Impact Factor: 4.71

INTERDISCIPLINARY JOURNAL OF MANAGEMENT, INNOVATION, AND ENTREPRENEURSHIP
11(2) 2024 IJMIE

ISSN: 3067-2333

AGENCY COSTS AND CORPORATE FINANCING DECISIONS IN NIGERIAN MANUFACTURING FIRMS: A PANEL ANALYSIS

Ijeoma Grace Okafor
Department of Finance, Rivers State University, Port Harcourt, Rivers State, Nigeria

Abstract: This study examined the effect of agency cost and equity financing policy of quoted manufacturing firms in Nigeria. Panel data were sourced from financial statement of the manufacturing firm's from 2014-2023. Financing policy was poxied by equity capital while agency cost was measured by agency cost of debt, monitoring cost, executive compensation and director's remuneration. Panel data methodology was employed while the fixed effects model was used as estimation technique at 5% level of significance. Fixed effects, random effects and pooled estimates were tested while the Hausman test was used to determine the best fit. Panel unit roots and panel cointegration analysis were conducted on the study. The study found that monitoring cost have negative effect while executive compensation and directors remuneration and agency cost of debt have positive effect on financing policy. From the findings, the study concludes that agency cost has significant effect on equity financing policy of the quoted manufacturing firms in Nigeria. We recommend among that internal and external factors such as corporate size, liquidity, capital structure that affect agency cost of the quoted manufacturing firms should be taken into consideration in formulating equity financing policy.

Keywords: Agency Cost, Corporate Equity financing policy, Manufacturing Firms, Panel Data Study

INTRODUCTION

The conflict of interest among different stakeholders, particularly between principal and agent, creates cost for enterprises. Such cost is commonly known in business and is theoretically explained through agency cost theory. There are reasons for the separation of ownership and management in industrial companies (Shirwan & Hariem 2022; Davies, & Lucky, 2018). Most enterprises require large sums of capital to achieve economies of scale. Professional managers may be more qualified to run the business because of their technical expertise, experience, and personality traits. The separation of ownership and management allows for unlimited change in ownership through share transfers without disrupting the firm's operations. However, managers may attempt to reach a specific degree of acceptable performance in terms of shareholder welfare. The agency theory explains the notion of separation of ownership and control in firms, and it emphasizes ownership structure and firm performance. Understanding the agency theory application in financial management is important because it gives greater insight for investors, stockholders, and those concerned about this issue, which create so-called "agency costs." The agency cost is the cost incurred in scrutinizing and controlling the managers and trying to eliminate their

exploitation. One way to reduce the agency problem is to use debt in financing policy. The agent usually wants to maximize his own benefit by increasing his personal wealth and job security, while the principal wants to maximize his own wealth (Abdulah & Tursoy, 2022; Kalash, 2019; Lucky & Akani, 2019). Agency costs of equity arise when the interests of the shareholders differ from those of the managers. These costs may be reduced by good planning. The most famous and widely used theoretical framework for examining the conflict of interest during the operation of a firm and its management decision process is the agency theory. The current research is mostly concerned with agency theory. According to the primary assumption of this theory, agency theory has a positive impact on financial performance (Berger & Di Patti, 2006; Dawar, 2014; Tarazi, 2019).

Jensen and Meckling (1976) defined agency costs as the sum of the monitoring expenditures by the principal, the bonding expenditures by the agent and the residual loss. Monitoring costs are expenditures incurred when the principals attempt to oversee or restrict the action of agents. For example, the board of directors of a company acts on behalf of shareholders to monitor and restrict the activities of management to ensure behaviour that maximizes shareholder value. The cost of having a board of directors is therefore, at least to some extent, considered an agency monitoring cost (Wilkinson, 2013). Bonding costs refer to the structures that management ultimately sets up to compel them to act in shareholders' best interests and includes compensating shareholders in the event of failure to act as such. While residual loss refers to residual agency losses that arise from conflicts of interest after both monitoring and bonding measures have been effected (Baker & Anderson, 2010). According to Baker and Powell (2005) there are two types of agency costs, direct and indirect agency cost. Shareholder incur direct costs in order to reduce potential conflicts with managers (bonus, stock option plan, audit fees, managerial incentives and infrastructure) put in place to control the behaviour of managers. Indirect agency cost is as a result of manager's failure to make profitable investment. The significance of agency cost is that it helps mitigate the effects of the agency problem. The adverse effects of these actions are felt in the form of the destruction of shareholder wealth and have a wider impact on other corporate stakeholders. The realization of the consequences flowing from the incidence of agency problems have led to emphasis being placed on the importance of competitive remuneration for managerial labour, corporate control as monitoring mechanisms designed to limit the degree of agency divergence.

Agency costs are incurred when the owner-manager uses debt finance in the business. Even without the benefit of a tax shield, debt finance is used because of its leveraging benefits. Therefore, as discussed earlier, the owner-manager still bears all the value reduction of the firm due to the principal-agent relationship but his/her wealth maximization is higher due to the ability to invest in highly profitable ventures without having to share more than a fixed portion of the wealth being created. As the bondholder will also be a rational investor, monitoring costs will be incurred that will be factored into the value of the debt and the interest payments required. The bondholder will issue covenants to restrict the behavior of the management. Because the ownermanager would like to be able to get funds from the markets in the future, he/she will continue to incur bonding costs. Agency costs help explain why debt is used as a source of financing even without the benefit of a tax shield. Modigliani and Miller (1963) state that, in a world without tax benefits, the composition of the firm is irrelevant. However, Jensen and Meckling (1976) maintained that the optimal ownership structure of a firm is dependent on the trade-off between agency costs of debt and equity. This helps us explain why even without tax benefits, debt is a popular source of finance. Furthermore, it would not be incorrect to say that agency theory is the crux of the development of the stream of corporate governance. If it were unimportant or negligible, governments would not spend time creating governance codes to protect the interests of shareholders and bondholders. It also helps us explain how even when management is highly efficient, it is possible to not create maximum value.

In line with Jensen and Meckling (1976), McKnight and Weir (2009) argued that higher debt financing of the firm would lead to lower agency costs. The rationale behind this is sound as it links back to the idea that if management is utilizing debt financing, then the bondholders would impose strong monitoring activities and debt covenants which would reduce the freedom of the management. The payment of interest and capital repayments also adds a regular burden on the management, ensuring all funds available are used optimally to create value for the shareholders. The relationship between agency cost and corporate organizations has well been documented in literature, however, existing studies focused on agency cost and corporate performance (Nazir, Saita, and Nawaz,. 2012; Mostaghimi, Ramezanpour and Nozari, 2014; Cheng, & Tzeng, 2011), the effect of agency cost on corporate valuation is lacking in literature, therefore this study examined the relationship between agency cost and equity financing policy of quoted manufacturing firms in Nigeria.

LITERATURE REVIEW

Agency Costs

Agency costs refer to the monitoring, bonding and residual loss that may be incurred by shareholders in an agency relationship. Agency costs arise because of the separation of ownership and control and the misalignment of the interests of managers and shareholders (Jensen and Meckling 1976; Jensen, 1986). The separation of ownership and control leads to non-zero agency costs (Ang et al, 2000) and these costs might be significantly higher in countries with weak legal systems and poor investor protection (Gurgler et al, 2003; Lucky & Onyinyechi, 2019).). Agency costs are not only limited to the incidence of separation of ownership and control (Berle and Means, 1932) but are also present between controlling shareholders and other investors (Shleifer and Vishny, 1997; Fan et al, 2002) if the controlling shareholders become part of management or have significant influence on management decision making.

From the agency theory perspective, strong corporate governance plays an important role in protecting shareholders in general, and minority interests in particular and, hence, should result in lower agency costs. Agency theory identifies a range of governance mechanisms that are designed to realign the interests of managers and shareholders in order to reduce agency costs. Many countries, for example, the UK, Germany, Australia and South Africa have promoted good governance through the introduction of codes of best practice. In addition, the Organization for Economic Co-operation and Development has also issued a code that identifies desirable governance characteristics. These codes recommend that firms adopt internal governance mechanisms such as non-executive directors' representation on the board, the separation of the posts of Chief Executive Officer (CEO) and chairman and the setting up of committees to deal with a range of issues such as auditing and remuneration.

The agency costs are created by lack of alignment in the interests of companies' owners and managers and thus the separation of ownership and control. Model of representation identifies a series of guidance mechanisms that align interests of agents and owners and reduce agency costs (Mac King, 2009). On the other hand, agency relationship includes a type of contract which based on one or a few individuals of the owner, agent or manager are commissioned to the operational implementation. By establishing an agency relationship, each of the parties follows maximizing their own personal interests. Because the utility function is not identical for managers with owners, therefore arises conflict of interests among them which by the formation of the agency relationship and due to existence of conflict of interests, agency cost occurs (Taghavi et al., 2010;). In addition, agency costs have a reverse effect on the value of the company, if the market expects occur such costs, value of the company will reduce (Almir and Saboo, 2008).

Executive Compensation

Akpotaire (2011) noted that as corporate executive compensation policies evolved, corporations drifted from traditional stock options executive compensation policy to restricted stocks, and performance stock policy with

dividend equivalent rights. The motivation for this was that there was a hand-full of criticisms of stock options policy in that executives often manipulate the structure to increase their pay-out value, thereby increasing the agency cost to shareholders and the company. Some other authors (Carlson & Vogel, 2006) argue that the integration of stock options as well as restricted stocks into executive compensation may reduce the conflicts between shareholders and management but at the same time give rise to other agency problems connected to debt. While this line of argument may hold some merit, the structure of executive compensation packages, has over the years, focused less on stock options and more on restricted stocks. A classic example of this trend is Microsoft, who in 2003, switched from using stock options to restricted stock.

However, compensating executives through restricted stocks has recently come under scrutiny due to the fact that some of these executives receive dividend equivalents on restricted stocks even before the vesting period. The relevant question that follows is whether executives are extracting additional compensation from shareholders using dividend equivalents or are dividend equivalents appropriate incentives to executives. Hence, it is expected that executive/ managerial incentives could affect and or influence dividend payout policy. This implies that stakeholder theory should be particularly relevant to the Nigerian case, and, as shown by Holder, Langrehr

Agency Cost of Debt

Most researches on agency problem have always viewed it from the shareholders versus management perspective. Agency relationship transcends this narrow scope; it also includes shareholders versus debt holders' conflict viz-a-viz dividend payout policy. Shareholders being the sole claimants of dividends prefer to have large dividends payment. On the contrary, creditors prefer to restrict dividends payment to maximize the firm's resources that are available to repay their claims. Given that this area of interest has not been adequately explored in this area of interest, its inclusion may be considered novel. Agency cost of debt refers to an increase in cost of debt when the interest of shareholders and management diverge. For this reason, debt suppliers like bondholders impose certain restrictions on companies (via bond indentures) because of a fear of agency-cost problems. The suppliers of debt financing are aware of two things: (a) Management is in control of their money (b) There are high chances of principal-agent problems in any company. In order to mitigate any losses due to managerial hybris, the debt supplier place some constrains on the use of their money. In general, the agency cost of debt happens when management engages in projects or behavior that benefits shareholders more than bondholders. For example, taking on riskier projects could benefits shareholders more while taking more risk means higher chances that debt bondholder will default. It should be noted that although each added unit of debt increases the value of the firm by the value of its associated interest tax shield, however, the presence of agency cost modifies this.

Shareholders Monitoring Cost

Firms with higher percentage of shareholdings (block holder of share/institutional investors) do suffer less agency problem than that of a dispersed ownership (Shleifer and Vishny, 1986). This position could be attributed to the institutional shareholders capacity to assert monitoring prowess over her agents (management) unlike a company with fragmented shareholders. La porta, Lopezde-silannes and Vishny (2000) posited that a legal environment provides strong protection of shareholders, thus enabling them to exert monitoring prowess on companies. Shleifer and Vishny (1986) and Grossman and Hart (1980) stated that large shareholders could play a role in effectively monitoring the activities of firms managers and insider shareholders, thus alleviating the free-rider problem associated with dispersed small shareholders. They explain large shareholders have more inducement and efforts than small shareholders to carry the cost of monitoring since the consequences of and returns from monitoring surpass the cost. Large shareholders have a strong incentive to adopt and enhance means to advance their role of effectively monitoring the activities of firm managers (Grinstein and Michaely, 2005; Redding, 1997;

Lucky & Michael, 2019). Short, Zhang and Keasey (2002) revealed a positive relationship between dividends and shareholding by financial institutions.

Financing Policy

The financing policy is known to influence the firm's value and its risk. The value of the firm is affected by capital market imperfections such as corporate taxes, personal taxes and bankruptcy costs. In this study, we examine to what extent these factors and others influence the financing policy. We start by discussing explanatory variables that according to theory should affect the financial leverage, followed by a presentation of the pecking-order theory, and concluding with the use of financial risk hedging techniques. Adeyemi (2016) concluded that the tax benefits of debt (in addition to financial flexibility, bond rating, and profit fluctuation) are the most significant factors shaping the company financing policy. Moreover, they found that bond rating and financial flexibility are the primary factors influencing bond-issue policy, while per share profit, dilution effect and share price on the stock exchange are the primary factors influencing decisions regarding stock issues.

The financing decision can be defined as the way of choosing a company's financing resources, namely choosing both the available resources and their mix in order to obtain the major objective in finance, the maximization of shareholders' wealth. In taking financing decisions, a company's management uses efficient financial criteria, such as the financing duration and the autonomy provided by certain financing sources. The selection consists in choosing between equity and borrowed funds (Frank and Goyal, 2019). Despite these criteria, the most important element determining the financing decision and the financial structure is represented by the cost of providing these resources. The management targets the reduction, and even the minimization, of the cost of capital. From a methodological point of view, the cost of capital is an average weighted cost of the different financing resources of a company.

Equity Capital

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

Shares are the universal and typical forms of raising capital from the capital market. The capital of a company is divided into certain units of a fixed amount. Share' means a share in the share capital of a company. It includes stock except where a distinction between stock and share is expressed or implied. Stock is merely a name for the aggregate ownership of a company, which is divided into a number of units, each unit called a share (Rafiu, Taiwo and Dauda, 2012). The holders of common stock are called shareholders or stockholders. The capital represented by common shares is called share capital or equity capital. Authorized share capital represents the maximum amount of capital, which a company is permitted to raise from shareholders. A Company may however change its authorized share capital by altering its Memorandum of Association. The portion of the authorized share capital that has been offered to shareholders is called issued share capital. Subscribed share capital represents that part of the issued share capital, which has been accepted by shareholders. The amount of subscribed share capital actually paid up by shareholders to the company is called paid-up share capital. Often subscribed and paid-up share capitals are the same.

The total paid-up share capital is equal to the issue price of common share multiplied by the number of common shares. The issue price may include two components: the par value and the share premium. The par value is the price per common share stated in the memorandum of association. Any amount in excess of the par value is called the share premium. In the case of new companies the par value and the issue price may be the same. The existing highly profitable companies may issue common shares at a premium(Rafiu, Taiwo and Dauda, 2012). The paid-up share capital is stated at the par value. The excess amount is separately shown as the share premium. The company's earnings, which have not been distributed to shareholders and have been retained in the business, are called reserves and surplus. They belong to the common shareholders. Thus the total common shareholders' equity is the sum of paid up share capital, share premium and reserves and surplus.

Ordinary shares, a synonym of common shares, represent the basic voting shares of a corporation. Holders of ordinary shares are typically entitled to one vote per share, and do not have any predetermined dividend amounts. An ordinary share represents equity ownership in a company proportionally with all other ordinary shareholders, according to their percentage of ownership in the company (Pandey, 2009). All other shares of a company's stock are, by definition, preferred share. Ordinary shareholders have the right to a corporation's residual profits. In other words, they are entitled to receive dividends if any are available after the dividends on preferred shares are paid. They are also entitled to their share of the residual economic value of the company should the business unwind; however, they are last in line after bondholders and preferred shareholders for receiving business proceeds.

Ordinary shareholders are considered unsecured creditors. While they face greater economic risk than creditors and preferred shareholders of a corporation, they can also reap greater rewards. If a company makes large profits, the creditors and preferred shareholders are not paid more than the fixed amounts to which they are entitled, while the ordinary shareholders divide the large profits among themselves. The same occurs when companies, such as start-up, are sold to larger corporations(Rafiu, Taiwo and Dauda, 2012).. The ordinary shareholders usually profit the most. The only obligation that an ordinary shareholder has is to pay the price of the share to the company when it is issued. In addition to the shareholder's right to residual profits, he is entitled to vote for the company's board members (although some preferred shareholders may also vote) and to receive and approve the company's annual financial statements.

Agency Theory

Every business has two sides of relationship, the principal, and the agent. Usually, the principal is the one who has the capital. However, sometimes the principal could be too busy to be directly involved in the daily business, and therefore a third party is hired to execute business operation. Agent and principal sometimes have a different view regarding how the company should be operated. The agency relationship defined as one in which one (or more) principal engages the agents to perform some service on their behalf which involves the delegation of some decisionmaking authority to the agent (Jensen and Meckling, 1976).

Problems arise when agents act to fulfill self-interest rather than the best interest of the principals. These conflicts between principal and agent relate to the firm's level of cash holdings. One of the reasons for managers to hold the excess of cash is because managers are risk-averse (Fama and French, 1998). This excess of cash will make managers able to make a bad investment which capital market would not be willing to finance. Agency theory predicts that self-interested managers are more likely to have higher level of cash holding in the present to gain self-advantage rather than hold them for future investment (Jensen and Meckling, 1976) hence; a good corporate governance mechanism is needed by the firms to bridge the relationship between the principal and agent. The Board of directors plays a central role in the corporate governance of firms (Fama and Jensen, 1983).

The last board characteristic that we examine is the board leadership. The CEO's task is varying from hiring, evaluating, firing and compensating the management, while the chairman's primary task is to act as a link between

the shareholder and the management. When the same person holds the titles of CEO and chairman of the board, it's called CEO duality (Baliga et al, 1996). In a firm that has CEO duality, the firm's process of decision-making will be faster. When CEO duality exists, the decision-making of the firm could lead to a decrease in firm value, which contradicts the shareholder goal (Jensen, 1993). Dahya and Travlos (2000) found that with dual responsibility, CEOs serve the interest of the management team and one way to protect the team's position is to hold an excessive level of cash. Due to this, firm with CEO duality expected to have a higher level of cash.

Stakeholder Theory

Stakeholder theory, developed originally by Freeman (1984) as a managerial instrument, has since evolved into a theory of the firm with high explanatory potential. Stakeholder theory focuses explicitly on equilibrium of stakeholder interests as the main determinant of corporate policy. The most promising contribution to risk management is the extension of implicit contracts theory from employment to other contracts, including sales and financing (Cornell and Shapiro, 1987). In certain industries, particularly high-tech and services, consumer trust in the company being able to continue offering its services in the future can substantially contribute to company value. However, the value of these implicit claims is highly sensitive to expected costs of financial distress and bankruptcy.

Empirical Review

Otete and Martin (2024) analyze agency costs and their effects on financial performance. In this study, the agency cost on financial performance of public commercial banks was analyzed. Specific objectives were; to establish how monitoring cost affect the financial performance of quoted commercial banks in Mombasa County, to assess the effect of bonding cost on financial performance of listed commercial banks in Mombasa county, to examine the extent to which residual loss affect the financial performance of commercial banks in Mombasa county and to determine the effects of restructuring cost on financial performance of listed commercial banks in Mombasa County- directed the study. Theories supporting this study were as follows; agency theories, free cash flow and stakeholder's theory. Descriptive design is a kind of research methodology which establishes the connection between variables. It was used in this study to identify both the broad and the detailed study goals. A census of the 10 listed commercial banks in Mombasa County was conducted as part of the work and purposive sampling was be used. This study used qualitative and quantitative methods. Validity was tested through interview while reliability was tested using Cronbach alpha. The data was analyzed using inferential statistics like regression and correlation and descriptive statistics like mean and standard deviation using the Statistical Package for Social Science (SPSS) Version 22.0. The results were presented using cross tabulation, frequency tables, and charts. Findings indicated that there was a significant impact between; monitoring cost, bonding cost and residual cost and the financial performance. Restructuring cost was determined to have a favourable impact on financial performance.

Shirwan Rafiq Sdiq and Hariem A. Abdullah1 (2023) examined the relationship between capital structure and firm performance in an emerging economy, Iraq. Moreover, it seeks to find an answer for the question "does agency cost moderates the relationship between capital structure and financial performance?" in the case of a developing industrial sector. Data was collected from published financial statements from the Iraqi Stock Exchange. The study sample consists of several companies from industrial sector listed on ISX over the period 2004–2020. Firm performance is measured using both accounting data and market indicator. Agency cost is measured through operating expense ratio and asset utilization ratio. Testing for short-term and long-term parameters between groups, pooled mean group estimation method is used for data analysis. The results manifest evidence to support agency theory in explaining the relationship between capital structure and financial performance. Moreover, strong interactions are found indicating that agency cost has a considerable impact on

the capital structure and firm performance association, that is, agency cost moderates the relationship between capital structure and firm performance. These results are robust checking various methods and diagnostics checks. These results are key evidence from an emerging country, Iraq to support the agency theory arguments. The results provide significant insights for managers of the sector particularly for the current rapid development in the sector.

Molina (2005) has focused on the question of whether firms are under leveraged. He found that leverage has a strong effect on ratings that result in a higher impact on the ex ante costs of financial distress, which can offset the tax benefits of debt. The preference of alternative financing sources is outlined by the pecking-order theory. According to the theory, firms first utilize internal sources of funds and then they employ external financing - debt and equity in that order. Next they make use of hybrid sources of capital such as convertibles, rights and warrants. In our survey we investigate the financing preferences of corporate managers. Another important financial decision is how and to what extent firms should hedge their financial risk.

Hentschel and Kothari (2001) examined whether companies use financial derivatives to change their risk level. They did not find a significant difference in risk level between firms that use financial derivatives frequently and those that rarely do so, and concluded that financial derivatives do not substantially reduce a firm's financial risk. Graham and Rogers (2002) found that companies hedge 6 risk in order to improve their ability to borrow money. In addition, they found a positive correlation between the firm's size and its potential bankruptcy on the one hand and it's hedging level on the other. Bodnar, Gregory and Marston (1998), examined the frequency with which financial derivatives are used to hedge risks among large companies in the U.S. Their results show that the use of financial derivatives is prevalent among less than half of the companies. Nevertheless, among companies that already use these hedging techniques, a rising trend was seen in their use. In our study, we examine the frequency of derivative use to hedge financial risks.

METHODOLOGY

This study used quasi-experimental research design approach for the data analysis. This approach combines theoretical consideration (a prior criterion) with the empirical observation and extract maximum information from the available data. It enables us therefore to observe the effects of explanatory variables on the dependent variables. The population of the study involves the listed firms in the Nigerian stock exchange. However, the target population is the listed manufacturing firms on the floor of Nigeria Stock exchange. The sample size of the study was 20 quoted manufacturing firms. Data for this study were secondary data sourced from the financial statement and annual reports of the selected quoted firms.

Model Specification

From theories, principles and empirical findings, the model below is specified in this study.

$$FP = f(ACD, MC, EXC, DIR) \quad (1)$$

It is empirically stated as

$$FP = \beta_0 + \beta_1 ACD_i + \beta_2 MC_i + \beta_3 EXC_i + \beta_4 DIR_{ii} + \beta \quad (2)$$

Where

ACD	=	Agency cost of debt
MC	=	Monitoring cost
EXC	=	Executive compensation
DIR	=	Directors remuneration
β_0	=	Regression Intercept

β_1 - $\beta 4$	=	Coefficient of the independent variables to the Dependent variable
μ	=	Error term

Techniques of Analysis

The hypotheses stated will be tested using the Ordinary Least Square model. The signs and significance of the regression coefficients will be relied upon in explaining the nature and influence of the independent and dependent variables as to determine both magnitude and direction of impact. Regression analysis is often concerned with the study of the dependence of one variable, the dependent variable, on one or more other variables, the explanatory variables, with a view to estimating and/or predicting the population mean or average value of the former in terms of the known or fixed (in repeated sampling) values of the latter (Gujarati and Porter, 2009). Most commonly, regression analysis estimates the conditional expectation of the dependent variable given the independent variables that is, the average value of the dependent variable when the independent variables are held fixed. Less commonly, the focus is on a quartile, or other location parameter of the conditional distribution of the dependent variable given the independent variables. In all cases, the estimation target is a function of the independent variables called the regression function. In regression analysis, it is also of interest to characterize the variation of the dependent variable around the regression function, which can be described by a probability (Gujarati, 1995). There are several multiple regression analyses techniques that dwell on either time series or crosssectional data. However, for the purpose of this study, panel data regression is employed because available data contain both time series and cross-sectional elements. A panel of data embodies information across time and space and most importantly, a panel retains the same entities and measures some quantity about them over time (Brooks, 2008). As such, this study employs the use of the panel data regression to analyze the performance of Nigerian manufacturing firms from 2014-2023.

Additionally, the advantages of Panel Data (Baltagi, 2013; Gujarati & Porter, 2009), that reinforced the utilization of panel data regressions are presented below:

1. Panel data relates to individuals, firms, states, countries, regions, etc., over time, and as such, there is bound to be heterogeneity in these units. And estimation techniques for panel data can take such heterogeneity explicitly into account by allowing for subject specific variables.
2. Panel data combines time series and cross-section observations, thus providing more informative data, more variability, less co-linearity among variables, more degrees of freedom and most importantly more efficiency.
3. By repeatedly studying cross sections of observations, panel data estimation techniques are better suited to study the dynamics of change.
4. Panel data estimation techniques can better detect and measure effects that cross section or pure time series cannot.
5. Panel data enables the study of more complicated behavioural models. For instance, phenomena like economies of scale and technological change are better handled by panel data estimation techniques than by pure cross-section or pure time series data.
6. Panel data minimizes the bias that might arise when individuals or firms are aggregated into broad categories due to the availability of several thousand units.

Econometrically, the panel data standard linear model can be written as follows (Verbeek, 2012; Brooks, 2014);

$$Y_{it} = \beta_0 + X_{it}\beta + \beta_{it} \quad (3)$$

Where Y_{it} is the dependent variable for firm —I at time-i; fib is the intercept term; X1 is a k dimensional vector of independent variables; $\square_{it}$ is the error term; the error term changes over individuals and time, and encompasses all unobservable factors that affect Y_{it}.

Moreover, in examining the panel data set through multiple regression techniques, this study is aware of the treatment of the possibilities of individual effects in the adopted models. Individual effect implies that each individual has a divergent effect. There are two core individual effects models in panel data analysis: the fixed effects model and the random effects model (Koop, 2008).

The **Fixed Effects Model (FEM)** takes into account the existence of each individual effect of the observations in a particular model. Put differently, the FEM allows for heterogeneity or individuality among entities by allowing them have separate intercept values. Hence, the individual effect subsists when it is assumed that each entity can have diverse intercepts in a particular model. Econometrically, the fixed effects model can be expressed as the equation below (Koop, 2008).

$$Y_{it} = ai + X_{it}\square + \square_{it} \quad (4)$$

The above equation is almost similar with the common pooled model. Where, a1 symbolizes a fixed (individual) effect. The difference resides in a1, which varies across entities. Hence, it allows each entity to have its own separate intercept.

While the **Random Effects Model (REM)** just like the fixed effects model suggests different intercept terms for each entity, it maintains that intercepts are constant over time, with the relationships between independent and dependent variables assumed to be same, both cross- sectionally and temporally (Brooks, 2014). Nonetheless, the divergent view is that under the random effects model, the intercepts for each cross-sectional unit are presumed to originate from a common intercept, which is the same for all cross-sectional units and over time, in addition to a random variable that varies cross-sectionally butitmains constant over time.

The random effects model can be written as:

$$Y_{it} = \square_0 + X_{it}\square + ai + u_{it} \quad (5)$$

Where, Y_{it} is a k-dimensional vector of independent variables, but unlike the FEM, there are no dummy variables to capture the heterogeneity (variation) in the cross-sectional element;

$= \square_{it} = ai + u_{it}$,, which implies that the error term consist of two components: an individual specific component that does not vary over time, and a remainder component that is assumed to be uncorrelated over time (Brooks, 2014; Verbeek, 2012). Moreover, in deciding whether to adopt either the FEM or the REM, this study employs the Hausman-test. According to Koop (2008), the idea behind the Hausnian-test rests on the assumption that if Ho (the individual effect is uncorrelated with any of the independent variables) is true, then both the FEM and REM estimators are consistent and provide relatively identical results. But, in the instance where 'Ho' is false, the REM will be inappropriate, while FEM will be suitable, and the results obtained could be quite dissimilar.

In a nutshell, multiple regression analysis makes it possible to analyze the relationships between background variables and the dependent variables of interest under the fixed effects or random effects models. In essence, panel data regression analysis is employed to evaluate the relationship between the risk, agency cost and corporate financial policies of the manufacturing firms.

ANALYSIS OF RESULTS

Table 1: Hausman Test Analysis

	Chi-Sq. Statistic	Chi-Sq. d.f	Prob.	Decision	Remark
Model 1	8.364950	4	0.0000	Accept alternate	Fixed effect model valid

Source: Computed from E-view 9.0, 2024

Hausman specification test has been used to determine which one of the alternative panel analysis methods (fixed effects model and random effects model) among the 3 panel regression models should be applied. With regard to this, H0 hypothesis claims that "random effects exist and H1 hypothesis claims that "random effects do not exist. The results of the Hausman specification show that fixed effect model was appropriate.

Table 2: Presentation of Panel Unit Root Results at Levels

Method: FP Statistics	Prob.**		Remark
Levin, Lin & Chu t*	-3.98832	0.0000	Stationary
Im, Pesaran and Shin W-stat	0.06761	0.5270	not Stationary
ADF - Fisher Chi-square	45.1784	0.1971	not Stationary
PP - Fisher Chi-square	31.3873	0.7673	not Stationary
MC			
Levin, Lin & Chu t*	-24.4179	0.0000	Stationary
Im, Pesaran and Shin W-stat	-4.73215	0.0000	Stationary
ADF - Fisher Chi-square	74.1774	0.0008	Stationary
PP - Fisher Chi-square	77.7626	0.0003	Stationary
EXC			
Levin, Lin & Chu t*	-17.8196	0.0000	Stationary
Im, Pesaran and Shin W-stat	-5.32763	0.0000	Stationary
ADF - Fisher Chi-square	79.1943	0.0000	Stationary
PP - Fisher Chi-square	50.3945	0.0561	not Stationary
DIR			
Levin, Lin & Chu t*	-4.96531	0.0000	Stationary
Im, Pesaran and Shin W-stat	-0.87631	0.1904	not Stationary
ADF - Fisher Chi-square	55.3016	0.0544	not Stationary
PP - Fisher Chi-square	78.5517	0.0003	Stationary
ACD			
Levin, Lin & Chu t*	-10.3588	0.0000	Stationary
Im, Pesaran and Shin W-stat	-3.12926	0.0009	Stationary
ADF - Fisher Chi-square	75.8982	0.0005	Stationary
PP - Fisher Chi-square	71.6504	0.0016	Stationary

Source: Computed from E-view 9.0, 2024

Null: Unit root

Levin Lin & Chu Test: Assumes common unit root process

Im, Pesaran and Shin: Assumes individual unit root process

ADF_Fisher chi_square: Assumes individual unit root process

PP_Fisher chi_square: Assumes individual unit root process

** Probabilities for fisher tests are computed using an asymptotic chi_Square distribution.

To check stationarity of data through panel unit root test. Panel unit root test are not similar to unit root test. There are two types of panel unit root processes. When the persistence parameters are common across cross_ section then this type of processes is called a common unit root process. Levin, Lin and Chu (LLC) employ this assumption. When the persistent parameters freely move across cross section then this type of unit root process

is called an individual unit root process. The Im, Pesaran and Shin (IPS), Fisher_ADF and Fisher_PP test are based on this form. To check the stationarity of our data we use the two types of panel unit root tests. As common unit root process we use Levin, Lin and Chu panel unit root test and for individual unit root process we use three type of panel unit root tests, first one is Im, Pesaran and Shin panel unit root test, second is Fisher type test, the ADF_ Fisher chi_square test and last one is also a fisher type test, the PP_Fisher Chi square panel unit root test. The result shows that at 5% level of significance we accept null hypothesis that means the series are not stationary for some parameter while some of the variables are stataionary.

Table 3: Presentation of Panel Unit Root Results at Difference

Method	Statistic	Prob.**	Remark
Levin, Lin & Chu t*	-9.34997	0.0000	Stationary
Im, Pesaran and Shin W-stat	-2.93225	0.0017	Stationary
ADF - Fisher Chi-square	74.2930	0.0004	Stationary
PP - Fisher Chi-square	109.678	0.0000	Stationary
MC			
Levin, Lin & Chu t*	-22.0351	0.0000	Stationary
Im, Pesaran and Shin W-stat	-4.15497	0.0000	Stationary
ADF - Fisher Chi-square	83.2119	0.0001	Stationary
PP - Fisher Chi-square	125.422	0.0000	Stationary
MC			
Levin, Lin & Chu t*	-16.2420	0.0000	Stationary
Im, Pesaran and Shin W-stat	-4.71285	0.0000	Stationary
ADF - Fisher Chi-square	85.6154	0.0000	Stationary
PP - Fisher Chi-square	144.681	0.0000	Stationary
DIR			
Levin, Lin & Chu t*	-6.22824	0.0000	Stationary
Im, Pesaran and Shin W-stat	-1.78526	0.0371	Stationary
ADF - Fisher Chi-square	57.6090	0.0352	Stationary
PP - Fisher Chi-square	106.269	0.0000	Stationary
ACD			
Levin, Lin & Chu t*	-6.32573	0.0000	Stationary
Im, Pesaran and Shin W-stat	-2.06614	0.0194	Stationary
ADF - Fisher Chi-square	65.7186	0.0064	Stationary
PP - Fisher Chi-square	109.577	0.0000	Stationary

Source: Computed from E-view 9.0, 2024

Null: Unit root

Levin Lin & Chu Test: Assumes common unit root process

Im, Pesaran and Shin: Assumes individual unit root process

ADF_Fisher chi_square: Assumes individual unit root process

PP_Fisher chi_square: Assumes individual unit root process

** Probabilities for fisher tests are computed using an asymptotic chi_Square distribution. After taking the first difference at 5% level of significance we reject null hypothesis, so first difference of the series is stationary. In

case of investment policy series in every test except PP _Fisher chi_square at 5% level of significance it reject null hypothesis but PP_Fisher chi_square accept null hypothesis it seems that the series has a unit root. But first difference of the series at 5% level of significance in all case reject null hypothesis. So after taking first difference the series is stationary. Details of the panel unit root test results of different variables and also after taking first difference of different variables are given in the appendix.

Table 4: Panel Regressions Results on Financing Policy for Quoted Firms in Nigeria

Variable	Fixed	Random
	-0.299439	0.020726
	*-0.743859	*0.057543
MC	**0.4580	**-0.9542
	0.122948	0.051017
	*0.610747	3.262866
EXC	**0.5422	0.0009
	0.059107	0.102371
	*0.267299	*2.986734
DIR	**0.7896	**0.0070
	-0.938323	-0.691277
	*-2.841872	*-2.258941
ACD	**0.0050	**0.0250
	6.107957	4.816480
	*3.782393	*3.310594
C	**0.0002	**0.0011 R^2 0.712669 0.635135
Adj R^2	0.675120	0.515343
F-stat	18.97970	11.75223
F-Prob	0.000000	0.000000
D.W	0.773552	0.707004

Source: Computed from E-view 9.0, 2024

The model was formulated to examine the effect of agency cost on investment policy as formulated in model III. Based on the random effect regression model, the adjusted coefficient of determination (Adjusted R^2) indicates that 51.1 percent variation on the investment policy of the selected manufacturing firms can be traced variation on the agency cost of the firms; this implies that 48.9 percent variation can be traced to factors not captured in the model. The results of the estimated model proved that the model is statistically significant based on the F-statistics of 11.75223 and probability coefficient of 0.000000. The Durbin Watson statistics proved the presence of serial autocorrelation among the variables. The regression intercept is positive with coefficient of 4.816480 and probability of 0.0011 which implies that holding other variables constant, investment policy of the manufacturing firm will increase by 4.8 units. Furthermore, the results indicate that monitoring cost have positive but significant effect on investment policy of the manufacturing firms with the coefficient of 0.020726 and 0.9542. Executive compensation has positive but significant effect on the investment policy of the manufacturing firms over the periods covered in this study with beta coefficient of 0.051017 and probability of 0.0009. The results indicate that director remuneration have positive and no significant effect on investment policy with the regression coefficient

of 0.102371 and probability of 0.0070. However, the estimated regression model proved that agency cost of debt have negative but no significant effect on investment policy of the selected manufacturing firms with -0.691277 and probability 0.0250.

Table 5: Cross Sectional Comparism of Fixed and Random Effect Models

Variable	Fixed	Random	Var(Diff.)	Prob.	Variable	Fixed	Random	Var(Diff.)	Prob.
MC	-0.299439	0.020726	0.032308	0.0749					
EXC	0.122948	0.051017	0.002858	0.1785					
DIR	0.059107	0.102371	0.004662	0.5263					
ACD	-0.938323	-0.691277	0.015370	0.0463					

Source: Computed from E-view 9.0, 2024

Table 5 presents results on the cross sectional differences between random and fixed effect models. The estimated model found that there are no significant differences between the random and the fixed effect models.

Table 6: Presentation of Granger Causality Test

Null Hypothesis:	Obs	F-Statistic	Prob.
MC does not Granger Cause FP	160	2.24222	0.1097
FP does not Granger Cause MC		1.61469	0.2023
EXC does not Granger Cause FP	160	0.33730	0.7142
FP does not Granger Cause EXC		1.14440	0.3211
DIR does not Granger Cause FP	160	0.07364	0.9290
FP does not Granger Cause DIR		0.78471	0.4581
ACD does not Granger Cause FP	160	0.41010	0.6643
FP does not Granger Cause ACD		0.82004	0.4423

Source: Computed from E-view 9.0, 2024

We accept null hypotheses that agency cost does granger cause financing policy of the manufacturing firms within the periods covered in this study.

Table 7: Pedroni Residual Cointegration Test

	Statistic	Prob.	Weighted Statistic	Prob.
Panel v-Statistic	-13.14855	0.0092	-11.82368	0.0060
Panel rho-Statistic	12.53723	0.0043	13.04833	0.0088
Panel PP-Statistic	-15.15201	0.0000	-15.46884	0.0000
Panel ADF-Statistic	0.582343	0.7198	-1.500921	0.0667
	Statistic	Prob.		
Group rho-Statistic	4.738106	0.0000		
Group PP-Statistic	-8.225408	0.0000		
Group ADF-Statistic	-0.164029	0.4349		

Source: Computed from E-view 9.0, 2024

Null Hypothesis: No cointegration

Trend Assumption: No deterministic intercept or trend

Automatic lag length selection based on SIC

The results of the cointegration test proved that the variables are cointegrated as the probability coefficient of the variables are greater than 0.05, we accept the alternate hypotheses that there is no presence of long run relationship between the dependent and the independent variables.

Table 8: Phillips-Peron Results Non-Parametric

Cross ID	AR(1)	Variance	HAC	Bandwidth	Obs

Champion Brewries	-0.113	0.003684	0.004461	1.00	9
Seven up Bottl. Co. plc	0.137	0.048164	0.013836	8.00	9
Ashaka Cement plc	-0.127	0.038533	0.038533	0.00	9
Cadbury Nig. Plc	-0.016	0.085452	0.085452	0.00	9
UAC plc	-0.212	0.161607	0.216425	1.00	9
Pharma Deko plc	0.112	0.073669	0.023370	8.00	9
Dangotee Sugar plc	-0.174	0.015655	0.018903	1.00	9
Flour Mills plc	-0.574	0.014095	0.010771	3.00	9
Guinness Nig Plc	-0.675	0.023631	0.026937	1.00	9
Glaxomithline plc	Dropped from Test				
Lafarge Wapco plc	-0.150	0.979604	0.904636	2.00	9
May and baker plc	-0.351	0.003742	0.002844	3.00	9
Nestle NIG. PLC	-0.417	0.012285	0.015260	1.00	9
Nigerian Ropes plc	-0.542	0.232954	0.044362	8.00	9
Nigerian Enamelware plc	-0.095	0.165422	0.240530	1.00	9
Nigerian Breweries plc	0.007	0.065357	0.014150	8.00	9
PZ Cussoons plc	0.163	1.17E-05	3.74E-06	8.00	9
Unilever Nig. Plc	-0.444	0.013844	0.007627	5.00	9
University press plc	-0.163	0.011324	0.001764	8.00	9
Vita Foam plc	-0.592	0.071542	0.023606	8.00	9

Source: Computed from E-view 9.0, 2020

As a starting point of panel stationarity analysis, we employ the first generation panel unit root tests which allow for cross-sectional independence between firms. As displayed in Table 4.8, the results suggest that the firms' null hypothesis cannot be rejected by all the first generation tests (LLC, IPS, MW and Choi tests). This finding of stationarity is not in line with Song and Wu (1998) who reported the absence of hysteresis in the firms for the annual data of 20 firms by using Levin and Lin (1992) panel unit root test. However, the cross-sectional (CD) dependence test rejects the presence of cross-sectional independence and hence, the first generation unit root test is not applicable. Therefore, the failure of the these tests to reject the null of the firms hysteresis is due to the fact that the first generation panel unit root tests do not allow neither for cross-sectional dependence nor for possible structural breaks.

Discussion of Findings

Form the estimated regression model was formulated to examine and test the relationship between agency cost and the financing policy of the quoted manufacturing firms for the periods covered in this study. The estimated results as presented in table 4.12 panel III indicates that agency cost explained 50.1 percent variation on financing policy of the quoted manufacturing firms. The results of the model was further justifies by the F-statistics and probability. The estimated egression model proved that executive compensation, directors' enumeration and agency cost of debt have positive effect on financing policy of the quoted manufacturing firm. The positive effect of variables confirms the a-priori expectation of the study, also, the positive effect of executive compensation and directors' enumeration and agency cost of debt on the financing policy of the quoted firms confirms the efficiency theory which states that better management and scale efficiency results to higher concentration thus greater and higher profits. The theory posited that management efficiency not only increases profits, but also results to larger market share gains and improved market concentration (Athanasoglou, Brissimis and Delis, 2005). Like the

findings in model three above, empirically the findings of the stud is in line with the findings of Whilst (2010) that 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. Omar et al. (2007) that the debt ratio of the Big-4 affiliated audit firms has significant positive relationship with Tobin's Q. However, the estimated model shows that monitoring cost have negative and significant effect on financing policy of the manufacturing firm. It proved that increase on the variable can affect investment policy of the firm to a great extent. The negative effect of the variable contradicts the expectation of the study and invalidates theories such as the police man theory of auditing. The negative effect of monitoring cost on financing policy confirm the findings of is in line with the findings of Whilst (2010) that 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. Omar et al. (2007) that the debt ratio of the Big-4 affiliated audit firms has significant positive relationship with Tobin's Q.

CONCLUSION AND RECOMMENDATIONS

Conclusion

The examined the effect of agency cost on equity financing policy of quoted manufacturing firms in Nigeria. The study contributes to the literature through investigating the effect of agency cost on the equity financing. Data were collected from the published financial statements of several manufacturing firms listed on Nigeria Exchange Group over 2014–2023. Panel Mean Group estimation method was used for data analysis purposes. Various models and estimations are used for robustness check in the results. We propose the existence of a significant moderate impact of agency cost on the relationship between equity financing. These results support agency theory, more debt discourages managers from making decisions unconsciously. Managers are obliged to follow the performance more carefully in order to not default their obligations. This way, the expected agency cost is reduced, and equity financing of the firm is served. The results of this study can be a valuable addition to the literature around capital structure, financial performance under agency cost theory from a developing country like Nigeria. Practically, the results provide significant insight to the financial authority in the country in which they could more support the industrial sector through facilitating regulations and rules of borrowing.

Recommendations

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

i. The manufacturing firms should consider establishment policies for executive stockholding. This will enhance management in planning and managing forts that affect equity financing of quoted firms. Management of the quoted manufacturing firms should adopt good compensation structure, welfare, and incentive packages as these would positively motivate executives and consequently improve financial performance and valuation.

ii. The policy makers need to provide adequate regulation on the determination of equity incentive of the directors of listed companies, this will reduce the agency cost that negatively effect of equity finances and the over bearing influence of directors in annual general meetings.

iii. It recommended that there should defined salary structure of the executive directors of the manufacturing firms; this will reduce the pressure on profitability of the quoted manufacturing firms to reduce agency cost.

iv. Executive bonuses of the firms should be directed toward achieving effective earnings management of the manufacturing firms and the regulatory authorities should ensure that executive officers comply with code of corporate governance.

REFERENCES

Abdulah, H., & Tursoy, T. (2022). The effect of corporate governance on financial performance: Evidence from a shareholder-oriented system. Iranian Journal of Management Studies. https://doi.org/10.22059/IJMS.2022.321510.674798

Abdullah, H. (2021). Profitability and leverage as determinants of dividend policy: Evidence of Turkish financial firms. Eurasian Journal of Management and Social Science, 2(3), 15– 30.

Abdullah, H. A., Awrahman, H. G., & Omer, H. A. (2021). Effect of working capital management on the financial performance of banks: An empirical analysis for banks listed on the Iraq stock exchange. Qalaai Zanist Journal, 6(1), 429–456.

Abdullah, H., & Tursoy, T. (2021a). Capital structure and firm performance: Evidence of Germany under IFRS adoption. Review of Managerial Science, 15(2), 379– 398.

Abdullah, H., & Tursoy, T. (2021b). Capital structure and firm performance: A panel causality test. Munich Personal RePEc Archive (MPRA). https://mpra.ub.unimuenchen.de/105871/

Abdullah. (2020). Capital structure, corporate governance and firm performance under IFRS implementation in Germany. [PhD Thesis], Near East University.

Ali, M. (2018). Impact of corporate governance on firm's financial performance (A comparative study of developed and non-developed markets). Economic Research, 2(1), 15–30.

Al-Imam, S., & Hassan, M. (2019). The effect of capital structure on financial performance. Journal of ALTurath University College, 27, 189–212.

Al-Qudah, A. (2017). The relationship between capital structure and financial performance in the companies listed in ABU DHabi securities exchange: Evidences from United Arab Emirates. Review of European Studies, 9(2), 1. https://doi.org/10.5539/res. v9n2p1

Al-Taani, K. (2013). The relationship between capital structure and firm performance: Evidence from Jordan. Journal of Finance and Accounting, 1(3), 41– 45.

Ang, J. S., Cole, R., & Lin, J. W. (2000). Agency costs and ownership structure. The Journal of Finance, 55(1), 81–106.

Ankamah-Yeboah, I., Nielsen, R., & Llorente, I. (2021). Capital structure and firm performance: Agency theory application to Mediterranean aquaculture firms. Aquaculture Economics & Management, 1–21. https://doi.org/10.1080/13657305.2021.1976884

Ardalan, K. (2017). Capital structure theory: Reconsidered. Research in International Business and Finance, 39, 696–710.

Berger, A. N., & Di Patti, E. B. (2006). Capital structure and firm performance: A new approach to testing agency theory and an application to the banking industry. Journal of Banking & Finance, 30(4), 1065–1102.

Berle, A. A., & Means, G. C. (1932). The Modern Corporation and private property. Commerce Clearing House, New York: The Mcmillan Company. Social sciences

Davies, S. D., & Lucky, A. L., (2018). Corporate characteristics and influence on share based payment of financial service firms in Nigeria. Asian Finance & Banking Review, 2 (1), 18-29.

Dawar, V. (2014). Agency theory, capital structure and firm performance: Some Indian evidence.

Managerial Finance, 40(12), 1190–1206. https://doi.org/10.1108/ MF-10-2013-0275

Ghafar, S., Abdullah, H., & Van Rasul, H. (2021). Bank profitability measurements and its determinants: An empirical study of commercial banks in Iraq. Journal of Zankoy Sulaimani, 4(22), 607–627. https://ideas. repec.org/p/pra/mprapa/114697.html

Ibhagui, O. W., & Olokoyo, F. O. (2018). Leverage and firm performance: 0 new evidence on the role of firm size. The North American Journal of Economics and Finance, 45, 57–82.

Imelda, E., & Dewi, A. P. (2019). Capital structure, corporate governance and agency costs. In Proceedings of the 7th International Conference on Entrepreneurship and Business Management (pp. 203–207).

Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. Journal of Financial Economics, 3(4), 305– 360.

Jouida, S. (2018). Diversification, capital structure and profitability: A panel VAR approach. Research in International Business and Finance, 45, 243–256.

Kalash, İ. (2019). Firm leverage, agency costs and firm performance: An empirical research on service firms in Turkey. İnsan ve Toplum Bilimleri Araştırmaları Dergisi, 8(1), 624–636.

Khan, R., Khidmat, W. B., Hares, O. A., Muhammad, N., & Saleem, K. (2020). Corporate governance quality, ownership structure, agency costs and firm performance. Evidence from an emerging economy. Journal of Risk and Financial Management, 13(7), 154.

Kontuš, E. (2021). Agency costs, capital structure and corporate performance: A survey of Croatian, Slovenian and Czech listed companies. Ekonomski Vjesnik, 34(1), 73–85.

Le, T. P. V., & Phan, T. B. N. (2017). Capital structure and firm performance: Empirical evidence from a small transition country. Research in International Business and Finance, 42, 710– 726.

Li, K., Niskanen, J., & Niskanen, M. (2018). Capital structure and firm performance in European SMEs: Does credit risk make a difference? Managerial Finance.

Liao, Y., Huang, P., & Ni, Y. (2022). Convertible bond issuance volume, capital structure, and firm value. The North American Journal of Economics and Finance, 60, 101673.

Liu, X., Tang, Z., & Zhao, Y. (2022). Determinants of financial performance: An evidence from

Internet finance sector. Managerial and Decision Economics. https://doi.org/10.1002/mde.3451

Lucky, A. L., & Akani, H. W. (2019). Cost of capital and dividend policy: a panel data study of Nigeria commercial banks. European Journal of Accounting, Finance and Investment, 4(12), 8089.

Lucky, A. L., & Onyinyechi, G. U. (2019). Dividend policy and value of quoted firms in Nigeria: A Test of Miller and Modigliani Irrelevant Hypothesis. Australian Finance & Banking Review, 3(2), 16-29.

Lucky, A. L., & Michael, A. O. (2019). Leverage and corporate financial distress in Nigeria: A panel data analysis. Asian Finance & Banking Review; 3(2), 26-38.

Mansyur, A., Mus, A. R., Rahman, Z., & Suriyanti, S. (2020). Financial performance as mediator on the impact of capital structure, wealth structure, financial structure on stock price: The Case of the Indonesian banking sector. European Journal of Business and Management Research, 5(5).

Mcknight, P. J., & Weir, C. (2009). Agency costs, corporate governance mechanisms and ownership structure in large UK publicly quoted companies: A panel data analysis. The Quarterly Review of Economics and Finance, 49(2), 139–158.

Modigliani, F., & Miller, M. H. (1958). The cost of capital, corporation finance and the theory of investment. Am` Econ Rev, 48(3), 261–297.

Modigliani, F., & Miller, M. H. (1963). Corporate income taxes and the cost of capital: A correction. Am Econ Rev, 53(3), 433–443.

Muneer, S., Bajuri, N. H., & Saif-ur-Rehman, S. U. R. (2013). Moderating effect of agency cost on the relationship between capital structure, dividend policy and organization performance: A brief literature review. Actual Problems of Economics, 11, 434–442.

Ngatno, Apriatni, E. P., & Youlianto, A. (2021). Moderating effects of corporate governance mechanism on the relation between capital structure and firm performance. Cogent Business & Management, 8(1), 1866822.

Nidumolu, R. (2018). Exploring the effects of agency theory on ownership structures and firm performance. Working paper. https://ssrn.com/abstract=3809607

Otete , F. O., & Martin, O. R.. (2024). Analysis of the effects of agency costs on financial performance of commercial banks listed at the Nairobi Securities Exchange in Mombasa County, Kenya. Asian Journal of Economics, Business and Accounting 24 (4):65-79.

Pandey, K. D., & Sahu, T. N. (2019). Debt financing, agency cost and firm performance: Evidence from India. Vision, 23(3), 267–274.

!

Zaman, K., Al-Ghazali, B. M., Khan, A., Rosman, A. S. B., Sriyanto, S., Hishan, S. S., & Bakar, Z. A. (2020). Pooled mean group estimation for growth, inequality, and poverty triangle: Evidence from 124 countries. Journal of Poverty, 24(3), 222–240.