

Agency Cost and Dividend Policy in Nigerian Non-Financial Quoted Firms

Okun O. Omokhudu, Ohidoa Toluwa

To Link this Article: <http://dx.doi.org/10.6007/IJARBSS/v8-i4/4017>

DOI: 10.6007/IJARBSS/v8-i4/4017

Received: 03 Mar 2018, Revised: 11 Apr 2018, Accepted: 18 April 2018

Published Online: 24 April 2018

In-Text Citation: (Omokhudu & Toluwa, 2018)

To Cite this Article: Omokhudu, O. O., & Toluwa, O. (2018). Agency Cost and Dividend Policy in Nigerian Non-Financial Quoted Firms. *International Journal of Academic Research in Business and Social Sciences*, 8(4), 323–345.

Copyright: © 2018 The Author(s)

Published by Human Resource Management Academic Research Society (www.hrmars.com)

This article is published under the Creative Commons Attribution (CC BY 4.0) license. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this license may be seen at: <http://creativecommons.org/licenses/by/4.0/legalcode>

Vol. 8, No. 4, April 2018, Pg. 323 - 345

<http://hrmars.com/index.php/pages/detail/IJARBSS>

JOURNAL HOMEPAGE

Full Terms & Conditions of access and use can be found at
<http://hrmars.com/index.php/pages/detail/publication-ethics>

Agency Cost and Dividend Policy in Nigerian Non-Financial Quoted Firms

Okun O. Omokhudu, Ohidoa Toluwa

Department of Accounting, University of Benin, Benin City, NIGERIA

Email: okun.omokhudu@uniben.edu, ohidoa.toluwa@uniben.edu

Abstract

Purpose This paper investigated the effect of agency cost on dividend policy in the Nigerian non-financial listed firms

Design/Methodology/approach - This paper applies the Ordinary least square to a multiplicative interaction model in which the effect of agency cost on dividend policy is conditional on leverage, growth, free cash flow and profitability. Three models were used in this study which include the dividend policy variables and control variables, with these variables interacted multiplicatively to ascertain conditional effect of agency cost on dividend policy.

Findings- according to our findings, dividend policy was significantly determined by agency cost. However, only executive compensation is found to be significantly related to dividend policy. Large shareholder monitoring and insider ownership were found not to be significant determinants of dividend policy.

Originality/value – This paper uses dividend to total assets as a measure of dividend policy and considers the impact of agency on it but conditional on other important variables as leverage, growth, profitability and free cash flow. The implication therefore is that the investor should factor executive compensation in selecting firms for investment portfolio where such investor has dividend payment as priority.

Keywords: Dividend Policy, Agency Cost, Leverage, Executive Compensation, Insider Ownership, Nigeria.

Introduction

Dividend policy can be described as the policy a company uses to decide how much it will pay to shareholders in dividends. Dividend policy that a firm adopts has implications for different stakeholders such as lenders, investors and managers. Since the publication of the original Miller and Modigliani (1961) on dividend irrelevance theory which submits that firm value and shareholders' wealth are not related to the decision as to whether or not the firm pays dividend, the question as to why most firms pay dividends and others do not has puzzled financial economists. Traditionally, finance scholars (Allen & Michaely, 2003) have emphasized

explanations for dividends payout that are based on the desire to communicate information to shareholders or to satisfy the demand for payouts from heterogeneous dividend clienteles. However, DeAngelo, DeAngelo, and Skinner (2004) cast doubt on signalling and clientele considerations as first-order determinants of dividend policy by reporting that dividends in the U.S. are increasingly concentrated among a small number of large payers.

An alternative view of dividends, proposed by DeAngelo and DeAngelo (2006), is that optimal payout policy is driven by the need to distribute the firm's free cash flow. They propose a life-cycle theory that combines elements of Jensen's (1986) agency theory with evolution in the firm's investment opportunity set of the type discussed in Fama and French (2001) and Grullon, Michaely, and Swaminathan (2002). In this theory, firms optimally alter dividends through time in response to the evolution of their opportunity set. The theory predicts that in their early years, firms pay few dividends because their investment opportunities exceed their internally generated capital. In later years, internal funds exceed investment opportunities so firms optimally pay out the excess funds in order to mitigate the possibility that the free cash flows will be wasted.

Manos (2001) claims that the payment of dividends is one of the measures available to managers for controlling agency behaviour; he further proposed that by inducing external monitoring, dividends reduce agency costs, although at the same time increasing the transaction costs associated with raising external funds. Agency theory, however, underpins the relationship between the principal and the agent. Within the context of the firm, agency theory is primarily concerned with owner-manager relationship and with the need for shareholders to monitor management behaviour. This need arises due to the separation of ownership and control and the associated conflicts of interests that arise between shareholders (principals) and managers (agents).

In light of the costs to managers from possible agency conflicts it becomes important to them that the firm is seen to be free of such conflicts. Managers will thus take measures, in addition to those taken by shareholders, to reduce the potential for agency conflicts. Agency costs arise because of conflicts of interest between shareholders and management. Consequently, agency costs are defined as the loss to shareholders for controlling agency behaviour, through measures taken by themselves and by managers as well as the costs from any agency behaviour that have not been controlled; it could also be seen as those costs borne by shareholders to encourage managers to maximize shareholders wealth rather than behave in their own self-interests. This cost arises from, or must be paid to, an agent acting on behalf of a principal. Shareholders wish for management to run the company in a way that increases shareholder value. But management may wish to grow the company in ways that maximize their personal power and wealth that may not be in the best interests of shareholders. Although most studies (Manos, 2002; DeAngelo et al, 2004) had focused on stock options as a means to addressing the agency problem. The major interest of most investors/shareholders is to get returns on their investment. Agency problems arise when a manager has incentives beyond simply maximizing the shareholders value. Firm faces two types of agency problems vertical agency problem that exist between owners and managers, horizontal agency problems that exist between controlling majority shareholders and minority owners.

Several studies have examined the factors which seem to influence dividend payout policy; DeAngelo, DeAngelo, and Stulz (2006) find that the propensity to pay dividends is positively

related to the ratio of retained earnings to total equity, their proxy for the firm's life-cycle stage. A further wrinkle in the 'dividend puzzle' literature was presented in Fama and French (2001) which reported a substantial decline in the proportion of firms paying dividends in the U.S. Although this decline is due in part to changes in the characteristics of firms that are publicly traded (i.e. more firms exhibit characteristics similar to those of non-dividend-paying firms), Fama and French (2001) nonetheless report that once they control for these characteristics, they still find a significant decline in the residual propensity to pay dividends.

Denis and Osobov, (2007) and Gul, Mughal, Shabir and Bukhari (2012) examined the factors which seem to influence dividend payout policy; the findings of the former supports agency cost-based lifecycle theories while the later found a positive correlation between profitability, firm size, growth and dividend yield. While these studies focused majorly on developed economics (U.S., Canada, U.K., Germany, France, and Japan), not much has been documented on the impact of agency cost mechanisms in emerging economies. Only recently, Osegbue, Ifurueze and Ifurueze, (2014) and Badu, (2013) looked at the factors that determines dividend payout policies in developing economies. The former considered the impact of free cash flows, current profitability, financial leverage, business risk and tax paid on dividend payment ratio and found no significant relationship between dividend payout of banks in Nigeria and all the explanatory variables. The latter examined the determinants of dividends payout policy of listed financial institution in Ghana using fixed and random effects, and found a statistically significant and positive relationship between Age and liquidity but saw statistically insignificant relationship between profitability, collateral and dividend payment.

Using a modified Al Taleb (2012) model, this study incorporates managerial incentives in a bid to extend the literature by examining cross-sectional and time-series evidence on the impact of agency cost on the propensity to pay dividends in Nigerian listed banks as a developing financial market. Also, in the light of scanty research work on agency cost and dividend policy in developing economies such as Nigeria, a re-examination of this area of interest becomes necessary. Following this introduction. The next section briefly reviews the literature on the relationship between Dividend policy and Agency cost, dividend policy and proxies of agency cost. Section 3 notes the sample and discusses the estimation procedures. Section 4 presents the results of the relationship between dividend policy and agency cost proxies. Section 5 concludes the study.

Review of Literature

Dividend Policy and Agency Theory

There has been considerable research that seeks to identify the determinants of corporate dividend policy. One branch of this literature has focused on an agency-related rationale for paying dividends. It is based on the idea that monitoring of the firm and its management is helpful in reducing agency conflicts and in convincing the market that the managers are not in a position to abuse their position. Some shareholders may be monitoring managers, but the problem of collective action results in too little monitoring taking place. Thus Easterbrook (1984) suggests that one way of solving this problem is by increasing the payout ratio. When the firm increases its dividend payment, assuming it wishes to proceed with planned investment, it is forced to go to the capital market to raise additional finance. This induces monitoring by potential investors of the firm and its management, thus reducing agency problems.

Rozeff (1982) develops a model that underpins this theory, called the cost minimization model. The model combines the transaction costs that may be controlled by limiting the payout ratio, with the agency costs that may be controlled by raising the payout ratio. The central idea on which the model rests is that the optimal payout ratio is at the level where the sum of these two types of costs is minimised. Thus Rozeff's cost minimisation model is a regression of the firm target payout ratio on five variables that proxy for agency and transaction costs. Transaction costs in the model are represented by three variables that proxy for the firm's historic and predicted growth rates and risk. High growth and high risk imply greater dependency on external finance due to investment needs, and in order to honour financial obligations, respectively. This, in turn, means that the firm raises external finance more frequently, hence bears higher transaction costs that are associated with raising external finance.

The model captures agency costs with two proxies. First, the fraction of the firm owned by insiders is a proxy for insider ownership and is expected to be negatively related to the target payout ratio. As insiders hold more of a firm's equity, the need to monitor their actions is reduced because the incentive for managers to misuse corporate resources falls. Second, the natural logarithm of the number of outside shareholders is a proxy for ownership dispersion. It is expected to be positively related to the target payout ratio because the greater the dispersion, the more severe is the collective action problem of monitoring. Indeed results from an Ordinary Least Squares (OLSQ) cross sectional regression using 1981 data on 1000 US firms, support the theory put forward. Thus the model provides good fit and consequently has attracted the attention of subsequent studies.

Llyod, Jahera and Page (1985) is one of the first studies to modify Rozeff's cost minimisation model by adding a size variable. An OLSQ cross sectional regression is applied to 1984 data on 957 US firms, and the results provide support for the cost minimisation model and show that firm size is an important explanatory variable. Likewise Schooley and Barney (1994) add a squared measure for insider ownership, arguing that the relationship between dividend and insider ownership may be non-monotonic. Indeed the results from an OLSQ cross sectional regression, using 1980 data on 235 industrial US firms, provide further support for Rozeff's model in general and for the hypothesis put forward in particular.

More support and further contribution to the agency theory of dividend debate, is provided by Moh'd, Perry and Rimbey (1995). These authors introduce a number of modifications to the cost minimisation model including industry dummies, institutional holdings and a lagged dependent variable to the RHS of the equation to address possible dynamics. The results of a Weighted Least Squares regression, employing panel data on 341 US firms over 18 years from 1972 to 1989 support the view that the dividend process is of a dynamic nature. The estimated coefficient on the institutional ownership variable is positive and significant, which is in line with tax explanations but contradicts the idea about the monitoring function of institutions.

Holder, Langrehr and Hexter (1998), extend the cost minimisation model further by considering conflicts between the firm and its non-equity stakeholders and by introducing free cash flow as an additional agency variable. The study utilises panel data on 477 US firms each with 8 years of observations, from 1983 to 1990. The results show a positive relation between the dependent variable and the free cash flow variable, which is consistent with Jensen (1986). Likewise the estimated coefficient on the stakeholder theory variable is shown to be significant and negative

as predicted. The estimated coefficients on all the other explanatory variables are also shown to be statistically significant and to bear the hypothesised signs.

Hansen, Kumar and Shome (1994), also take a broader view of what constitutes agency costs, and apply a variant of the cost minimisation model to the regulated electric utility industry. The prediction is that the agency rationale for dividend should be particularly applicable in the case of regulated firms because agency costs in these firms extend to conflicts of interests between shareholders and regulators. Results of cross sectional OLSQ regression for a sample of 81 US utilities and for the period ending 1985 support the cost minimisation model and the contribution of regulation to agency conflicts in the firm.

Another innovative approach to Rozeff's cost minimisation model is offered in Rao and White (1994), who applies it to 66 private US firms. Using a limited dependent variable, Maximum Likelihood (ML) technique, the study shows that an agency rationale for dividends applies even to private firms that do not participate in the capital market. The authors note that perhaps by paying dividends, private firms can still induce monitoring by bankers, accountants and tax authorities.

Agency Costs and Dividend Policy

The finding of Adaoglu (2000) states that the main determinant in the amount of cash dividend in the Istanbul Stock Exchange is earning for the same year; any changeability in the earning of the company is directly reflected in the level of cash dividend. La Porta et al. (2000) compared to countries that have strong legal protection for shareholders with those who are poor legal protection of shareholders, and related that for countries with low quality of shareholder protection laws. Their conclusion is that shareholders will take whatever they can obtain cash dividends from company profits, in which the dividend is deemed unstable.

According to La Porta et al. (2000), Thailand is characterized as a country with low shareholder protection. Further, the ownership structure of Thai firms is highly concentrated. These characteristics can increase the agency costs of free cash flows and dividend payments are more likely to be used as a mechanism that helps mitigate this agency problem. The distinct institutional feature of Thai firms is a major reason why dividend policy in Thailand is of interest for examination in the context of agency costs of free cash flows. Fama and French (2001) study the propensity to pay dividends of U.S. firms between 1926 and 1999. They find that the percentage of firms paying dividend declines substantially after 1978, i.e., the proportion of dividend payers reaches its peak of 66.5% in 1978 but falls to only 20.8% in 1999. Their evidence indicates that the lower proportion of dividend payers is, in part, due to a surge in new listings of small firms with low profitability but high investment opportunities that never pay dividends.

Studies result regarding relationship between dividend payout and free cash flow are the following. La Porta et al. (2000) explained that if the company had free cash flow, the managers will engage in wasteful practices, even when the protection for the investor increased. Meanwhile, the studies of Holder et al. (1998) and Mollah et al. (2002) have suggested that companies with a higher free cash flow should pay more dividends to decrease free cash flow agency costs. Baker et al. (2007) report that Canadian dividend paying firms are significantly having greater cash flows; Amidu and Sawicki (2005) illustrated that dividend payouts can help to ultimately monitor the performance of managers in large firms. That is, in large firms, information asymmetry increases due to ownership dispersion, decreasing the shareholders'

ability to monitor the internal and external activities of the firm, resulting in the inefficient control by management. Paying large dividends can be a solution for such a problem because large dividends lead to an increase in the need for external financing, and the need for external financing leads to an increase in the monitoring of large firms, because of the existence of creditors.

Eriotis (2005) reports that the Greek firms distribute dividend each year according to their target payout ratio, which is determined by distributed earnings of these firms; in investigating the determinants of dividend policy of Tunisian stock Exchange, Nacelur et al. (2006) find that the high profitable firms with more stable earnings can manage the larger cash flows and because of this they pay larger dividends. Abor (2006) find dividend payout policy decision of listed firms in Ghana Stock Exchange is influenced by cash flow position of the firms. DeAngelo et al. (2004) document highly significant association between the decision to pay dividends and the ratio of earned equity to total equity controlling for cash balance.

Baker et al. (2007) finds that Canadian dividend paying firms are significantly having some growth opportunities. Amidu and Abor (2006) find dividend payout policy decision of listed firms in Ghana Stock Exchange is influenced by growth scenario and investment opportunities of the firms. A recent study of Denis and Osobov (2008) also document the ratio of retained earnings to equity as a significant factor affecting dividend policies in six developed financial markets (the U.S., Canada, the U.K., Germany, France, and Japan). However, little is known about the impact of earned/contributed capital on dividend policies in emerging economies.

Denis and Osobov (2008), examine cross-sectional and time-series evidence on the propensity to pay dividends in six developed financial markets (U.S., Canada, U.K., Germany, France, and Japan) over the period 1989-2002 Free cash flow (FCF) is estimated by cash flows from operations following Baba (2009). If the managers pay dividends to mitigate agency cost of free cash flows, a positive relation between free cash flows and dividend payouts is predicted. On the other hand, a negative relation between free cash flows and dividend payouts might indicate the agency problem.

Having given a general overview on agency cost and dividend policy, attempt was made in the next section to link the various proxies of agency cost as used in this study with dividend payout policy.

Large Shareholders Monitoring and Dividend Policy

Firms with higher percentage of shareholdings (block holder of share/institutional investors) do suffer less agency problem than that of a dispersed ownership (Shleifer & 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, Lopez-de-silannes and Vishny (2000) posited that a legal environment provides strong protection to 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 & Michaely, 2005; Redding, 1997).

Short, Zhang and Keasey (2002) revealed a positive relationship between dividends and shareholding by financial institutions. Also, Claessens, Dhiensiri and Lang (2000) revealed a positive relationship between dividends and large shareholders. This could be attributed to the monitoring capacity of these institutional investors. This is also attributed to the fact that as largest shareholders are controlling smaller shareholders; they can choose to pay high dividends in order to minimize extraordinary monitoring costs. Large shareholders adopt large dividend payouts as a mechanism of maintaining firm value and enhancing the firm's reputation for not expropriating the wealth of its minority shareholders. On the contrary, Renneboog and Trojanowski (2005) revealed a negative relationship which is unexpected. In the study of Gesser, Halman and Sarig (2005), they found BLOCK shareholding to be insignificantly related to market reaction to share repurchase announcement. The insignificant coefficient of BLOCK shareholdings suggests that monitoring by large shareholders does not reduce the value of share repurchases as a means to alleviate agency problem. By extension, it implies that monitoring by large shareholders does not have a significant impact on dividend payout policy.

Apart from large shareholders using their capacity to monitor bank manager, it has been argued that they can also use their power to expropriate small outside shareholders. Pergola and Verreault (2009), Shleifer and Vishny (1997), Demsetz and Lehn (1985) posited that large shareholders might use their authority to act in pursuit of their private benefits, mostly at the expense of small shareholders.

Insider Ownership and Dividend Policy

It has been argued that agency costs may be reduced if insiders (managers, directors, and other executive officers) increase their ownership in the firm, because this can help to align the interests of both managers and shareholders (Jensen & Meckling, 1976). The higher the proportion of managerial ownership in firm, the less would be the need for using dividends as a tool of reducing agency cost (Al-Malkawi, 2007). Therefore we expect a negative relationship of ownership structure and dividend payments.

Rozeff's (1982) posited that the optimal dividend payout is at the level where the sum of transaction cost and agency cost are minimized (cost minimization model). In his findings, insider ownership used as a proxy for agency cost exhibited a significant and negative relationship with dividend payout ratio. This implies that increase in managerial ownership has an inverse relationship with dividend payout. Rozeff's (1982) posited that the benefits of dividends in amelioration agent-principal conflict are smaller for companies with lower of ownership and/or higher insider ownership.

Holder, Langrehr and Hexter (1998) while examining 477 US firms over the period 1980 to 1990 found that insider ownership exhibited a significant and negative relationship with dividend payout. This significant though negative findings is in tandem with studies of Dempsey and Laber (1992), Saxena (1999), Jensen, Solberg and Zorn (1992), Short, Zhang and Keasey (2002), Renneboog and Trojanowski (2005) and Farinha (2003). The reason for the above findings could be that directors becoming shareholders could still indulge in excessive perquisite despite being part owners of the company. In essence, there is a tradeoff between perquisite accruable to these directors and the dividend they will eventually receive at the end of the financial year. The

higher the opportunistic environment to enrich themselves, the tendency that they will underplay payment of dividend at the end of the financial year.

Agency Cost of Debt and Dividend Policy

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 hubris, the debt supplier place some constraints 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 benefit 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. As the size of debt increases, the value of the levered firm initially increases due to the marginal benefits of interest tax shield. As the debt-to-value ratio further increases, the marginal agency costs rise and the value of the firm begins to fall consequently affecting dividend payout policy. An attempt will be made in this paper to measure agency cost of debt by using the ratio of debt financing to equity financing.

Executive Compensation and Dividend Policy

Akpoatare (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 may 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. One recent example of a company that has received such criticism is CA. Inc. CA's executives received as much as \$19,530 apiece on dividend equivalents from stock that they do not own. 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 and Hexter (1998) this may lead to a downward pressure on dividend levels. However, the relevance of stakeholder theory to the Nigerian case also implies extension of agency problems to conflicts of interests between equity holders and other stakeholders, increasing the need for shareholders to monitor management behaviour. It is thus the case that on the one hand stands the prediction by Samuel (1996) that agency costs should be lower in the Nigerian business environment.

This implies that the agency rationale for dividends should be less applicable in the case of India. To contrast this, the agency rationale for dividends is predicted to become particularly applicable to Nigeria, due to the extension of agency conflicts on at least three accounts as explained above. An empirical procedure is the natural way to settle these differences and it is to this task that researchers now turn.

Sample and Data Source

Our sample originally consisted of all firms listed in the Nigerian Stock Exchange over the period 2010-2016. Initially this generated a total sample size of 943 firm-years observation. The eventual sample size was arrived after applying the following screening criteria

- Firms listed in the exchange between 2016 and/or no longer listed as of 31st December, 2016 to ensure the availability of the data for the period under consideration
- Firms not providing consolidated financial statement, to ensure the homogeneity of financial statements
- Not closing the financial statement on 31 December, to ensure homogeneity of the date of closure and relevant consistency with Nigerian Stock Exchange capitalisation
- Firms with missing data.

Model Specification

The model for this study is a modification of the agency cost minimization model of Rozeff (1982). Also, in line with Osegbue, (2014) and Al Taleb, (2012) that other factors could have significant impact on dividend payout policy and hence need to be controlled for, this study seeks to employ leverage (LEV), growth (GROW), free cash flow (FCF) and profitability (PROF) as control variables. The model is presented below:

$$DIV = f(LSM, INSID, ACD, EXEPAY, ,) \dots \dots \dots (1)$$

It can be re-specified in a regression form as given below:

$$DIV_{it} = \alpha_0 + \beta_1 LSM_{it} + \beta_2 INSID_{it} + \beta_3 ACD_{it} + \beta_4 EXEPAY_{it} + \beta_5 LEV_{it} + \beta_6 GROW_{it} + \beta_7 FCF_{it} + \beta_8 PROF_{it} + \mu_t \dots \dots \dots (1a)$$

Model Two: Combination of agency cost proxies variables and control variables.

$$DIV = f(LSM, INSID, ACD, EXEPAY, LEV, GROW, FCF, PROF) \dots \dots \dots (2)$$

It can be re-specified in a regression form as given below:

$DIV_{it} = \alpha_0 + \beta_1 LSM_{it} + \beta_2 INSID_{it} + \beta_3 ACD_{it} + \beta_4 EXEPAY_{it} + \beta_5 LEV_{it} + \beta_6 GROW_{it} + \beta_7 FCF_{it} + \beta_8 PROF_{it} + \mu_t$
 $\mu_t =$ Stochastic term.

Model Three: Interacting each of the agency cost proxies variables with the control variables.

$$DIV_{it} = \alpha_0 + \beta_1 LSM_{it} * LEV_{it} + \beta_2 LSM_{it} * GROW_{it} + \beta_3 LSM_{it} * FCF_{it} + \beta_4 LSM_{it} * PROF_{it} + \beta_5 INSID_{it} * LEV_{it} + \beta_6 INSID_{it} * GROW_{it} + \beta_7 INSID_{it} * FCF_{it} + \beta_8 INSID_{it} * PROF_{it} + \beta_9 EXEPAY_{it} * LEV_{it} + \beta_{10} EXEPAY_{it} * GROW_{it} + \beta_{11} EXEPAY_{it} * FCF_{it} + \beta_{12} EXEPAY_{it} * PROF_{it} + \mu_t \dots \dots \dots (3a)$$

Operationalization of Variables

Table 1

Variable	Definition	Measurement
DIVP	Dividend payout	Cash dividend paid over total assets
LSM	Large shareholder monitoring	Percentage of shares held by block shareholders institutional shareholders
INSID	Managerial shareholding	Percentage of shares held by directors of the firm
ACD	Agency cost of debt	Debt to total Asset
EXPAY	Executive compensation	Naira amount of CEO salary, current bonuses and long term
LEV	Leverage	Total debts divided by Total assets
GROWTH	Firm Growth	Market to book ratio
FCF	Free cash flow	Profit after tax less changes is fixed asset divided by total assets
Profitability	PROF	Profit after tax divided by revenue

Presentation of Regression Results

Table 2 shows the descriptive statistics for the variables. The dependent variable dividend pay out (DVP) has a maximum value of 332.66 and a minimum value of -191.65. The mean and standard deviation are 38.44 and 50.88 respectively. Which shows that the data is appreciably dispersed as some observations even fall outside 99 per cent of the total observations. This reflect the heterogeneity of the sample coverage of the study. LSM has mean value of 52.4 and standard deviation of 22.5, which show that sample data has some meaningful variations and not concentrated around the mean as observations fall within two standard deviations from the mean. With respect to Free cash flow (FCF) the mean and standard values are 9.24 and 10.54 respectively indicating wide dispersion of observations from the mean and strong heterogeneity of sample data extracted from companies across various industrial groups. LEV with a mean of 54.7 and standard deviation of 25.63, reveals that an appreciable number of observations fall outside three standard deviations from the mean on either side of the mean. GROWTH shows skewness to the right as mean is marginally larger than median, with Mean=8.99 STD=27.9, indicating that some observations lie well outside three standard deviations. PROF mean=0.599 STD=68.05, shows strong dispersions from the mean and considerable variations reflecting the heterogeneity of the sample data cutting across industrial groupings. INSID mean value 12.07 and STD of 19.9, again revealing that sample data are appreciable dispersed such that there is no concentration around the mean. EXEPAY mean value of 62,555 STD of 98,031 indicate that

sample data are reasonably dispersed from the mean, with some observations outside three standard deviations from the mean.

Table 2 : Descriptive Statistics

	DVP	LSM	FCF	LEV	GROWTH	PROF	FSIZE	INSID
Mean	38	52	9	55	9	1	4	12
Median	31	56	6	55	6	5	4	1
Max	333	95	62	151	190	100	6	164
Min	-192	0	-5	-253	-86	-1,123	3	0
Std. Dev.	51	22	11	26	28	68	1	20
J-B	835	15	598	56,816	1,109	741,044	9	2,219
Prob	0	0	0	0	0	0	0	0
Obs	314	314	314	314	314	314	314	314

Table 3 below is the correlation matrix of the dependent and explanatory variables in the study. A cursory look will show that the variables are not strongly related to one another. The dependent variable DVP is negatively related to LEV but positively related to other explanatory variables, with the higher correlation being EXEPAY at 0.25. Strongest correlation is that EXEPAY and Firms Size at 0.53 which are positively related. The results indicate that the presence of autocorrelation is minimized, thus likely yielding best linear unbiased estimates.

Table 3: Correlation Matrix

	DVP	LSM	FCF	LEV	GROWTH	PROF	FSIZE	INSID	EXEPAY
DVP	1								
LSM	0.04	1							
FCF	0.22	0.14	1						
LEV	-0.03	0.09	-	1					
GROWTH	0.02	-0.05	-	0.06	1				
PROF	0.09	0.18	0.11	-0.09	0.24	1			
FSIZE	0.26	0.1	-	0.17	0.12	0.12	1		
INSID	0.05	-0.13	-	-0.03	-0.03	-0.03	-0.13	1	
EXEPAY	0.25	-0.04	-	0.04	0.11	0.1	0.53	0.04	1

Discussion of Regression Results

The paper employed three models to determine the effect of agency cost on dividend policy. Model 1 uses indicators of agency cost as explanatory variables. Model 2 controls for some variables indicated from previous literature as affecting dividend policy. Model 3 interacts the agency cost variables with the control variables to establish the effect of the control variables

acting in concert with agency cost variables. The study undertakes the regression analysis using Panel least square (PLS), Random Effect Model (REM) and Fixed Effect Model (FEM). This analysis is employed to address to address the heterogeneity of sample data.

Table 4 : Model 1

Variable	PANEL			FEM			REM		
	Coeff	t-value	p-value	Coeff	t-value	p-value	Coeff	t-value	p-value
c	14.24	1.13	0.26	21.11	1.77	0.08	18.33	1.98	0.05
LSM	0.18	0.89	0.37	0.02	0.08	0.94	0.12	0.84	0.40
INSID	0.17	0.86	0.39	0.19	0.95	0.34	0.17	1.13	0.26
EXEPAY	0.00	5.59	0.00	0.00	5.59	0.00	0.00	5.62	0.00
R-sq	0.20			0.58			0.10		
Adj R-sq	0.18			0.44			0.09		
F-stat	15.03			3.92			11.40		
p-value	0.00			0.00			0.00		
D-W stat	2.23			2.13			1.93		
Hausmann	8.13								
p-value	0.04								

Table 4 shows the result of regression of model 1 in which the DVP is regressed against agency cost variables as regressands.. The results shows that the dependent variable DVP has positive relationship with agency cost variables. LSM is positively related to DVP using PLS, FEM and REM regression technique the coefficient are 0.1785, 0.0166 and 0.1239 respectively, with (t-statistics= 1.13, 1.769 and 1.9779) and p-values = 0.2594, 0.0785 and 0.0488). However LSM does not pass the test of significance at 5% level. INSID is also positively to DVP from the three techniques. The PLS, FEM and REM shows the (t-statistics = 0.864, 0.9535 and 1.129) with p-values = 0.388, 0.3416 and 0.2595) indicating that the coefficients are not significant at 5 per cent. EXEPAY under the three techniques is positively related to DVP. The PLS, FEM and REM shows (t-statistics=5.59, 4.72 and 5.62) with (p-values=0.000, 0.000 and 0.000) indicating that EXEPAY is significantly related to DVP even at a stringent 1 per cent. The Adjusted R-square are 0.183, 0.435 and 0.091 respectively, suggesting that about 18%, 43.5% and 9% respectively of the changes in DVP are explained by the regressands. The f-statistics are 15.02, 3.92 and 11.4 using PLS, FEM and REM respectively, with p-values=0.00, 0.00 and 0.00 under each technique, suggesting that the model significantly explains variations in DVP.

Table 5 Model 2

Variable	PANEL			FEM			REM		
	Coeff	t- valu e	p- valu e	Coeff	t- valu e	p- valu e	Coeff	t- valu e	p- valu e
c	10.020	0.89 2	0.37 3	18.883	1.55 5	0.12 1	13.077	0.87 7	0.38 1
LSM	0.098	0.66 0	0.51 0	0.057	0.58 8	0.55 7	0.065	1.47 9	0.14 0
INSID	0.130	0.85 2	0.39 5	0.208	1.87 1	0.06 3	0.151	1.10 4	0.27 0
EXEPAY	0.000	5.05 5	0.00 0	0.000	5.89 6	0.00 0	0.000	3.92 4	0.00 0
GROWTH	-0.036	- 0.36 7	0.71 4	-0.002	0.04 7	0.96 3	-0.015	0.21 8	0.82 8
LEV	0.071	0.58 5	0.55 9	-0.039	0.38 4	0.70 2	0.000	3.92 4	0.00 0
FCF	0.824	2.63 7	0.00 9	0.038	0.05 4	0.95 7	0.765	1.28 6	0.19 9
PROF	0.018	0.42 1	0.67 4	0.007	1.96 5	0.05 1	0.017	1.64 9	0.10 0
R-sq	0.174			0.507			0.113		
Adj R-sq	0.152			0.368			0.093		
F-stat	7.980			3.642			5.592		
p-value	0.000			0.000			0.000		
D-W stat	2.143			2.339			1.936		
Hausman n				16.488					
p-value				0.021					

Table 5 shows the result of regression model 2. the coefficients of the explanatory variables is determined using the three techniques of Panel least square (PLS), Fixed Effect Model (FEM) and Random Effect Model (REM) in the presence of the control variables of leverage (LEV), GROWTH, Free Cash flow (FCF) and Profitability (PROF). The coefficients of LSM show (t-statistic=0.66, 0.59 and 1.47) respectively and (p-values= 0.51, 0.56 and 0.14), again revealing the lack of significance at five per cent. INSID coefficients have (t-statistics=0.85, 1.87 and 1.10) and p-values=0.39, 0.06 and 0.27) revealing that the relationship with DVP is not significant at 5 per cent. However EXEPAY shows significant relationship with DVP as indicated by the t-statistics=5.05, 5.89 and 3.92 with corresponding p-values=0.00, 0.00 and 0.00 respectively. Showing that EXEPAY is

significantly related even at 1 per cent. With respect to the control variables however, we find that all are positively related to DVP except GROWTH that is negatively related DVP. However non of the control variables is significantly related to DVP. The Adjusted R-square are 0.17, 0.507 and 0.11 respectively, which are marginally higher than those of model 1. The f-statistics are 7.97, 3.64 and 5.59 with p-values of 0.00, 0.00 and 0.0004 showing the joint significance of the explanatory variables in the model.

Table 6 : MODEL 3

Variable	PLS			FEM			REM		
	Coeff	t-stat	Prob	Coeff	t-stat	Prob	Coeff	t-stat	Prob
C	29.77	3.06	0.00	33.692	3.755	0.000	29.250	3.998	0.000
LSM*FCF	0.00	0.49	0.63	-0.006	0.589	0.556	0.008	1.094	0.275
LSM*LEV	0.00	-0.26	0.79	-0.002	0.620	0.536	-0.002	0.775	0.439
LSM*GROWTH	-0.01	-2.42	0.02	-0.002	0.620	0.536	-0.004	2.051	0.041
LSM*PROF	0.003	0.798	0.426	0.005	1.202	0.231	0.004	1.318	0.189
INSID*FCF	0.056	2.845	0.005	0.095	4.200	0.000	0.053	3.351	0.001
INSID*LEV	0.007	1.736	0.084	-0.013	2.976	0.003	-0.008	2.192	0.029
INSID*GROWTH	0.008	1.179	0.240	0.008	1.129	0.260	0.008	1.359	0.175
INSID*PROF	0.001	0.151	0.880	0.008	1.129	0.260	0.000	0.041	0.967
EXEPAY*FCF	0.000	1.055	0.293	0.000	1.027	0.306	0.000	1.067	0.287
EXEPAY*LEV	0.000	4.608	0.000	0.000	3.922	0.000	0.000	4.778	0.000
EXEPAY*GROWTH	0.000	0.977	0.330	0.000	0.822	0.412	0.000	1.035	0.302
EXEPAY*PROF	0.000	0.891	0.374	0.000	0.132	0.895	0.000	1.045	0.297
R-squared	0.248			0.629			0.169		
Adj R-squared	0.207			0.470			0.136		
F-statistic	6.019			3.959			5.109		
Prob(F-statistic)	0.000			0.000			0.000		
D-W stat	2.190			2.220					
Hausmann Prob				13.495					
				0.000					

Table 6 presents the result of regression of model 3 which is an interaction of the agency cost variables with the control variables, in order to ascertain the effect of agency cost variables acting in concert with control variables. The result of the regression are presented in table 4.7 below.

The table shows that LSM interacting with each control variables. LSM*FCF has t-stat of 0.49, -0.59 and 1.09 using PLS, FEM and REM regression techniques respectively, with p-values of 0.63, 0.56 and 0.27, which suggest that the relationship with DVP lacks significance at 5 per cent. LSM*LEV shows t-statistics=-0.26,-0.62 and -0,78 with p-values=0.79, 0,54 and 0.44, clearly pointing to the lack of significance of this variable. LSM*GROWTH shows some level of significance at 5 per cent level as its t-statistics=-2.42, -1.29 and -2.05 have p-values of 0.02, 0.19 and 0.04, with respect to the panel least square and Random effect model. LSM*PROF fail test of significance at 5 per cent with t-statistics= 0.79, 1.20 and 1.32 with associated p-values of 0.43, 0.23 and 0.19 respectively.

Insider ownership (INSID) interacting with control variables reveals a mixed result. INSID*FCF has t-statistics=2.84, 4.19 and 3.35 with p-values=0.005, 0 and 0.0009, suggesting that interaction of insider ownership and free cash flow is positively significantly related to DVP. INSID*LEV shows t-statistics=-1.73, -2.97 and -2.19 with p-values=0.09, 0.003 and 0.03, indicating some level of significance with the dynamic models of FEM and REM even at stringent 1 per cent level. With respect to the interaction of INSID*GROWTH, t-statistics=1.17, 1.13 and 1.36 with p-values=0.23, 0.26 and 0.18, suggesting the lack of significance at 5 per cent level. The same result is obtainable for INSID*PROF with t-statistics=0.15, -0.39 and 0.04 with associated p-values of 0.87, 0.69 and 0.96 respectively pointing to the lack of significance at 5 per cent. EXEPAY*FCF shows negative relationship with DVP under the FEM and REM technique with t-statistics=-1.05, -1.02 and -1.06 and p-values of 0.29, 0.31 and 0.29 which fails the test of significance at 5 per cent. EXEPAY*LEV is positively related to DVP with t-statistics=4.61, 3.92 and 4.78 with associated p-values of 0.000, 0.0001 and 0.000, which shows strong relationship with DVP and pass the test of significance at even 1 per cent on all three techniques EXEPAY*GROWTH shows positive relationship with DVP but not significant at 5 per cent. The t-statistics=0.98, 0.82 and 1.03 with associated p-values of 0.33, 0.41 and 0.30 support the lack of significance. EXEPAY*PROF under the dynamic models is negatively related to DVP but not significant at 5 per cent. The t-statistics=-0.89, -0.13 and -1.04 with p-values of 0.37, 0.89 and 0.29 clearly indicating the lack of significance.

Conclusions

The study investigates the effect of agency cost factors on the dividend policy of listed firms in Nigeria. The study covered a period of five years, 2010 to 2014, with a coverage of sixty-six listed firms, giving us a three hundred and fifteen firm-years observation. The study is motivated by lack of extant studies in the area of dividend policy that focus on agency cost. The major finding of this study is that agency cost has significant effect on dividend policy of listed firms in Nigeria. The study also finds that large shareholder monitoring do not significantly determine dividend policy. With respect to insider ownership we document evidence that it is not a significant determinant of dividend policy. However executive compensation is found to a positively significant effect on dividend policy. The significance of the relationship derives from the fact that for management to meets its own interest, it must of necessity address the interest of the shareholders.

The result of the study has implication not only for investors but also for management. The fortunes of the management is inexorably tied to that of shareholders. The symbiotic relationship between management and shareholders is established by the significance of Executive compensation in relationship with dividend policy. For investors who seek dividend,

must focus on the how management is compensated, as such management are desirous of satisfying shareholders in order to prevent scrutiny of its own compensation. For management pursuing a dividend policy that is short changes shareholders at the expense of management is likely to trigger shareholders disaffection. Management in fixing its compensation must also address the need of shareholders for dividends.

References

- Adaoglu, C. (2000). Instability in the dividend policy of the Istanbul Stock Exchange (ISE) Corporations: Evidence from an emerging market. *Emerging Markets Review*, 1(3), 252-270.
- Aharony, J., & Swary, I. (1980). Quarterly dividend and earnings announcements and stockholders' returns: An empirical analysis. *Journal of Finance*, 35(2), 23-28.
- Ahmed, H., & Javid, A. Y. (2009a). Dynamics and determinants of dividend policy in Pakistan: Evidence from Karachi stock exchange non-financial listed firms. Retrieved from <http://www.amcm.gov.mo> on 17th June, 2014.
- Ahmed, H., & Javid, A. Y. (2009b). The determinants of dividend policy in Pakistan. *International Research Journal of Finance and Economics*, 4(2), 19. Retrieved from www.eurojournals.com/finance on 17th June, 2014.
- Ahmed, H., & Javid, A. Y. (2009). Determinants of dividend policy in Pakistan. *International Research Journal of Finance and Economics*, 3(29), 110-125.
- Akpotaire, U. B. (2011). Agency cost problems in executive compensation: An evaluation of dividend equivalent rights on restricted stocks. Retrieved from <http://ssrn.com/abstract=1948105> on 5th May, 2014.
- Al-Kuwari, D. (2009). Determinants of the dividend policy in Emerging Stock Exchanges: The Case of GCC Countries. *Global Economy & Finance Journal*, 2(2), 38-63.
- Al-Malkawi, H. (2007). Determinants of Corporate dividend policy in Jordan: An application of the Tobit Model. *Journal of Economic & Administrative Sciences*, 23(2), 44-70.
- Al-Najjar, B., & Hussainey, K. (2009). The Association between dividend payout and outside directorships. *Journal of Applied Accounting Research*, 10, (1), 4-19.
- Amidu, M., & Abor, J. (2006). Determinants of dividend payout ratios in Ghana. *Journal of Risk Finance*, 7(3), 136-145.
- Ang, J., Cole, R., & Lin, J. (2000). Agency costs and ownership structure. *Journal of Finance*, 55(1), 81-106.
- Asquith, P., & Mullins, J. D. W. (1983). The impact of initiating dividend payments on shareholders' wealth. *Journal of Business*, 56(1), 77-96.
- Azhagaiah, R., & Sabari, P. N. (2008). The impact of dividend policy on shareholders' wealth. *International Journal of Finance and Economics*, 20(3), 24-29. Retrieved from www.eurojournals.com/finance on 12th June, 2014.
- Bajaj, M., Vijh, A. M., & Westerfield, R. W. (2002). Ownership structure, agency costs and dividend policy. *Research in Finance*, 19(2), 1-28.
- Baker, K. H., & Wurgler, J. (2004). A catering theory of dividends. *Journal of Finance*, 59(3), 1125-1165.
- Bell, L., & Jenkinson, T. (2002). New evidence of the impact of dividend taxation on the identity of the marginal investor. *Journal of Finance*, 57 (3), 1321-1346.

- Bhattacharya, S. (1979). Imperfect information, dividend policy and the bird-in-hand fallacy. *Bell Journal of Economics*, 10(2), 259-327.
- Bradley, M., Jarell, G., & Kim, E. H. (1984). On the existence of an optimal capital structure: Theory and evidence. *Journal of Finance*, 39(5), 857-78.
- Brockman, P., & Unlu, E. (2009). Dividend policy, creditor rights and the agency costs of debt. *Journal of Financial Economics*, 92(4), 276-299.
- Carlson, R. L., & Vogel, T. J. (2006). Restricted stock versus stock options: The case of Jones Apparel Group, Incorporated. *Issues in Accounting Education*, 21(4), 32-35.
- Chen, J., & Dhiansiri, N. (2009). Determinants of dividend policy: The evidence from New Zealand. *International Research Journal of Finance and Economics*, 41(34), 18-28.
- Claessens, S., Djankov, S., & Lang, L. (2000). The separation of ownership and control in East Asian Corporations. *Journal of Financial Economics*, 58(4), 81-112
- Da Silva, C.L., Goergen, M., & Renneboog, L. (2004). *Dividend policy and corporate governance*. Oxford, UK: Oxford University Press.
- DeAngelo, Harry, DeAngelo, L., René, M., & Stulz. (2004). *Dividend policy, agency costs, and earned equity* (Financial Economics Working Paper, No.10). Insert name of city, Country: publisher.
- Dempsey, S. J., & Laber, G. (1992). Effects of agency and transaction costs on dividend payout ratios: Further evidence of the agency-transaction cost hypothesis, *Journal of Financial Research* 15(3), 317-321.
- Demsetz, H., & Lehn, K. (1985). The structure of corporate ownership: Causes and consequences. *Journal of Political Economy*, 93(5), 1155-1177.
- Denis, D. J., & Osobov, I. (2008). Why do firms pay dividends? International evidence on the determinants of dividend policy. *Journal of Financial Economics* 89(19), 62-82. doi:10.1016/j.jfineco.2007.06.006.
- Easterbrook, F. H. (1984). Two agency-cost explanation of dividends. *American Economic Review*, 174(23), 92-98.
- Eriotis, N. (2005). The effect of distribution earnings and size of the Firm to its dividend policy. *International and Economics Journal* (incomplete).
- Fama, F. E., & French, K. R. (2001). Disappearing dividends: Changing Firm characteristics or lower propensity to Pay? *Journal of Financial Economics*, 60(12),3-43. doi:10.1016/S0304405X(01)000381.
- Fluck, Z. (1998). Optimal financial contracting: Debt versus outside equity. *Review of Financial Studies*, 11(4), 383-418.
- Frankfurter, G.M., & Wood, J.B.G. (2000). Dividend policy theories and their empirical tests. Retrieved from www.Internationalreviewoffinancialanalysis.org on 17th May, 2014.
- Gaver, J., & Gaver, K. (1993). Additional evidence on the association between the investment opportunity, set and corporate financing, dividend, and compensation policies. *Journal of Accounting and Economics*, 16(7), 125-160.
- Gesser, R., Halman, R., & Sarig, O. (2005). Measuring the agency costs of dispersed ownership: The case of repurchase initiation. Retrieved from <http://www.manuscript.sciknow.org> on 25th September, 2014.
- Gordon, M. J. (1963). Optimal investment and financing policy. *Journal of Finance*, 18(2), 264-272.

- Grossman, S., & Hart, O. (1980). David A. Currie and William Peters. ed. *Take-Over Bids: The Managerial Theory of the Firm and the Free Rider Problem*. London: Croom Helm. 461-468.
- Grimblatt, M., & Titman, S. (2003). *Financial markets and corporate strategy* (2nd ed.). New Delhi, India: Tata McGraw-Hill.
- Grinstein, Y., & Michaely, R. (2005). Institutional holdings and payout policy. *Journal of Finance*, 60(5), 1389-1426.
- Gugler, K. (2003). Corporate governance, dividend payout policy, and the interrelation between dividends, R & D, and capital investment. *Journal of Banking & Finance*, 27(7), 1297-1321.
- Han, K. C., Suk, H. L., & David, Y. S. (1999). Institutional shareholders and dividends. *Journal of Financial & Strategic Decision*, 12(3), 53-62.
- Hansen, R. S., Kumar, R., & Shome, D. K. (1994). Dividend policy and corporate monitoring: Evidence from the regulated electric utility industry, *Financial Management*, 23(1), 16-22.
- Haque, M. S. (1999). The fate of sustainable development under neo-liberal regimes in developing Countries. *International Political Science Review*, 20(2), 197-218.
- Healy, P. M., & Papepu, K. G. (1988). Earnings information conveyed by dividend initiations and omissions. *Journal of Financial Economics*, 21(2), 149-175.
- Holder, M. E., Langrehr, F. W., & Hexter, J. L. (1998). Dividend policy determinants: An investigation of the influences of stakeholder theory. *Financial Management*, 27(3), 73-82.
- Israel, G. D. (1992). Sampling the evidence of extension program impact. Program evaluation and organizational development, IFAS, University of Florida. PEOD-5. October. Retrieved from <https://edis.ifas.ufl.edu/pd006> on 25th September, 2014.
- Jensen, G. R., Solberg, D. P., & Zorn, T. S. (1992). Simultaneous determination of insider ownership, debt, and dividend policies. *Journal of Financial and Quantitative Analysis*, 27(2), 247-263.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(2), 305-360.
- Jensen, M. C. (1986). Agency costs of free cash flow, corporate finance and takeovers. *American Economic Review*, 76(2), 323-329.
- Johnson, K., & Williams, J. (1985). Dividends, dilution, taxes: A signaling equilibrium. *Journal of Finance*, 40(6), 44-47.
- Joshi, V., & Little, I. M. D. (1997). India – Reform on hold. *Asian Development Review*, 15(2), 1-42.
- Khan, T. (2006). Companies dividend and ownership structure: Evidence from UK panel data, *The Economic Journal* 116, C172-C189
- Kaleem, A., & Salahuddin, C. (2006). Impact of dividend announcement on common stock prices at Lahore Stock Exchange (Pakistan). *South Asian Journal of Management*, 13(2), 34-36.
- Kim, W. S., & Sorenson, E. H. (1986). Evidence on the impact of the agency costs of debt on corporate debt policy. *Journal of Financial and Quantitative Analysis*, 21(9), 131-144.
- Kindelberger, C. P. (1984). A financial history of west Europe. (insert name of the city), London: George Allen & Unwin.
- Kowalewski, O., Stetsyuk, I., & Talavera. (2007). *Corporate governance and dividend policy in Poland* (Working Paper year/insert number). Insert name of city, Country: German Institute for Economic Research.

- Kumar, J. (2009). Does corporate governance influence firm value? Evidence from Indian Firms. Retrieved from www.Academyofaccountingandfinancialstudiesjournal.org on 19th May, 2014.
- La Porta, R., Lopez-de Silanes, F., Shleifer, A., & Vishny, R. (2000). Agency problems and dividend policies around the world. *Journal of Finance*, 55(12), 1–33.
- LaPorta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. W. (2000). Agency problems and dividend policies around the World. *Journal of Finance* 55(12), 1-33. doi:10.1111/0022-1082.00199.
- Lasfer, M. A. (1995). Ex-day price behaviour: Tax or short-term trading effects. *Journal of Finance*, 50(13), 875-897.
- Lease, R.C., Kose, J., Avner, K., Uri, L., & Oded, H. (2000). *Dividend policy: It's Impact on firm value*. Massachusetts: Harvard Business School Press.
- Leland, H. E. (1998). Agency costs, risk management and capital structure. *Journal of Finance*, 53(4), 1213-1214.
- Lintner, J. (1956). Distribution of income of corporations among dividend, retained earnings, and taxes. *American Economic Review*, 46(17), 97-113.
- Lonie, A. A., Abeyratna, G., Power, D. M., & Sinclair, C. D. (1996). The stock market reaction to dividend announcements: A study of complex market signals. *Journal of Economic Studies*, 23(1), 32-52.
- Manos, R. (2002). *Dividend policy and agency theory: Evidence on Indian Firms* (Working Paper insert year/number). Manchester, London: University of Manchester, Institute for Development Policy.
- Marfo-Yiadom, E., & Agyei, S. K. (2011). Determinants of dividend policy of banks in Ghana. *International Research Journal of Finance and Economics*, 61(16), 120-127.
- McCluskey, T. (2006). *An empirical investigation of the dividend decision in Irish Companies* (Unpublished doctoral dissertation). University of Dundee, name of city, Ireland.
- Mello, A. S., & Parsons, J. E. (1992). Measuring the agency cost. *Journal of Finance*, 47(5), 1887-1904.
- Miller, M., & Modigliani, F. (1961). Dividend policy, growth and valuation of share. *Journal of Business*, 34,(4), 411-435.
- Miller, M. H., & Rock, K. (1985). Dividend policy under asymmetric information. *Journal of Finance*, 40(26), 19-24.
- Modigliani, F., & Miller, M. (1959). The cost of capital, corporation finance and theory of investment: A reply. *American Economic Review*, 49(24), 665-669.
- Moh'd, M. A., Perry, L. G., & Rimbey, J. N. (1995). An investigation of the dynamic relationship between agency theory and dividend policy. *The Financial Review*, 30(2), 367-385.
- Mollah, A. S. (2001). *Dividend policy and behaviour, and security price reaction to the announcement of dividends in an emerging market : A study of Companies listed on the Dhaka Stock Exchange* (Unpublished doctoral dissertation). University of Leeds, name of city, London.
- Myers, J. S. (2000). Outside equity. *Journal of Finance*, 55(34), 234-239.
- Myers, S., & Majluf, N. (1984). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economics*, 3(2), 187-221.

- Naceur, S., Goaid, M., & Belanes, A. (2006). On the determinants and dynamics of dividend policy. *International Review of Finance*, 6(2), 1- 23.
- Park, J. J. (2009). Shareholder compensation as dividend. *Michigan Law Review*, 108(98), 323-371. Retrieved from www.michiganlawreview.org on 17th July, 2014.
- Pergola, T., & Verreault, D. (2009). Motivations and potential monitoring effects of large shareholders. *International Journal of Business in Society*, 9(5), 551-563
- Pruitt, S. W., & Gitman, L. W. (1991). The interactions between the investment, financing, and dividend decisions of major US Firms. *Financial Review*, 26 (33), 409-430.
- Rao, R. K. S., & White, S. A. (1994). The dividend payouts of private firms: evidence from tax court decisions. *Journal of Financial Research*, 17(4), 449-464.
- Redding, L. (1997). Firm size and dividend payouts. *Journal of Financial Intermediation*, 6, (2), 224-248.
- Renneboog, L., & Trojanowski, G. (2007). Control structures and payout policy. *Managerial Finance*, 33(1), 43.
- Rozeff, M. S. (1982). Growth, beta and agency costs as determinants of dividend payout ratios. *Journal of Financial Research*, 5 (3), 249-259.
- Samuel, C. (1996). *The stock market as a source of finance: A comparison of US and Indian firms* (World Bank Policy Research Working Paper 1592). Washington D.C., U.S.A: The World Bank.
- Saxena, A. K. (1999). Determinants of dividend payout policy: Regulated Versus Unregulated Firms, Working Paper, (State University of West Georgia).
- Schwartz, S. H. (1994). Beyond individualism/collectivism: New cultural dimensions of values. Retrieved from www.michiganlawreview.org on 21st July, 2014.
- Shao, L. (2010). Two essays on cross-country differences in corporate dividend policies. Retrieved from www.proposals_Shao_fmcom2009 on 20th May, 2014.
- Shao, L., Kwok, C. C. Y., & Guedhami. (2008). Is national culture a missing piece of the dividend puzzle? Retrieved from www.michiganlawreview.org on 20th July, 2014.
- Short, H., Hao, Z., & Kevin K. (2002). The link between dividend policy and institutional ownership. *Journal of Corporate Finance*, 8(2), 105-122.
- Shleifer, A., & Vishny, R. (1997). A Survey of Corporate Governance. *Journal of Finance*, 52(5), 737-783.
- Shliefer, A., & Robert, V. (1986). Large shareholders and corporate control. *Journal of Political Economy*, 94(38), 461-488.
- Uddin, M. H. (2003). Effect of dividend announcement on shareholders' value: Evidence from Dhaka Stock Exchange, Global corporate governance forum (Sponsored by World Bank), 13-16 December, Hyderabad, (INDIA).

Appendices

Table 3: Correlation Matrix

	DVP	LSM	FCF	LEV	GROWTH	PROF	FSIZE	INSID	EXEPAY
DVP	1								
LSM	0.04	1							
FCF	0.22	0.14	1						
LEV	-0.03	0.09	-	1					
GROWTH	0.02	-0.05	0.01	0.06	1				
PROF	0.09	0.18	0.11	-0.09	0.24	1			
FSIZE	0.26	0.1	-	0.17	0.12	0.12	1		
INSID	0.05	-0.13	0.04	-0.03	-0.03	-0.03	-0.13	1	
EXEPAY	0.25	-0.04	0.04	0.04	0.11	0.1	0.53	0.04	1

Table 4 : Model 1

Variable	PANEL			FEM			REM		
	Coeff	t-value	p-value	Coeff	t-value	p-value	Coeff	t-value	p-value
c	14.24	1.13	0.26	21.11	1.77	0.08	18.33	1.98	0.05
LSM	0.18	0.89	0.37	0.02	0.08	0.94	0.12	0.84	0.40
INSID	0.17	0.86	0.39	0.19	0.95	0.34	0.17	1.13	0.26
EXEPAY	0.00	5.59	0.00	0.00	5.59	0.00	0.00	5.62	0.00
R-sq	0.20			0.58			0.10		
Adj R-sq	0.18			0.44			0.09		
F-stat	15.03			3.92			11.40		
p-value	0.00			0.00			0.00		
D-W stat	2.23			2.13			1.93		
Hausmann	8.13								
p-value	0.04								

Table 5 Model 2

Variable	PANEL			FEM			REM		
	Coeff	t-value	p-value	Coeff	t-value	p-value	Coeff	t-value	p-value

c	10.020	0.89 2	0.37 3	18.883	1.55 5	0.12 1	13.077	0.87 7	0.38 1
LSM	0.098	0.66 0	0.51 0	0.057	0.58 8	0.55 7	0.065	1.47 9	0.14 0
INSID	0.130	0.85 2	0.39 5	0.208	1.87 1	0.06 3	0.151	1.10 4	0.27 0
EXEPAY	0.000	5.05 5	0.00 0	0.000	5.89 6	0.00 0	0.000	3.92 4	0.00 0
GROWTH	-0.036	- 0.36 7	0.71 4	-0.002	0.04 7	0.96 3	-0.015	0.21 8	0.82 8
LEV	0.071	0.58 5	0.55 9	-0.039	0.38 4	0.70 2	0.000	3.92 4	0.00 0
FCF	0.824	2.63 7	0.00 9	0.038	0.05 4	0.95 7	0.765	1.28 6	0.19 9
PROF	0.018	0.42 1	0.67 4	0.007	1.96 5	0.05 1	0.017	1.64 9	0.10 0
R-sq	0.174			0.507			0.113		
Adj R-sq	0.152			0.368			0.093		
F-stat	7.980			3.642			5.592		
p-value	0.000			0.000			0.000		
D-W stat	2.143			2.339			1.936		
Hausman									
n				16.488					
p-value				0.021					