance of book value in equity valuation. They claim that under some fairly reasonable assumptions, equity value is the present value of net financial assets plus present value of all future free cash flow operating activities (Feltham and Ohlson, 1995).

Dividends Net Book Value

Ohlson (1995) states that the dividends/cash flow model can be written solely as a function of accounting numbers if the assumption of clean surplus relation holds. Clean surplus relation that book value only changes with earnings and net capital investments and net dividends:

$$B_t = B_{t-1} + I_t - d_t \quad (2.19)$$

where

B = book value of equity

I = earnings

d = dividends

Adjusting the book value of a firm's assets and liabilities is a common everyday-world method of deriving the value of a firm. This method is used when liquidating the firm is under consideration, in which case the adjusted value is known as the firm's liquidation value. This method also is used when acquiring the firm is under consideration, in which case the acquiring party adjusts book value to obtain replacement value, because one alternative to the acquisition is to build an equivalent firm from scratch.

The Adjusted Net worth Measures

The adjustment of assets can be approached either by capitalizing investments that have been expensed or by finding the replacement cost of the tangible or intangible assets. The first approach is sensible in some situations; the second approach, in other situations. Both approaches, however, should not be applied to any single situation, for that would overcompensate. Based upon the principle of conservatism, generally accepted accounting rules of the everyday world call for the expensing of expenditures in intangibles, such as advertising, employee training, and research and development. These rules are sensible in the context of the everyday world, because the effects of those expenditures are speculative. In the context of business simulations, however, the effects are generally determined by a mathematical model, so they are not speculative at all. Accordingly, in the general case when the effects are mathematically determined, the expenditures should be capitalized as investments for valuation purposes, but not necessarily for financial reporting purposes. The capitalization should follow the form of the simulation's model. For example, if advertising, Y, has an exponentially declining effect, such that an advertising expenditure of one period affects sales in the following period, with a residual effect that declines by a in successive periods such that the effect of advertising in any one period, E_t, is defined by the relationship.

Then the capitalized value of the advertising expenditure, Y_t^{*}, from the start of the exercise to any period t should be as follows:

$$Y_t^* = \frac{Y_t}{1 - a} \quad (2.20)$$

$$R = \frac{Y_t}{1 - a} \quad (2.21)$$

In adjusting the balance sheet, Y_t^{*} should be added to the firm's assets and to its net worth. Finding the replacement cost of a tangible asset of a simulated firm is generally not difficult. That replacement cost is simply the cost of re-acquiring the same as given of the simulated setting. Finding

the replacement cost of an intangible asset, however, can be more of a challenge. Consider the case of learning, which is commonly modeled by the established learning-curve formula:

$$T_n = T_1 n^{-\alpha} \quad (2.22)$$

The exponent of n can be calculated by relying on the identity:

$$\alpha = -\log_2 \left(\frac{T_2}{T_1} \right) \quad (2.23)$$

For the right side of Equation 2.22 any logarithm will do, including natural and common logarithms. In this common formulation, T_n represents the time to produce one unit of an item, T_1 represents the time to produce the first unit of the item, n represents the n th item, and α is the learning coefficient, a parameter that ranges from 0.0 to 1.0, with smaller numbers associated higher rates of learning. Inasmuch as production time is directly related to production cost, a reasonable application of the formula is to replace production time with production cost, C , as follows:

$$C_n = C_1 n^{-\alpha} \quad (2.24)$$

The cost that must be borne to bring the firm to the n th level of learning is the cumulative cost of production up to the n th level less the base cost, which is the cost at the n th level taken over n units of production. This difference is the extra cost that a firm with no learning experience must absorb before it will be as competitive as the firm with experience. The cumulative cost of production up to the n th level can be found either discreetly by summing the unit costs up to the n th level.

Market Value

Market value is based on supply and demand. It is used to refer to a company's market capitalization value. It is calculated by multiplying the number of shares issued by the price of the company's share. A company's share price is determined by daily trading between buyers and sellers on the relevant stock exchange. Market prices are easy to determine for assets as the constituent values, such as stock and futures prices, are readily available. A valuation would have to be prepared using different methods (Ngerebo-a, 2007).

Market value is the value of an asset/security as determined by the forces of demand for and supply of the assets. It is the perceived or observed value of an asset on the market. It is also known as current value. It is in fact the mutually accepted worth (cost or price depending on the individual) of the asset after negotiation..

Agency Theory Agency theory discusses the problems that surface in the firms due to the separation of owners and managers and emphasizes on the reduction of this problem. This theory helps in implementing the various governance mechanisms to control the agents' action in the jointly held corporations. Berle and Means (1932) found that the modern corporation of the USA was having dispersed ownership, and it leads to the separation of ownership from control. In a joint stock company. The ownership is held by individuals or groups in the form of stock and these shareholders (principals) delegates the authority to the managers (agents) to run the business on their behalf (Jensen & Meckling, 1976; Ross, 1973), but the major issue is whether these managers are performing for the owners or themselves. Adam Smith (1937) is perhaps the first author to suspect the presence of agency problem and since then it has been a motivating factor for the economists to cultivate the aspects of agency theory.

Agency Cost

Jensen and Mecklings (1976) defined agency costs in light of the firm as a nexus of relationship. In the definition, they concentrated largely on the possible costs, which might arise when a firm (the principal) hires managers from outside (the agent) to act on its behalf. Along that framework, they

developed agency theory within the context of the conflicts of interest between corporate managers and equity and debt holders who are seldom if ever involved in the day-to-day running of the business. In their own words, agency cost of a firm is the sum of: (1) the monitoring expenditure by the principal, (2) the bonding expenditures by the agent, (3) the residual loss. The definition is explicit about the key sources of agency related costs to a firm (monitoring, bonding and residual loss). The reduced welfare of the principal is the residual loss.

The seminal work of Jensen and Mecklings (1976) elaborated that this residual loss mostly comes about due to the imperfection of 'the agency arrangements and agreements. Monitoring of an agent certainly brings about a reduced (not eliminates) agency cost from a given angle (but also brings about another form of agency cost- the monitoring cost, in addition to the residual loss). The leftover extent, which may not be covered by monitoring and bonding, is the residual loss.

outcome of monitoring. Bonding costs, on the other hand, are incurred by the agent (upon approval by the principal) on activities such as accepting contractual limitations on the agent's decision making power and agreeing to have accounts audited by a qualified auditor.

The agency costs in any enterprise depend on the lack of information about the agent's activities, and the costs of monitoring and analyzing the management's performance, the costs of devising a bonus scheme which rewards the agent maximizing the principal's welfare and the costs for determining and enforcing policy rules. They further also depend on the supply of replacement managers (Fleming, 2015).

Agency Monitoring Cost

Monitoring cost involves the cost associated with the monitoring and assessing of the agent's performance in the firm. The various expenditures covered under the monitoring cost are the payment for watching, compensating and evaluating the agent's behaviour. Owners appoint boards to monitor the managers; hence the cost of maintaining a board is also considered as a monitoring cost. The monitoring cost also includes the recruitment and training and development expenses made for the executives. These costs are incurred by the shareholders in the initial stage but in the later stage, it is borne by the managers because they are compensated to cover these expenses (Fama and Jensen, 1983).

The owners of a company can establish systems for monitoring the actions and performance of management, to try to ensure that management are acting in their best interests. An example of monitoring is the requirement for the directors to present an annual report and accounts to the shareholders, setting out the financial performance and financial position of the company. These accounts are audited, and the auditors present a report to the shareholders (Liao and Lin, 2017). Preparing accounts and having them audited has a cost.

Residual Loss

The conflict of interest between the shareholders and managers results in another problem, where the decision taken by the managers are not aligned to maximize the wealth of the owners. These inefficient managerial decisions lead to a loss known as the residual loss. Williamson (1988) elucidated that the residual loss is the key component of the agency cost, which should have to be reduced by the principals. To reduce the residual loss, the owners incur monitoring cost and bonding cost. Hence, these costs have become the whole of the irreducible agency cost.

Bonding costs

The third aspect of agency costs is costs that might be incurred to provide incentives to managers to act in the best interests of the shareholders. These are sometimes called bonding costs. These costs are intended to reduce the size of the agency problem. Directors and other senior

managers might be given incentives in the form of free shares in the company, or share options. In addition, directors and senior managers might be paid cash bonuses if the company achieves certain specified financial targets (Liao and Lin, 2017). The remuneration packages for directors and senior managers are therefore an important element of agency costs.

Agency Cost of Debt

The agency costs of debt have been widely discussed, but the benefits of debt in motivating

Managers and their organizations to be efficient have been ignored. Managers with substantial free cash flow can increase dividends or repurchase stock and thereby pay out current cash that would otherwise be invested in low-return projects or wasted (Singh and Davidson, 2013). This leaves managers with control over the use of future free cash flows, but they can promise to pay out future cash flows by announcing a permanent increase in the dividend. Such promises are weak because dividends can be reduced in the future.

The fact that capital markets punish dividend cuts with large stock price reductions is consistent with the agency costs of free cash flow. Debt creation, without retention of the proceeds of the issue, enables managers to effectively bond their promise to pay out future cash flows. Thus, debt can be an effective substitute for dividends, something not generally recognized in the corporate finance literature ((Singh and Davidson, 2013). By issuing debt in exchange for stock, managers are bonding their promise to pay out future cash flows in a way that cannot be accomplished by simple dividend increases. In doing so, they give shareholder recipients of the debt the right to take the firm into bankruptcy court if they do not maintain their promise to make the interest and principle payments. Thus debt reduces the agency costs of free cash flow by reducing the cash flow available for spending at the discretion of managers.

Agency Problems

Agency conflicts are differences in the interests of a company's owners and managers. They arise in several ways

Moral Hazard

The prospect that a party insulated from risk may behave differently from the way it would

Behave as if it were fully exposed to the risk. A manager has an interest in receiving benefits from his or her position as a manager. These include all the benefits that come from status, such as a company car, a private chauffeur, use of a company airplane, lunches, attendance at sponsored sporting events, and so on. Jensen and Meckling (1973) suggested that a manager's incentive to obtain these benefits is higher when he has no shares, or only a few shares, in the company. The biggest problem is in large companies.

Effort Level

Managers may work less hard than they would if they were the owners of the company. The

Effect of this 'lack of effort' could be lower profits and a lower share price. The problem will exist in a large company at middle levels of management as well as at senior management level. The interests of middle managers and the interests of senior managers might well be different, especially if senior management are given pay incentives to achieve higher profits, but the middle managers are not,

Earnings Retention

The remuneration of directors and senior managers is often related to the size of the

Company, rather than its profits. This gives managers an incentive to grow the company, and increase its sales turnover and assets, rather than to increase the returns to the company's shareholders. Management is more likely to want to re-invest profits in order to make the company bigger, rather than pay out the profits as dividends. When this happens, companies might invest in capital investment projects where the expected profitability is quite small, and the net present value might be negative

Risk Aversion

Executive directors and senior managers usually earn most of their income from the company they work for. They are therefore interested in the stability of the company, because this will protect their job and their future income. This means that management might be risk averse, and reluctant to invest in higher-risk projects. In contrast, shareholders might want a company to take bigger risks, if the expected returns are sufficiently high. Shareholders often invest in a portfolio of different companies; therefore it matters less to them if an individual company takes risks.

Time Horizon

Shareholders are concerned about the long-term financial prospects of their company, because the value of their shares depends on expectations for the long-term future. In contrast, managers might only be interested in the short-term. This is partly because they might receive annual bonuses based on short-term performance, and partly because they might not expect to be with the company for more than a few years. Managers might therefore have an incentive to increase accounting return on capital employed (or return on investment), whereas shareholders have a greater interest in long-term value as measured by net present value.

Empirical Review

Ogunyemi, Adewole and Akinde (2019) examined the effects of employees' remunerations on productivity in Nigerian breweries. The study used descriptive research design. The population of this study consists of all staff working at the Nigerian Breweries PLC Ibadan. Sample of one hundred and twenty respondents were selected. A structured questionnaire was used to collect data from the respondents. The descriptive statistics employed include; frequencies and percentage and the relationship between independent and dependent variables were established using Pearson Product Moment Correlation coefficient with the use of (SPSS). The findings were presented using tables and figures. From the findings in the Hypothesis, the $r = 0.509^{**}$ was obtained. This is significant as the p-value greater than 0.05. This shows that there was a significant relationship between remuneration packages' and employee performance. The findings also revealed that quick payment of remuneration has great influence on employees' productivity.

Mitnick (2015) studied the origins of agency theory and found that CEOs might pursue their own interests if they perceived that their incentives did not align with performance of firms. Balafas and Florackis (2014) used this theory to examine the effects of CEO compensation on shareholder value by comparing firms that provided their CEOs with excessive fees and other firms in the same industry that did not provide their CEO with excessive fees. Using from a large sample of U.K.-listed companies for the period of 1998-2010, BalafasFlorackis found that higher CEO compensation could lead to lower subsequent short-returns, whereas firms that provided CEOs with low incentive distribution experienced opposite. Brisker, Colak, and Peterson (2014) found that owners experienced information

gaps in the external environment, market trends, and actual business situations. Chief executive officers pay relative to firm performance compensation schemes might align with the executives' incentives. By using a quantitative logit and stepwise regression design, Joubert collected sample data of executive compensation for 231 publicly traded companies in Canada, France, United Kingdom, and the United States over the period of 2004-2008. Through a regression analysis on panel data of 180 French and Canadian listed firms from 2006 to 2008, Joubert and Fakhfakh (2011) investigated the impact of institutional features on the behavior of earnings management, which were the strongest incentives to management discretion through a PMDA. They conducted three separate panel regressions to determine the effects of board characteristics and institutional features on the PMDA.

Cao and Wang (2013) conducted a mixed-methods study by integrating agency theory into search theory to examine executive compensation in market equilibrium. They analyzed the optimal contracting strategy of individual firms under arbitrarily fixed outside options for CEOs, where a CEO can choose to stay or quit after privately observing an idiosyncratic shock to the firm. Then, the authors explored the relationship between the risk level of the firm and the optimal pay-to-performance ratio (Cao & Wang, 2013).

Hou, Lee, Stathopoulos, and Tong (2016) indicated that executive compensation structure could influence the development of enterprises, but the research findings vary widely. Moreover, different perspectives emerged on the variables and their influence factors on corporate performance (Hou et al., 2016). Most scholars advocated that the link between CEOs' compensation and performance of firms would ease the conflicts between shareholders' and executives' interests and help solve the problem of agency. High compensation for CEOs could improve the profitability of the corporation, as represented in annual revenue of the firm (Graham et al. 2012). Hou et al. (2016) found the same result-equity compensation is helpful for motivating executives to create enterprise value. The authors discovered a strong correlation between executive remuneration and the market value of the firm (Hou et al., 2016).

Banker et al. (2013) also found positive effects of CEO compensation, and showed the managerial ownership has a positive incentive effect and could thus significantly improve operating performance of the company; in other words, a positive correlation exists between executive compensation structure and growth in annual revenue of the main business. Banker et al. performed a multiple linear regression analysis using ROE and individual stock performance as predictor variables, and CEOs' salary, CEOs' bonus, and CEOs' equity compensation as criterion variables. They determined that from 1993 through 2006, using data of 15,512 CEOs, ROE and stock performance of an individual firm had a positive association with both CEOs' salary and CEOs' equity-based compensation (Banker et al., 2013). Gibbons and Murphy conducted a survey of the entrepreneurs of the top 500 companies in *Happy Magazine*, and more than half of the survey participants indicated the financial index method was more appropriate than other methods for evaluating financial performance of firms (Graham et al., 2012). Empirical research of 367 companies listed on the New York Stock Exchange revealed that accounting indexes are a commonly used method for evaluating the performance of entrepreneurs instead of stock returns (Graham et al., 2012). Lin et al. (2013) reported that firm size, as measured by total assets of a firm, has a significantly positive relationship with CEOs' incentive compensation. Firm size is a measurement to differentiate the size of each firm by total assets of the firm (Lin et al., 2013). Many organizations have increased the proportion of stock options in executive compensation structure.

Nulla (2013) used independent variables of ROE and annual revenue, and the dependent variable of CEOs' total compensation in the study. The results indicated the existence of a positive relationship between CEO compensation and CEO age, using accounting performance as a benchmark (Nulla, 2013a). Graham et al. (2012) contributed to the study of executive compensation by modeling the

fixed effect of managers, which refers to the heterogeneity of the managerial talents and human capital. Therefore, the model may explain some of the high levels of executive compensations. Graham et al. suggested that executives with high compensation and increased corporate performance are identified to be highly aligned. Furthermore, Graham et al. found that managers with a higher than expected level of compensation would take measures to prevent losing their jobs and the excess compensation by choosing lower leverage. The authors pointed out that executive' human capital accounts for better corporate performance.

Brisker and Wang (2017) used a quantitative correlation design to explore the relationship between CEOs' deferred compensation, capital structure of the firm, and firm performance. They used the deferred compensation data set to measure CEOs' aversion to risk. Brisker and Wang also provided firsthand evidence of the relationship between CEO risk preferences and firm risk, such as stock return volatility, earnings volatility, and the riskiness of financial and investment policies. The results indicated that risk-taking CEOs pursue risky financial and investment firm policies, based on the behavioral consistency theory to demonstrate that CEOs act consistency across personal and professional.

Wang (2019) used six different proxies of agency costs from which asset turnover is one of them. He concluded that if only total asset turnover and operating expense ratio are to be regarded as sufficient agency cost measures for agency costs and disregard the remaining proxy variables of agency costs (which seems insignificant from his findings), his study can be said to have found evidence, sufficient to give support to the free cash flow hypothesis. Nevertheless, certain methodological oversights by the study might have necessitated the conduct of this study

Kim, Kogut, and Yang (2015) analyzed the drastic shift of income inequality in the United States and blamed executive compensation for being the primary source. They proposed three potential explanations, including interlocking directorates, peer groups, and educational networks (Kim et al., 2015). Kim et al. failed to find supporting statistical evidence of the explanatory power of peer and education network on excessively high executive compensation. Therefore, managerial talent could not be the major source of rapid growth of executive compensations, which were growing faster than the market valuation or size of the firm (Kim et al., 2015). The only justified explanation of their statistical analysis was corporate director networks.

Brisker et al. (2014) concluded that it can lead to less risk taking, which can also be detrimental. Another concern regarding incentives paid through stock options was the unintended consequence of creating risk aversion for the CEO (Brisker et al., 2014). Risk aversion could occur if the CEO has most of his or her wealth concentrated in stock options and thus tied to the value of the firm (Brisker et al., 2014; Heron & Lie, 2017). CEOs in a situation with wealth tied directly to the firm value may be hesitant and reject positive net present value projects, which were too risky.

Banker et al. (2013) found board of directors of growth companies tended to raise the proportion of equity earnings in CEOs' compensation structure to reduce agency costs. The nature of investment opportunities also affects executive compensation structure. Investment or investment opportunities that were more uncertain and needed more time to succeed were more likely to be associated with potential proxy conflicts (Banker et al., 2013). Nyberg et al. (2010) concluded the quality of the primary data, an emphasis on equity-based compensation, and the mismatch of short-term or long-term incentives were limitations to applicability of agency theory. Based on the reconceptualization of Chief executive officers compensation to Chief executive officers return, Nyberg et al. discovered a stronger alignment of CEOs' compensation and shareholders' interests than had been reported in the previous literature.

Pandher and Currie (2013) conducted a quantitative correlation study examining how CEOs' compensation and compensation composition can be strategic factors in the capacity of firms to generate value, the uncertainty of resource advantage, and the competitive interaction of the firm stakeholders with their top executives. Pandher and Currie used an analytical framework wherein CEOs and stakeholders pressed for the surplus of firms as utility-maximizing claimants according to their bargaining power, while providing shareholders with market-based returns. Pandher and Currie found that executives were self-serving and might not act in shareholders' best interests to maximize profits for the firm, which agreed with the findings reported by Nyberg et al. (2010).

Larkin, Pierce, and Gino (2012) focused on the psychological cost of nonexecutive compensation to analyze agency theory by investigating the pay-to-performance system from a different perspective. Larkin et al. first conducted a qualitative case study using the survey and interview instruments on data of selected firms in California. Next, they examined how psychological costs from overconfidence and social comparison can lead to reductions in the accuracy of individual performance-based compensation by using a quantitative cause-and-effect analysis design. Larkin et al. found that compensation was a strategic motivator for workers, which could also lead to overall better productivity and firm performance. Larkin et al. (2012) concluded that even though agency theory provides a framework for the development of compensation strategies, the theory fails to take into account several psychological factors that can improve costs of performance-based compensation. The researchers argued that performance-based pay increases agent costs because of psychological costs such as social comparison and overconfidence.

Liao and Lin (2017) studied how R&D investments of firms might have an impact on firm performance and found a positive relationship in between. Therefore, the spending on R&D and advertising mediated the relationship between CEOs' compensation and performance (book value, sales, dividend payout, and return on assets [ROA] of firms in the given study; Chakravarty & Grewal, 2016). R&D spending also provided disincentives for the CEOs; these disincentives could create the problems such as earnings expectation to the subsequent analysts' anticipation, declining sales, worse economic conditions, and limited tenure in the firm (Chen, Ho, & Ho, 2014). The risk compensation would have a direct impact on agents' decisions that involve capital investment, R&D expenses, and corporate diversification (Chen, Ho, et al., 2014).

Chen, Ho, et al., Chakravarty and Grewal (2016) suggested that if CEOs' compensation were set according to long-term scope, the CEOs would act in the best interests of long-term goals and perform more risk-taking behaviors. Furthermore, the effects would be larger in smaller firms because larger companies are not likely to improve the equity-to-bonus ratio on a large scale. Therefore, the research was consistent with agency theory, indicating CEOs' compensation aligned with performance of firms from a long-term perspective (Chakravarty & Grewal, 2016).

Kabir and Minhat (2014) examined a sample of UK firms from 2003 to 2006 and find that CEOs receive higher equity-based pay when firms employ multiple compensation consultants rather than a single consultant, and that the market shares of compensation consultants are positively related to CEO equity-based pay. They also find that CEO pay increases as the number of compensation consultants increases, but not vice versa.

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Elson and Ferrere (2014) argued that excessive overcompensation departed from optimal market-based contracting, which originated from the mechanistic and arbitrary application of compensation peer group. They further pointed out the necessity of internal pay-setting systems to develop compensation standards based on the individual nature of the organization concerned, including the CEOs' current and historical performance, and competitiveness exhibited by different industries, firms, and business environments.

Larcker (1983) founds a significant positive stock market reaction when an adoption of a performance plan is disclosed. Tehranian and Waagelein (1985) report that the announcement of short-term compensation plan adoption is associated with positive abnormal returns, and argue that the returns subsequent to the announcement are associated with positive unexpected earnings change. Brickley et al. (1985) show that the introduction of long-term compensation plans increased shareholder wealth. Waagelein (1988) also finds that there is a significantly positive stock market reaction for companies which adopted the short-term compensation plans.

Iskandar et al (2017) used firms listed on Bursa- Malaysia stock exchange. This study also tested their hypotheses using cross sectional regression and concluded with a significant positive impact of free cash flow on agency cost negative impact on asset utilization. They hence concluded that free cash flow may be invested unproductively, thereby resulting to inefficient assets utilization. As observed in the previous evidence, along with the assumption that firms' characteristics are the same, cross sectional regression also assumes that the variables' variations are not affected by time.

Wang (2010) conducted a study to investigate the relationship between agency cost and cash flow, as well as to investigate on how such relationship could affect the company performance. Based on the findings, this study conducted on Taiwan publicly listed companies were focusing on 3 main points which is there is significant effect between free cash flows on agency cost; the agency cost positively effect on company performance; and no significant effect pertaining the effect of agency cost on company performance.

Related empirical studies Yermack (1996) pioneered the empirical study on the relationship between board size and financial performance. Analyzing a panel of 452 large USA firms from 1984 to 1991 using a fixed effects model, result shows that there is a negative and significant board size effect on Tobin's q (financial performance proxy). (2009) sought to establish whether dividend policies have a relationship with the amount of agency related cost from a sample of companies quoted in the Nairobi Stock Exchange. Descriptive research design was used and targeted all 54 companies quoted at the Nairobi Stock Exchange. Stratified random sampling was used to select data of which a sample of 20 companies out the population of 54 companies was picked for a period of 8 years, 1999 to 2006 to ensure that information obtained was current and relevance. The findings showed that the dividend policies of the firm in the various sectors do not seem to be designed to mitigate the agency costs.

Pinteris (2002) examined agency costs, ownership structure and performance in Argentine banking. The study empirically investigates two main objectives: first is related to the reality of banking sectors in Argentine. Such objective proves the agency problems existence between stakeholders and management, from one hand, the stakeholders and government represented by banking institutions, from other hand. Second objective is represented by providing evidences related to the impact of bank ownership concentration on both agency cost and performance using available information related to banks in the period 1997-1999. The study reveals an inverse relationship between ownership concentration and performance. The study also concludes that the banks having high ownership concentration should have high risk on bank's loan portfolio; at the same time it does have a high agency cost as compared to other banks which have low ownership concentration. The results of this study also show a strong conflict between stockholders and the management of banks

because of the asymmetric information and the stockholders' attempt to push the bank's managers towards investment on the account of deposits and reserves ratios.

Yuk-Chow (2005) examined agency costs and ownership structure from the small business finance survey data base. The purpose of the paper was to show the impact of managerial effectiveness on agency cost of ownership and debts in light of the variety of ownership structure, debt contract and investment. This study uses the data of 1993, revealing that the managerial effectiveness has an important role to alleviate both agency cost of ownership and debts. The findings of this study recommended giving more attention to the important role played by management to lighten agency cost of ownership in light of differences of ownership structure, as well as to mitigate the debt contracts and investment policy impact on agency cost for ownership.

Yinusa, Ismail, Olawale, Yulia (2019) examined the impact of capital structure on firm performance in Nigeria as well as test the possibility of non-monotonic relationship between capital structure and firm performance based on the prediction of the agency cost theory of capital structure when firm use debt financing excessively. The study used dynamic panel model on panel data of 115 listed nonfinancial firms in Nigeria. Specifically, the paper employed the two step generalized method of moments (GMM) estimation method that recognizes the persistence of the dependent variable by including its lag value as an explanatory variable in the regression model. The major findings indicate statistical significant relationship exist between capital structure and firm performance particularly when debt financing is moderately employed. However, the paper found evidence of nonmonotonic relationship between capital structure and firm performance when firms in Nigeria employed excessive debt financing which impinged on the performance of firms. The findings support the portability of the agency cost theory in the Nigeria context but with caution considering the facts that firms in Nigeria were largely finance through short term debt as against long term debt financing that was assumed in the agency cost theoretical proposition.

Chowdhury and Chowdhury (2017) examined the impact of capital structure on firm's value using data from Bangladesh economy from the year 1997 to 2003 and observed that maximizing the wealth of shareholders requires a perfect combination of debt and equity. They explained that the cost of capital has a negative correlation from the result, thus should be kept as minimum as possible

Babalola (2012) examined the relationship between Return on Equity (ROE) and the capital structure of a sample of 10 Nigerian firms from year 2000 to 2009, and observed that a strong curvilinear relationship exist between ROE and the debt-to-asset ratio. Their findings which is consistent with the trade-off theory shows that at a reasonable parameter values, the financial distress cost burn by debt do, infact provide a first-order counterbalance to the tax benefit of debt and that firm's performance is a quadratic function of debt ratio.

Ang, Cole, and Lin (2016) used data of small business in US, studied the effect of ownership structure on agency costs. They find that agency costs (proxies by expense ratios) decline as managerial ownership increases. The authors found empirical support for the disciplinary role of debt. This supports the idea that better monitoring by banks reduces agency costs. They argue that this puts pressure on managers to run business profitably and report the real picture of business to such banks. Hence, they conclude that agency costs increases with the number of non-manager shareholders, and to a lesser extent, are lower with greater monitoring by banks.

Ang, et al. (2015) examined to larger US publicly traded corporations using data for the period 1992 and 1994. Using asset utilization and discretionary expense ratio as proxy measure for agency costs, their results showed that inside ownership reduces agency costs when asset utilization is used

but relationship is not significant when discretionary expense ratio is used. They demonstrate that outside large shareholders' ownership may only have a limited effect on reducing agency costs and find weak evidence that higher managerial ownership reduces agency costs. Fleming et al. (2015) used sample data of Australian SMEs. They use asset utilization ratio and operating expense ratio as proxy for agency costs. They test the relationship between debt to equity ratio, used as proxy for banks' monitoring, and equity agency costs. The results show that leverage improves asset utilization but results show no significance impact on discretionary operating expenses. Hence, they showed that capital structure has an effect on agency costs but the effect depends on the size of the firm and the choice of agency costs measures taken.

Nyaboga (2018) investigated the relationship between capital structure and agency costs of twenty firms listed at the NSE in Kenya between 2000 and 2007. The study applied gearing ratio as the measure of capital structure and agency costs measured as operating expenses to total sales as the dependent variable. The relationship was analyzed using simple regression analysis model with no control variables. The study finds that the use of debt decreases expenses in high growth firms but increases asset utilization in low growth firms.

Kittony (2011) tested the relationship between capital structure and agency costs on twenty eight firms listed at the NSE between 2005 and 2009. The study used agency costs proxy of operating expenses to total assets. Further, the study used the capital structure measured by Onsomu (2014) carried out a study to investigate the relationship between capital structure and agency costs for firms listed at the NSE for the period 2009-2013. The study used efficiency cost ratio as a proxy for agency costs, and capital structure was measured as long term debt to equity. In addition, two other variables were used, this is information asymmetry measured as market value to book value per share and ownership concentration measured by corporate ownership to equity. Using a multiple regression analysis, the study finds that capital structure has a significant positive relationship with agency costs. Furthermore, the study shows that the use of long term debt in the process of the operational activities will lead to an improvement in a company's operating expenses. Hence, the study concludes that capital structure determines agency costs.

Mwangi, et al (2014) investigated the relationship between capital structure and financial performance of non-financial companies listed at the NSE, Kenya for the period 2006-2012. Performance was measured using return on equity (ROE) and return on assets (ROA). Capital structure was measured by long term debt to equity. Panel multiple regression analysis was applied to estimate the relationship between the financial leverage level and performance. The study finds that increased financial leverage has a negative effect on the performance of the firms. The findings however, contradicts the agency theory postulated by Jensen and Meckling (1976), that the use of leverage (long term debt) in the capital structure can be used to mitigate the agency conflicts by forcing managers to invest in profitable ventures that benefit the shareholders.

Kaijage and Elly (2014) posit that in general, empirical studies have examined the validity of the various theories, but no consensus has emerged among researchers as regards the theory that best explains the capital structure choice. Furthermore, the study of agency theory has been an important subject in corporate finance since Jensen and Meckling (1976) demonstrated that the self-interest motive of management could incur agency costs burdening the wealth of stockholders. In addition, a variety of studies have provided valuable insights into how capital structure choices can be used to mitigate various types of agency problems.

METHODOLOGY

Philosophical Foundation

The selection of an appropriate paradigm lays the ground for the intent, inspiration and expectations of research, Mackenzie & Knipe (2006). The way of collection, analysis ‘ and interpretation of date. The core of researchers way and manner of conducting .On the one hand, it is well-established that the research process is dependent on researcher’s assumption about the nature of reality. On the other hand, the clear definition of researchers’ philosophical perspective facilitates the understanding of their work by the academic community. This work will be based on objective ontology and functionalist paradigm

Research Design

This study examines the relationship between agency theory and the value of quoted Agro-allied manufacturing firms in Nigeria, secondary data was used. Ex-post facto research design will be employed in obtaining, analyzing and interpreting the relevant data for hypotheses testing. The rationale for the variety is that ex-facto research design allows the researcher the opportunity of observing one or more variables over a period of time (Uzoagulu, 1998). Specifically, panel data will be adopted in data analysis.

Population of the Study

The study examined the effect of agency theory, capital structure on the value of quoted agro allied firms, therefore the population of the study are all the agro allied manufacturing firms quoted in the Nigeria stock exchange.

Sample size

The sample size of the study is seven (7) quoted conglomerate firms. Selection of the seven (7) quoted firms was purposive to ensure that most sectors of the industrial classification according to NSE were well represented. The seven quoted conglomerate firms are, Dangote flour Plc, Cadbury Nig. Plc, FTN cocoa processors Plc, Ella Lakes Plc, Okomu Oil and palm Plc, Presco Plc, and Livestock Feed Plc.

Data Collection Method

The data for this study was collected through the secondary source. This includes; data’s of various quoted conglomerate firms as above. The data covered for a period of 8 years (2014 - 2021) and will be obtained from, the Nigerian exchange Group fact book.

Model Specification

The model is specified functionally as:

$$Y = \beta_0 + \beta_1 X_{it} + \mu \quad (3.1)$$

Where Y = Dependent Variable

$\beta_1 X_{it}$ = Independent variable

β_0 = Regression Intercept

μ = Error Term

Thus,

$$(3.2)$$

But

VF = BV, IGR

AC = MC, BC, RC,

AP = EE, AS, OINVT, RP

Disaggregating Equation 3.2 to form the multiple regression models, we have

Agency cost

$$BV = F(MC, BC, RC,) \quad (3.3)$$

$$IGR = F(MC, BC, RC,) \quad (3.4)$$

Fixed Effect Model Specification

$$BV_{it} = \beta_0 + \beta_1 MC_{it} + \beta_2 BC_{it} + \beta_3 RC_{it} + \varepsilon_{it} \sum_i^9 = 1 \alpha_i idum \varepsilon_{1it} \quad 3.15$$

$$IGR_{it} = \beta_0 + \beta_1 MC_{it} + \beta_2 BC_{it} + \beta_3 RC_{it} + \varepsilon_{it} \sum_i^9 = 1 \alpha_i idum \varepsilon_{1it} \quad 3.16$$

Random effect model specification

$$BV_{it} = \beta_0 + \beta_1 MC_{it} + \beta_2 BC_{it} + \beta_3 RC_{it} + \varepsilon_{it} \quad 3.21$$

$$IGR_{it} = \beta_0 + \beta_1 MC_{it} + \beta_2 BC_{it} + \beta_3 RC_{it} + \varepsilon_{it} \quad 3.22$$

VF= Value of the quoted Agro-Allied manufacturing firms in Nigeria proxy by end of Year's equity price

BV = Book value of the quoted Agro-Allied manufacturing firms in Nigeria proxy by log of Book value of assets

IGR =Internal Growth Rate

MC = Monitoring cost of the quoted Agro-Allied manufacturing firms in Nigeria proxy by cost of

Audits

BC = Bonding cost of the quoted Agro-Allied manufacturing firms in Nigeria proxy by log of book

value of equity

RC = Residual loss of the quoted Agro-Allied manufacturing firms in Nigeria proxy by log of net operating expenses

ε =Error Term Coefficient of Independent Variables to the Dependent Variables

β_0 =Regression Intercept

$\beta_1 - \beta_4$ =Regression Coefficient

APriori Expectation of the Result:

The explanatory variables are expected to have positive and direct effects on the dependent variables.

Technique for Analysis

To obtain the observed values on the expectation of the impact of financial information on market value, panel data survey of eleven year period was employed. Panel data structure allows us to take into account the unobservable and constant heterogeneity, that is, the specific features of each quoted firm. The researcher employed pooled Ordinary Least Squares (OLS), Fixed Effects and Random Effects regression models to test the various hypotheses. Pooled OLS regression technique is popular in financial studies owing to its ease of application and precision in prediction (Alma, 2011).

This undermines an exploration of the effect of slow changing within individual firm's factors. Hence, the rationale for adopting Fixed Effects and Random Effects models estimator as additional test is to enable the researcher control time contrast and time invariant variables, and thereby control for the effect of the unobserved heterogeneity in the dataset. Ujunwa (2012) opines that coefficient of estimations are reliable when regression parameters do not change over time and do not differ between various cross-sectional units. Therefore, when the regression estimation differ widely between the two models (Fixed and Random Effects models), the adoption of Hausman test will be essential. Panel data over the period from 2010-2021 is used and in line with notable literature, such as the work of Majumdar & Chhibber (1999), Zeitun & Tian (2007), and Onaolapo & Kajola (2010), firm's market value measure will be regressed on each of the variants of financial information and other control variables holding other factors constant.

Hausman Test

Since random effects model is invalid when heterogeneity exist, meaning that error term is correlated with explanatory variables, Hausman test is often used to test whether a variable can be

treated as exogenous or whether that variable needs a separate structural equation. Hausman test refers to a test for whether a random effects approach to panel regression is valid or whether a fixed effects model is necessary (Brooks, 2014). We exercise Hausman test by E-views, with the null hypothesis that random effects model can be applied.

Pooled Regression (OLS) Model (PRM):

Is equally known as the constant coefficient model (CCM); It is the simplest among the three models in panel data analysis; However, it disregards the space and the time dimensions of the pooled data; in a situation where there is neither significant cross-section unit nor significant temporal effects, one could pool all of the data and run an ordinary least squares (OLS) regression model.

Fixed Effects (FE) Model:

In the FE technique, the slope coefficients, are constant but the intercept, varies across space i.e. the intercept in the regression model is allowed to vary across space (individuals); This is as a result of the fact that each cross-sectional unit may have some special characteristics; The FE technique is very suitable in cases where the individual specific intercept may be correlated with one or more regressors (independent variables); In order to take into cognizance the different intercepts, the mean differencing or dummy method is usually employed based on which is found more suitable; It is known as the least-squares dummy variable (LSDV) model in cases where dummy variables are used; This is another way of calculating within estimate, most especially when the number of observations (A is not relatively large; Its major disadvantage of the LSDV model is that it significantly reduces The degrees of freedom when the number of cross-sectional units, N, is very large; In this case, N number of dummies is introduced, which will help to reduce the common intercept term.”

Random Effect (RE) Model:

The RE technique which is equally known as the Error Components Model (ECM) is an alternative to FE technique; Basically, the RE estimator assumes that the intercept of an individual unit is a random component that is drawn from a larger population with a constant mean value; The individual intercept is then expressed as a deviation from this constant mean value; One major merit of the RE over the FE is that it is economical (parsimonious) in degrees of freedom; This is because one does not have to estimate N cross-sectional intercepts but just only the mean value of the intercept and its variance; The RE technique is suitable in cases where the (random) intercept of each cross-sectional unit is uncorrelated with the regressors; Since there is no significant correlation between the unobserved units of observation, specific random effects and the regression, the RE model may be more appropriate.’

Statistical Approach:

(i) Coefficient of Determination (R^2): This is used to measure the extent to which the independent variables in the model can explain changes on the dependent variable;

(ii) Correlation Coefficient (R): This measures the strength and the extent to which the dependent and the independent variable are related;

(iii) T-Test: This is used to measure the significance of the independent variables to the dependent variable and the hypothesis will be tested at 5% level of significance and at 95% confidence interval; The hypothesis for this test is stated as follows:

Null I hypotheses: $H_0: \beta = 0 = 0$, (Statistically not significant) Alternate hypotheses;

$H_i: \beta \neq 0$ (Statistically Significant)

And the decision rule states that ‘ H_0 ’ should be rejected when T-statistics is greater than the critical value, but when the T-statistics is lower than the critical value, the ‘ H_0 ’ is accepted.”

(iv) **F-Test:** This is used to find out the overall significance of the regression model at 5% level of significance; the hypothesis for this test is stated as:

Null Hypotheses; $H_0: \beta_1 - \beta_3 = 0$ (all slope coefficients are equal to zero)

Alternative Hypotheses: $H_1: \beta_1 - \beta_3 \neq 0$ (all slope coefficients are not equal to zero)

The decision rule for this test is that 'H₀' should be rejected when F-statistics is greater than the critical value of F, but when the F-statistics is lower, then the 'H₀' is accepted while the 'H₁' is rejected"

(v) **Test of Autocorrelation**

The Durbin Watson statistics will be used in this research to test for the presence of autocorrelation; When there is presence of autocorrelation, the First order autoregressive scheme will be employed to correct it; The hypotheses states that:

$H_0: \rho = 0$ (There is serial independence in the errors)

$H_1: \rho > 0$ (There is first order (AR) positive autocorrelation)

When the Durbin Watson Statistics (DW-Stat) is less than lower Durbin Watson (DL), the null hypothesis (H₀) is being rejected but if the Durbin Watson statistics is greater than the upper Durbin Watson (DU), the null (H₀) is then accepted.

Granger Causality Test:

Although regression analysis deals with the dependence of one variable on other variables, it does not imply causation. In addition to the panel regression, granger causality test is deployed to find out if whether the accounting information will impact on the market value of selected local content petroleum firms. At one extreme are people who believe that everything causes everything (Gujurati, 2004). To further study the relationship between accounting information and the market value of selected local content petroleum firms, granger causality test is applied. Granger causality test is dealing with bilateral causality and it can detect the direction of the causality. With the Granger causality test, we will test the variable dividend yield with each determinant separately. The test will be conducted in E-views, with the null hypothesis that the variable under consideration does not "granger cause" on other variable (Gujurati, 2004).

Diagnostic Test

Regression models can find a variety of problems or combinations of them, such as wrong odds estimates and wrong standard errors. To achieve more reliable and consistent estimates, our regression model requires some desirable features that must be consistent with the five assumptions of OLS. Therefore, several regression diagnostic tests are required before starting the regression model; each diagnostic test and the corresponding conclusions are discussed below, based on five assumptions, then multicollinearity and location.

Multicollinearity

Using the OLS estimation method also requires that the explanatory variables are not correlated with one another, Multicollinearity refers to a high correlation between explanatory variables. Multicollinearity would cause loss of precision, R-squared will be high but the individual coefficients have high standard errors and inference is not reliable (Brooks, 2014). We will examine the correlation between the independent variables by using covariance matrix. An absolute correlation value exceeding 0.8 would indicate strong correlation and something that would necessitate us to remove one of the variables.

Panel Unit Root:

According to Brooks (2014), "it is necessary to examine the stationarity of data to avoid spurious regressions; Besides, it is not possible to validly undertake hypothesis tests about the regression parameters; A stationary series can be defined as one with a constant mean, constant variance and

constant autocovariances for each given lag; There are various unit root test to examine stationarity of series. Unit root tests such as DF test, ADF tests e.t.c, are weak and tend to accept the null hypothesis (Gujarati, 2004). Besides, individual unit root tests have limited power. Since we have panel data, Levin, Lin and Chu's (LLC) model (Brooks, 2014) is recommended as it allows for both entity-specific and time-specific effects. The null hypothesis is unit root exists, indicating the data is non-stationary; we will conduct panel unit root tests on each variable in its current level in our model.

DATA PRESENTATION AND ANALYSIS OF RESULTS

Presentation of Results

Agency Cost and Book Value

Table 4.1: Analysis of Panel Unit Root of Agency Cost and Book Value

Method: AC	Statistic	Prob.**	Cross-sections	Obs	Source: Computed by Research from E-view
Levin, Lin & Chu t*	-0.11009	0.4562	7	112	
Breitung t-stat	-2.06248	0.0196	7	112	
Im, Pesaran and Shin W-stat	0.08658	0.5345	7	112	
ADF - Fisher Chi-square	10.9687	0.6885	7	112	
PP - Fisher Chi-square	-0.02039	0.4919	7	112	
Series: BV					
Levin, Lin & Chu t*	-13.4374	0.0000	7	112	
Breitung t-stat	-1.07654	0.1408	7	112	
Im, Pesaran and Shin W-stat	-6.18128	0.0000	7	112	
ADF - Fisher Chi-square	27.7265	0.0155	7	112	
PP - Fisher Chi-square	-1.17739	0.1195	7	112	
Series: D(AC,2)					

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The results in Table 4.1 are panel unit root analysis for agency cost and book value. This is done to test for the unit roots and also the order of integration of the variables. The results are determined using a Dickey-Fuller, Levine, Lane and Chu augmented T* test. Test was necessitated due to the nature of data which is so random in nature and non stationery. The consequence of using data without checking for stationary is that it can lead to spurious results. This test shows that there was a unit root as it wasn't stationery at levels or series as only one PV of 0.0196 of the five tests conducted was less than 0.05 percent while the other four had PV greater than 0.05 at 5percent level of significance, whereas the acceptance rule for rejection of Null hypothesis of non -stationary is that at least three results out of the five tests conducted M

must have a PV lesser than 0.05. A further test was conducted and had four out of the five test with a PV lesser than 0.05 .therefore, the data got integrated at I (I) level one of first differencing, with this integration at first level of difference I(I), we reject the null hypothesis of non – stationarity and proceeded to test for a co integration to establish evidence of long -run relation among variables.

Table 4.2: Presentation of Co-Integration Test of Agency Cost and Book Value

Statistic	Prob.	Weighted Statistic	Prob.
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Panel v-Statistic	1.140526	0.1270	0.128447	0.4489
Panel rho-Statistic	-1.114735	0.0325	-1.429785	0.0764
Panel PP-Statistic	-1.571062	0.0581	-1.895119	0.0890
Panel ADF-Statistic	-1.182994	0.0118	-0.789401	0.2149
Alternative hypothesis: individual AR coefs. (between-dimension)				
	<u>Statistic</u>	<u>Prob.</u>		
Group rho-Statistic	0.197352	0.0578		
Group PP-Statistic	-1.112576	0.0132		
Group ADF-Statistic	-1.052506	0.0146		

Source: Computed by Researchers from E-view 10

The study estimated with Pedroni (1999) procedure of residual-based panel Co-integration tests model using value of firms (Dependent variable) and the independent variables with Individual intercept and individual trend. Here are seven test results (panel v-Statistic, Panel rho-Statistic, Panel PP-Statistic, Panel ADF-Statistic, Group rho-Statistic, Group PP-Statistic, Group ADF-Statistic). From the estimated results, four out of all the p-values of the seven tests were lesser than 0.05 and the criteria for accepting Null hypothesis of co-integration is that at least four out of the seven statistical results must have P-value lesser than 0.05. We therefore accept the Null hypothesis that there is Co integration equations among the variables in the model.

Table 4.3 Presentation of Regression Results for Agency Cost and Book Value

Variable	Coefficient	Std. Error	t-Statistic	Prob.
AC	0.072146	0.028613	2.521439	0.0130
C	6.962744	0.329295	21.14442	0.0000
Effects Specification				
			S.D.	Rho
Cross-section random			0.378131	0.4434
Idiosyncratic random			0.423670	0.5566
Weighted Statistics				
R-squared	0.548926	Mean dependent var		1.967269
Adjusted R-squared	0.541256	S.D. dependent var		0.431968
S.E. of regression	0.422963	Sum squared resid		22.18333
F-statistic	6.378919	Durbin-Watson stat		1.643824
Prob(F-statistic)	0.012809			
Unweighted Statistics				
R-squared	0.010611	Mean dependent var		7.704683
Sum squared resid	36.54977	Durbin-Watson stat		0.390760
Correlated Random Effects - Hausman Test				
Test Summary		Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random		0.586627	1	0.4437
Cross-section random effects test comparisons:				
Variable	Fixed	Random	Var(Diff.)	Prob.
AC	0.074096	0.072146	0.000006	0.4437

Source: Computed by Researchers from E-view 10

The result in Table 4.3 is the presentation of regression model and Hausman test. The result shows the chi-square value of 0.586627 which is greater than 0.05 with p-value of 0.4437. The acceptance rule for a Chi value is that it must be greater than 0.05 and with evidence from the result, we have sufficient evidence to reject the null hypothesis of the random effects model as being inadequate. From the result one can deduce that the estimators (fixed effects model and random effects model) used for the analysis of this study are efficient and consistent estimates that can trace the true nature of the relationship between agency cost and book value of quoted Agro Allied manufacturing firms in Nigeria.

The adjusted R-squared value (R^2) is 0.548926, representing a 54.8926 percent change in book value of quoted agro allied manufacturing firms with a value of the F statistic of 6.378919 and its p-value is 0.012809, indicating that independent variables can significantly influence the book value of quoted agro allied firms as it has an overall effect of about 63 percent. The P-value of 0.012809 which is less than 0.05 also shows that the independence variables can significantly affect the book value of Agro Allied firm in Nigeria. However, a constant of 0.072146 as book value and agency cost 6.962744 means that the variables add to about 69.62744 percent of book value of quoted agro allied manufacturing firms. The likelihood ratio shows that the variables are not statistically significant. There is no significant difference between the random effects model and the fixed effects model as the likelihood ratio is less than 0.05

Table 4.4: Pairwise Granger Causality Tests

Null Hypothesis:	Obs	F-Statistic	Prob.
AC does not Granger Cause BV	112	2.60895	0.0073
BV does not Granger Cause AC		0.53549	0.0159

Source: Computed by Researchers from E-view 10

As summarized in Table 4.4 indicates that there is a causal relationship between agency cost and book value of quoted agro Allied manufacturing firms in Nigeria. The findings contradict our a-priori expectations.

Agency Cost and Internal Growth Rate

Table 4.5: Analysis of Panel Unit Root for Agency Cost and Internal Growth Rate

	Statistic	Prob.**	Cross-sections	Obs
<i>Method: AC</i>				
Levin, Lin & Chu t^*	-0.11009	0.4562	7	112
Breitung t-stat	-2.06248	0.0196	7	112
Im, Pesaran and Shin W-stat	0.08658	0.5345	7	112
ADF - Fisher Chi-square	10.9687	0.6885	7	112
PP - Fisher Chi-square	-0.02039	0.4919	7	112
Series: IGR				
Levin, Lin & Chu t^*	-0.38967	0.3484	7	112
Breitung t-stat	-1.76022	0.0392	7	112
Im, Pesaran and Shin W-stat	0.56246	0.7131	7	112
ADF - Fisher Chi-square	7.94039	0.8924	7	112
PP - Fisher Chi-square	0.52388	0.6998	7	112

Series: D(AC,2)				
Levin. Lin & Chu t*	-1.58742	0.0038	7	105
Breitung t-stat	-1.22010	0.1112	7	105
Im, Pesaran and Shin W-	-1.81934	0.0344	7	105
ADF - Fisher Chi-square	22.9753	0.0607	7	105
PP - Fisher Chi-square	-2.10699	0.0176	7	105
Series: D(IGR,2)				

Source: Computed by Researchers from E-view 10

The results in Table 4.5 are analysis of panel unit root test for agency cost and internal growth rate. Evidence from test reveals that data were not stationery at first test or at levels neither were data stationery at first differencing, however further test had data stationery at I(2) second differencing where all result had P-value lesser than 0.05 and at this second differencing, we therefore reject the null hypothesis of non stationarity and proceed to test for their co integration to know how variables will relate at the long run... The study accepted the alternative hypothesis and rejected the null hypothesis.

Table 4.6: Presentation of Co-integration Test of Agency Cost and Internal Growth Rate

	Statistic	Prob.	Weighted Statistic	Prob.
Panel v-Statistic	0.897443	0.1847	-0.349366	0.6366
Panel rho-Statistic	-1.497743	0.0671	0.105924	0.5422
Panel PP-Statistic	-1.906558	0.0283	-0.111844	0.4555
Panel ADF-Statistic	-1.979246	0.0239	0.725963	0.7661
Alternative hypothesis: individual AR coefs. (between-dimension)				
	Statistic	Prob.		
Group rho-Statistic	1.225972	0.0889		
Group PP-Statistic	0.768539	0.0278		
Group ADF-Statistic	1.593802	0.0044		

Source: Computed by Researchers from E-view 10

The cointegration result as seen in table 4.6 shows there is cointegration among variable since result had four P-value lesser than 0.05 among the seven test conducted,, We therefore accept the Null hypothesis of cointegration and proceed to run the regression of model as seen in table 4.7 below.

Table 4.7: Presentation of Regression Results of Agency Cost and Internal Growth Rate

Variable	Coefficient	Std. Error	t-Statistic	Prob.
AC	-1.0808	27733455	-3.911637	0.0002
C	1.3409	3.4908	3.845977	0.0002
Effects Specification				
			S.D.	Rho
Cross-section random			5.23E+08	0.6196
Idiosyncratic random			4.10E+08	0.3804
Weighted Statistics				
R-squared	0.108163	Mean dependent var		41114804
Adjusted R-squared	0.100971	S.D. dependent var		4.36E+08
S.E. of regression	4.13E+08	Sum squared resid		2.12E+19

F-statistic	15.03888	Durbin-Watson stat	0.456777
Prob(F-statistic)	0.000170		
	Unweighted Statistics		
R-squared	-0.024178	Mean dependent var	2.26E+08
Sum squared resid	6.13E+19	Durbin-Watson stat	0.157882

Correlated Random Effects - Hausman Test

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	3.160455	1	0.0754

Cross-section random effects test comparisons:

Variable	Fixed	Random	Var(Diff.)	Prob.
		-		
		- 108483204.59734		
AC	111604667.225	3	1811.0000	0.0754

Source: Computed by Researchers from E-view 10

The results in Table 4.7 is to determine the relationship between Agency Cost and Internal Growth Rate and also, the result of the Hausman test evidence from result shows that the chi-square value of 3.160455 together with the p-value of 0.0754 are good fit and sufficient evidence to reject the null hypothesis of the random effects model as inadequate. The estimators (fixed effects model and random effects model) are most efficient and consistent to estimates and trace the true nature of the relationship between agency cost and Internal Growth Rate of quoted manufacturing firms in Nigeria. The adjusted R-squared value (R^2) of 0.100971, represents a 10.0971 percent change in internal growth rate of quoted agro allied manufacturing firms. However, the F statistic value of 15.03888 and its p-value is 0.000170, indicates that independent variables can significantly influence the internal growth rate of quoted Agro allied firms in Nigeria, a constant of -1.0808 as seen in internal growth rate and agency cost of 1.3409 implies that the variables reduced 10.808 percent of internal growth rate of quoted agro allied firms in Nigeria. The likelihood ratio shows that the variables are statistically significance. There is no significant difference between the random effects model and the fixed effects model as the likelihood ratio is less than 0.05.

Table 4.8: Pairwise Granger Causality Tests

Null Hypothesis:	Obs	F-Statistic	Prob.
AC does not Granger Cause IGR	112	0.04719	0.0419
IGR does not Granger Cause AC		0.97446	0.0387

Source: Computed by Researchers from E-view 10

As summarized in Table 4.8 there is a causal relationship between Agency Cost and Internal Growth Rate of quoted Agro Allied manufacturing firms in Nigeria. The findings contradict our a-priori expectations though.

DISCUSSION OF FINDINGS

5.1 Agency Cost and Book Value

The results in Table 4.3 contain the presentation of regression model and Hausman test. The results show that the adjusted R-squared value (R^2) is 0.548926, representing a 54.8926 percent change in book value for quoted agro allied manufacturing firms in Nigeria. Also, the value of the F statistic is 6.378919 and its p-value is 0.012809, indicating that the independent variable which is agency cost can significantly influence the book value of quoted manufacturing firms in Nigeria. Also, the model

has a constant value of 0.072146 as book value and agency cost 6.962744. This simply means that one percent increase in agency cost can increase book value by 69.62744 percent of quoted Agro allied manufacturing firms in Nigeria. Similarly, the results in Table 1.2 contains the presentation of co-integration test using the Pedroni (1999) and concluded that there is co-integration equations among the variables in the model, we reject the null hypotheses. Also, the summary in Table 1.4 indicates that there is a causal relationship between agency cost and book value of quoted Agro allied manufacturing firms in Nigeria. This finding of a significant and positive relationship is in line with our a-priori expectations, in line with the Theory of Agency cost

Agency Cost and Internal Growth Rate

The result in Table 4.7 contains the presentation of regression model to determine the relationship between agency cost and internal growth rate and also, the result of the Hausman test. The result shows an adjusted R-squared value (R^2) is 0.100971, representing a 10.0971 percent change in Internal Growth Rate of quoted agro allied manufacturing firms in Nigeria. However, the value of the F statistic is 15.03888 and its p-value is 0.000170, indicating that independent variable of Agency Cost can significantly influence internal growth rate of quoted agro allied manufacturing firms in Nigeria. Also, the results in Table 4.6 contains the presentation of co-integration test using the Pedroni (1999) which extends the procedure of residual-based panel Co-integration tests model using value of firms (Dependent variable) and the independent variables with Individual intercept and individual trend establishing evidence of long run relationship between variables. Also, the summary in Table 4.8 indicates that there is a causal relationship between Agency Cost and Internal Growth Rate of quoted agro allied manufacturing firms in Nigeria. Again, this is in line with our a-priori expectation and also conforms with agency theory

Conclusion

From the foregoing and findings, it is evident that Agency cost (independent variable) has a positive and significant relationship with book value and internal growth (dependent variables) of agro allied manufacturing firms in Nigeria, and this finding is in line with the agency theory of cost Jensen and Meckling (1976), efforts must be put in motion to cut down agency costs to the barest minimal by resolving agency problems in a way and manner that attracts less cost as optimality lies at the point where total agency cost is minimum.

Recommendations

Based on the findings, the study makes the following recommendation

Managers of firms should seek optimality but reducing agency cost since optimality lies at the point where agency cost is least, and reduction on such would automatically enhance the value of Agro- Allied Firms in Nigeria.

Shareholders should also formulate adequate guideline to reduce agency cost and by tying performance of firm to managers' remuneration. While investors should go for firms with good principal/agency conflict records to avoid loss in share values..

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