# AN EXAMINATION OF THE EFFECTS OF OWNERSHIP STRUCTURE AND FINANCIAL LEVERAGE ON THE DIVIDEND POLICIES OF LISTED FIRMS IN NIGERIA

# Uwalomwa Uwuigbe

Covenant University
E-mail: uwalomwa.uwuigbe@covenantuniversity.edu.ng
KM. 10 Idiroko Road, Canaan Land, Ota, Ogun State, Nigeria

#### **ABSTRACT**

In an attempt to provide a developing economy perspective to the corporate dividend puzzle, this study basically examined the effects of ownership structure and financial leverage on the dividend payouts of firms operating in Nigeria. Using the judgmental sampling technique, a sample of 50 selected listed firms from the Nigerian Stock Exchange Market where analyzed using the annual reports for the period 2006 to 2010. The choice of the selected firms' arises based on the capital structure and the availability of data for the listed firms. The regression analysis method was employed as a statistical technique for analyzing the data collected from the annual report of the selected firms. Findings from the paper revealed that there is a significant positive relationship between ownership structure and the dividend payout of the sampled firms in Nigeria. In addition, the paper revealed that there is a significant negative relationship between financial leverages and the dividend payout of firms. Thus the paper concludes that while the ownership structure of firms in terms of equity interest appear to have a visible and significant effect on dividend payout of firms, on the other hand, the financial leverage have a very significant negative impact on firms corporate dividend payout policies.

**Key words:** Dividend Policy, Financial Leverage, Dividend Payouts, Nigerian NSE, Corporate Policy.

# PENGUJIAN PENGARUH STRUKTUR KEPEMILIKAN DAN FINANCIAL LEVERAGE TERHADAP KEBIJAKAN DIVIDEN PERUSAHAAN TERDAFTAR DI NIGERIA

# **ABSTRAK**

Dalam usahanya untuk memberikan perspektif ekonomi yang berkembang kepada masalah dividen perusahaan, penelitian ini secara mendasar meneliti pengaruh struktur kepemilikan dan financial leverage pada dividend pay outs perusahaan yang beroperasi di Nigeria. Teknik judgments sampling digunakan untuk menentukan sampel sebanyak 50 perusahaan yang diseleksi dan terdaftar pasar saham di Nigeria. Laporan tahunan perusahaan periode 2006 sampai 2010 dianalisis. Pemilihan perusahaan tersebut berdasarkan pada struktur modal dan ketersediaan data. Analisis regresi digunakan untuk menganalisis laporan tahunan. Ditemukan terdapat hubungan signifikan dan positif antara struktur kepemilikan saham dan dividend payouts perusahaan di Nigeria. Di samping itu, ditemukan juga bahwa terdapat hubungan singifikan dan negatif antara financial leverage dan dividend payout. Disimpulkan bahwa struktur kepemilikan saham yaitu equity interest berpengaruh signifikan pada dividend payouts, sementara financial leverage berpengaruh signifikan dan negatif pada kebijakan dividend payouts perusahaan.

Kata Kunci: Dividend Policy, Financial Leverage, Dividend Payouts, Nigerian NSE, Corporate Policy.

#### INTRODUCTION

Dividend policy is one of the most captivating themes in financial research. It has remained one of the fundamental components of corporate policy, and the most controversial topics in corporate finance literature (Alii, Khan and Ramirez 1993). Besides that, the dividend policy of a firm is a complex and crucial issue in corporate finance. Although investors generally agree on some key determinants of dividend policy of firms, the effect of dividend policy on firm performance is largely contended. Dividend policy is one of the most important financial policies, not only from the viewpoint of the company but also from that of the shareholders, the consumers, the workers, regulatory bodies and the government. For a company, it is a pivotal policy around which other financial policies rotate (Alii, Khan and Ramirez 1993). Dividend or profit allocation decision is one of the four decision areas in finance. According to Ross, Westerfield and Jaffe (2002) companies view dividend decision as quite important because it determines what funds flow to investors and what funds are retained by the firm for investment. More so, it provides information to stakeholders on issues relating to a company's financial performance.

More than a half century, financial economists and experts have been occupied in examining corporate dividend policy. According to Black (1976: 5), the harder we look at the dividend picture, the more it seems like a puzzle, with pieces that do not fit together. At present, academic researchers have provided considerable attention and thoughts to solving the dividend puzzle, resulting in a large number of conflicting hypotheses, theories and explanations (Afza 2010). Academic researchers in this area of corporate finance have mainly focused on developed markets; however, additional insight into the dividend policy debate can be gained by an examination of developing countries, which is currently to the best of the researcher's knowledge is lacking in the literature. This paper to this end attempts to

examine the effect of ownership structure and financial leverage on firms' dividend payouts.

To gain more insight into this paper, the paper has been organized as follows. Section 2 presents an in-depth literature review on ownership structure and dividend policy and the hypotheses development. Section 3 discusses the research methodology adopted for the study. While section 4 focused on the findings of the study, section 5 discusses the conclusion.

# THEORETICAL FRAMEWORK AND HYPOTHESIS

The Agency theory according to Ramli (2010:171) suggests that large shareholders' ownership may either alleviate or exacerbate agency conflicts. A high level of managerial ownership could minimize agency problems, as managers have to bear a portion of the losses arising from their divergent behaviour (Jensen and Meckling 1976; Morck et al. 1988). The agency theory also suggests that dividends can be used as a corporate governance instrument to mitigate agency concerns. In a pioneering effort, Black (1976) finds no convincing explanation of why companies pay cash dividends to their shareholders. Dividends according to Ramli (2010) can also minimize agency conflicts by subjecting companies to the scrutiny of capital market monitoring. It can also play a significant role in controlling possible agency conflicts between large shareholders and minority shareholders. By paying dividends, a pro-rata distribution can be guaranteed to all shareholders and limit corporate wealth from large shareholders' control (Easterbrook 1984).

# **Ownership and Payout Policy**

Dividend is considered as an unresolved issue in the field of corporate finance. Many justifications have been presented in this regard. According to Afza and Hassan (2011), existing literature on the determinants of dividend policy has its roots in the seminal paper of Lintner (1956) and Miller

and Modigliani (1961). Lintner (1956) establish that changes in earnings and existing dividend rates are the most significant determinants of a company's dividend decision. Miller and Modigliani (1961) presented the irrelevance proposition and proved that in an ideal capital market, firm's dividend decision is not a thing of value. Concerning determinants of dividend policy, many researchers have analyzed the impact of firm performance on dividend payouts but the evidence on the impact of ownership structure on the dividend payout of firms is very limited especially in a developing economy like Nigeria.

Rozeff (1982) using a sample of 1000 US firms, argued that in the presence of inside equity holders, the need to pay high dividend is decreased. He considered average payout ratio for a period of seven years (1974-1980) as a dependent variable. The results showed a negative relationship between inside shareholders and dividend payout, while a positive relationship between dispersed shareholding and dividend payout.

Han et al. (1999) looked at the relationship between institutional ownership and dividend payouts. Using the Tobit analysis they found positive relationship between institutional ownership and corporate dividend policy. Their result established the fact that dividends are positively related to institutional ownership, thus supporting the taxbased hypothesis that institutional shareholders prefer dividends over capital. More so, Khan (2006) in a related study investigated the ownership structure of 330 large listed UK firms. Based on the estimated results she reported that ownership concentration has a negative impact on firm's dividend paying ability. She further analyzed ownership compositions and reported that ownership by insurance companies is positively and individual ownership is negatively related with dividend policy.

Jensen et al. (1992) examined interdependence between the determinants of the three policy choices, level of inside ownership, leverage and dividend levels, by apply-

ing three stage least squares (3SLS). A cross-sectional firm data was analyzed at two points in time, 565 firms for 1982 and 632 firms for 1987. The results proved insider ownership as an important determinant of a firm's dividend policy and debt. Investment and growth were related negatively to dividend, while profitability was found positively associated with dividend

Bathala and Rao (1995) used OLS to examine the interrelation between board composition and debt, managerial ownership, and dividend payout for a sample of 261 firms. The findings showed a negative relationship between outside board directors and inside ownership, dividend and debt leverage. The results described that outside directors on the board provided important monitoring function to control agency conflicts.

However, Mondher and Moncef (2009) while studying Tunisian companies found that dividend payment is very much linked and affected by highly concentrated ownership. Similarly, Sharif et al. (2010) in a related study examined the impact of shareholder ownership on payout ratio for a panel of 41 listed companies on Tehran stock exchange for the period 2002-2008. The results found a significant positive relationship between ownership concentration, institutional shareholding and payout ratio. A negative association was also found between the individual shareholders and payout ratio.

Kumar (2006) analyzed a panel of Indian firms over the period of 1994-2000 to test the relationship between corporate governance, ownership structure and dividend payout. The results revealed that ownership by corporations and directors was positively related with dividend but the squared corporate ownership was negatively related. Similarly, Syed and Wasim (2011) in a study of taken from the companies listed at Karachi Stock Exchange (KSE) observed that a positive relationship exists between ownership structures and dividend payout policy of listed firms in Karachi.

Nevertheless, while several prior empirical studies from developed economies

			-				
	N	Minimum	Maximum	Mean	Std. Dev.	Skewness	Kurtosis
DPO	50	.0000	.9950	.4315	.3156	.3800	-1.2800
OS	50	.0010	.9810	.1495	.2858	2.3930	4.0930
LEV	50	.0013	6.6806	.9213	1.6943	2.0160	3.1160
Valid N	50						

Table 1
Descriptive Statistics

Table 2
Pearson Correlations for Selected Firms in Nigeria

		DPO	OS	LEV
DPO	Pearson Correlation	1		
	Sig. (2-tailed)			
	N	50		
os	Pearson Correlation	.597**	1	
	Sig. (2-tailed)	.000		
	N	50	50	
LEV	Pearson Correlation	407**	.253**	1
	Sig. (2-tailed)	.003	.076	
	N	50	50	50

<sup>\*\*</sup> Correlation is significant at the 0.01 level (2-tailed).

have shed light on the relationship between ownership structure and dividend payout of firms, the same is not true in developing economies like Nigeria. This study therefore tends to fill this gap in literature by examining the relationship between the ownership structure of firms' and the dividend payout of listed firms in Nigeria.

# **Development of Hypotheses**

The hypotheses to be tested in this study are stated below in their null forms:

H0: There is no significant relationship between the ownership structure of firms' and the dividend payout of listed firms in Nigeria. H0: There is no significant relationship between firms' financial leverage and the dividend payout of listed firms in Nigeria.

#### RESEARCH METHOD

To achieve the objectives of this study, the annual reports for the period 2006-2010 were analyzed. However, using the judgmental sampling technique; a total of 50 listed firms operating in high profile industries in the Nigerian Stock Exchange were

selected. This represents 20.5% of the total population. This is consistent with the propositions of Krejcie & Morgan (1970) where a minimum of 5% of a defined population is considered as an appropriate sample size in making generalization. The choice of the sampled firms was based on the frequency in which dividends are paid to shareholders. In addition, these firms were selected based on the availability of ownership structure data for the period under consideration. Nevertheless, in analyzing the research hypothesis, the ordinary least square (OLS) was used in the estimation of the regression equation under consideration.

## **Model Specification**

The following model is used to examine the association between independent and the dependent variables of the listed firms in Nigeria.

$$DPO it = f(OS_{it}, Leverage_{it}, e_{it}).$$
 (1)

This can be written in explicit form as:

$$DPO_{it} = \beta_{0} + \beta_{1}OS_{it} + \beta_{2}LEV_{it} + e_{it}.$$
 (2)

#### Where:

 $DPO_{it}$  = Dividend Payout ratio is measured

Table 3
<b>Model Summary</b>

		<sub>n</sub> R	Adjusted Std. Error		<b>Change Statistics</b>				
Model	R	Square	R	of the	R Square	F change	df1	df2	Sig F Change
			Square	<b>Estimate</b>	Change	change			Change
1	.653 <sup>a</sup>	.426	.402	.244	.426	17.469	2	47	.000

a. Predictors: (Constant), LEV, OS.

Table 4 ANOVA<sup>b</sup>

	Model	Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	2.081	2	1.040	17.469	$.000^{a}$
	Residual	2.799	47	.060		
	Total	4.879	49			

a. Predictors: (Constant), LEV, OS.

b. Dependent Variable: DPO.

as the dividend per equity share divided by earnings per share

OS<sub>it</sub> = Ownership structure has been calculated by the percentage of shares held by board of directors divided by total numbers of shares

 $Lev_{it}$  = Financial leverage as a proxy is defined as a firms total debt divided by its total Equity.

*e* = Stochastic or disturbance term.

t = Time dimension of the Variables

 $\beta_0$  = Constant or Intercept.

### DATA ANALYSIS AND DISCUSSION

Results from our descriptive statistics as presented in Table 1 present a mean dividend payout of about 0.4315 for the firms under consideration. This represents an averaged percentage distribution of about 43% for the period 2006-2010. On the other hand; the descriptive statistics results on ownership structure and firms financial leverage as depicted in Table 1 indicates an averaged mean distribution value of about 0.1495 and 0.9213 respectively for the sampled listed firms in the Nigerian Stock Exchange market. Nevertheless, a review of empirical findings from the Pearson Correlation analysis on the relationship between ownership structure and firms dividend payouts shows that there is a positive correlation between the ownership structure of firms and the dividend payout of listed firms in Nigeria, and it is significant at 1% probability level with a correlation coefficient (r) of 0.597. In addition, the Pearson correlation analysis result further shows that there is a negative correlation between financial leverage and the dividend payout of listed firms in Nigeria and it is also significant at 1% probability level with a correlation coefficient (r) of about - 0.407 (see Table 2).

Furthermore, the test for multicollinearity was carried out before analyzing the regression model. According to Field (2000), this test is necessary because multicollinearity can affect the parameters of a regression model. Adeyemi and Fagbemi (2010) suggested that a tolerance value less than 0.1 indicates a serious multi-colinearity problem between the independent variables. Nevertheless, since all values are more than 0.10, there is no issue of multi-colinearity between the independent variables. Also, Myers (1990) suggested that a variance inflation factor (VIF) value greater than 10 calls for concern, however, for this study, the VIF values are less than 10.

In addition, findings from the regression analysis result for the selected firms as depicted in Table 3 indicates that from the model, the R<sup>2</sup> which is often referred to as the coefficient of determination of the variables was .426. The R-Squared which is also a measure of the overall fitness of the model indicates that the model is capable of explain-

				Cocincients				
	Model	Unstandardized Coefficients		Std. Coefficients	t	Sig.	Collinearity Statistics	
	-	В	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.391	.046		8.501	.000		
	OS	.583	.126	.528	4.622	.000	.936	1.069
	LEV	051	.021	273	-2.392	.021	.936	1.069

Table 5 Coefficients<sup>b</sup>

a. Dependent Variable: DPO.

Table 6 Variance Inflation Factor

Variables	VIF	1/VIF
LEV	1.07	0.936
OS	1.07	0.936
Mean VIF	1.07	

ing about 43% of the variability of firms' dividend payout. This means that the model explains about 43% of the systematic variation in the dependent variable. That is, about 54% of the variations in dividend payout policies of the sampled firms are accounted for by other factors not captured by the model. This result is complimented by the adjusted R<sup>2</sup> (adjusted R-squared) of about 40%, which is in essence the proportion of total variance that is explained by the model. Similarly, findings from the Fishers ratio (i.e. the F-Statistics which is a proof of the validity of the estimated model) as reflected in Table 4, presents a p-value that is less than 0.05 (p-value < 0.05); this invariably suggests clearly that simultaneously the explanatory variable (i.e. ownership structure and financial leverage) are significantly associated with the dependent variable (dividend payout).

Similarly, consistent with our apriori expectations (i.e.  $\beta_1 > 0$ ), further empirical findings provided in Table 5 shows that there is a significant positive relationship between ownership structure and the dividend payout of the sampled firms in Nigeria. This is evident in the t-statistics value of (4.622 and a p-value = .000). This outcome basically implies that the companies where more owners are present on the board pay more dividends as far as Nigeria corporate culture is concerned. That is, companies where more owners are

sitting in the board, they tend to take care for the dividends. More so, cash dividend level is higher where the owners' presence in the board of directors is higher. This outcome in a nutshell points to the fact that the ownership structure of firms appears to have a visible and significant effect on the dividend payout of firms. This outcome however supports the earlier work of Kouki and Guizani (2009), Gugler and Yurtoglu (2003), Kouki and Guizani (2006), Holder et al. (1998) where ownership structure was found to have a significant positive impact on the dividend policies of firms.

On the other hand, consistent with our apriority expectations (i.e.  $\beta_2 < 0$ ), empirical findings from the regression analysis on the second hypothesis indicates clearly that a significant negative relationship does exist between financial leverage and the dividend payout policies of the sampled firms in Nigeria. This is evident in the t-statistics value of (-2.392 and a p-value = .021). This result basically implies that the financial leverage of a firm has a negative impact on the dividend payout of firms. This basically indicates less dividend payments by highly indebted firms. That is, firms with high financial leverage tend to pay lower dividend to avoid the higher cost of raising external capital for the company. In essence, highly

levered firms look forward to maintaining their internal cash flow to fulfill duties, instead of distributing available cash to shareholders and protect their creditors. This result nevertheless, corroborates the work of Faccio et al. (2001), Gugler and Yurtoglu (2003), Al-Malkawi (2007) where they observed that the level of financial leverage negatively affects firm's dividend policy.

# CONCLUSION, IMPLICATION, SUG-GESTION, AND LIMITATIONS

This study examined the relationship between the ownership structure and the dividend policies of listed firms operating in Nigeria. It also examined the relationship between financial leverage and the dividend policies of listed firms in Nigeria. The study came up with the following findings that are of salient importance to scholars investigating dividend issues in the Nigerian context. Firstly, the study observed that the ownership structure of firms has a significant impact on the dividend payout of listed firms in Nigeria. That is, companies where there are more shareholders are sitting in the board basically tries to influence their power in the decision making regarding dividend policy. This in the long run basically reduces the agency conflict and develops the trust of the outsiders and shareholder on the company.

Secondly, findings from the second hypothesis validate the propositions provided in (Rozeff 1982; Faccio et al. 2001; Gugler and Yurtoglu 2003; Al-Malkawi 2007) where they observed that the level of financial leverage negatively affects firm's dividend policy. More so, firms with high financial leverage tend to pay lower dividend to avoid the higher cost of raising external capital for the company. Consequently, the paper concludes that while the ownership structure of firms in terms of equity interest appear to have a visible and significant effect on dividend payout of firms, on the other hand, the financial leverage of a firm basically have a very significant negative impact on firms dividend payout policies.

This study is however limited by the fact

that the sample only covers five (5) years data from the Nigerian stock exchange market. Also, only one corporate governance variable was considered in the study. However, Future research could consider other corporate governance variables not considered in this study. In addition, could examine the effects of board characteristics and ownership identity on the dividend policy of firms in Nigeria.

#### **REFERENCES**

- Adeyemi, SB, and Fagbemi, TO 2010, 'Audit Quality, Corporate Governance and Firm Characteristics in Nigeria', *International Journal of Business and Management*, vol. 5, no. 5, pp. 169-179.
- Afza T, Hammad HM 2010, 'Impact of ownership structure and cash flows on dividend payout behavior in Pakistan', *Int. Bus. Res*, 3(3): 210-221.
- Afza, T and Hassan HM 2011, 'Institutional Shareholdings and Corporate Dividend Policy in Pakistan', *African Journal of Business Management*, Vol. 5 (22), pp. 8941-8951, DOI: 10.5897/AJBM11.564.
- Alii, KL, Khan, AQ, and Ramirez, GG 1993, 'Determinants of Corporate Dividend Policy: A Factorial Analysis', *Finan-cial Review*, Vol. 28, pp. 523-47.
- Al-Malkawi, HN 2007, 'Determinants of Corporate Dividend Policy in Jordan: An Application of the Tobit Model', *Journal of Economic & Administrative Sciences*, vol. 23, No. 2, pp. 44-70.
- Bathala, CT, and Rao, RP 1995, 'The Determinants of Board Composition: An Agency Theory Perspective', *Managerial and Decision Economics*, vol. 16, No. 1, pp. 59-69.
- Black, F 1976, 'The Dividend Puzzle', *Journal of Portfolio Management*, vol. 2 (2): pp. 5-8.
- Faccio, Maria, Larry PH Lang, and Leslie Young, 2001, 'Dividends and Expropriation', *American Economic Review*, vol. 91(1), 54-78.
- Easterbrook FH 1984, 'Two Agency-Cost Explanations of Dividends', *American*

- Economic Review, 74: 650-659.
- Field, A 2000, *Discovering statistics: Using SPSS for Windows*, London: Sage Publications.
- Gugler, K, B Yurtoglu, 2003, 'Corporate governance and dividend payout policy in Germany', *Working Paper*, University of Vienna.
- Han KC, Lee SH, Suk DY 1999, Institutional Shareholders and Dividends, *Journal of Financial and Strategic Decision*, vol. 12(1), pp. 53-62.
- Holder, Mark E, Langrehr, Frederick W, and Hexter, J Lawrence, 1998, 'Dividend policy determinants: An investigation of the influences of stakeholder theory', *Financial Management*, 27 (3), 73-82.
- Jensen GR, Solber DP, Zorn T 1992, 'Simultaneous Determination of Insider Ownership, Debt, and Dividend Policies', *Journal of Finance and Quantitative Analysis*, vol. 27 (2), pp. 247-263.
- Jensen MC, Meckling W 1976, 'Theory of the Firm: Managerial Behavior, Agency Costs, and Ownership Structure', *Journal of Financial Economy*, vol. 3, pp. 305-360.
- Khan T 2006, 'Companies Dividend and Ownership Structure: Evidence from UK panel data', *Economic Journal*, vol. 116, 172-189.
- Kouki M, Guizani M 2009, 'Corporate Governance and dividend policy in Poland', Warsaw School of Economics, World Economy Research Institute, *Al. Niepodlegosci*, Warsaw, vol. 162, pp. 02-554.
- Krejcie, RV, and Morgan, DW 1970, 'Determining Sample Size for Research Activities', *Educational and Psychological Measurement*, vol. 30, pp. 607-610.
- Kumar J 2006, 'Corporate Governance and Dividend Policy in India', *Journal of Emerging Market and Finance*, vol. 5

- (5), pp. 15-58.
- Lintner J 1956, Distribution of incomes of corporations among dividends, retained earnings, and taxes', *American Economy Review*, vol. 46 (2), pp. 97–113.
- Miller M, Modigliani F 1961, 'Dividend Policy, Growth, and the Valuation of Shares', *Journal of Business*, vol. 34 (4), pp. 411-433.
- Mondher Kouki and Moncef Guizani, 2009, 'Ownership Structure and Dividend Policy Evidence from the Tunisian Exchange market', *European Journal of Scientific Research*, vol. 25, no. 1, pp. 42-53.
- Morck, R, Shleifer, A, Vishny, R 1988, 'Management Ownership and Market Valuation: An Empirical Analysis', *Journal of Financial Economics*, vol. 20, pp. 293-315.
- Myers, R 1990, Classical and Modern Regression with Applications, 2<sup>nd</sup> ed., Boston, MA: Duxbury.
- Ramli, NM 2010, 'Ownership Structure and Dividend Policy: Evidence from Malaysian Companies', *International Review of Business Research Papers*, Vol.6, No.1 February 2010, pp.170-180.
- Ross, SA, Westerfield, RW, and Jaffe, J 2002, *Corporate Finance*, 6<sup>th</sup> ed., McGraw-Hill Companies.
- Rozeff, M 1982, 'Growth, Beta and agency Costa as Determinants of Dividend Payout Rations', *Journal of Financial Research*, vol. 5, pp. 249-259.
- Sharif, SJ, Salehi, M, and Bahadori, H 2010, 'Ownership Structure of Iranian Evidence and Payout Ratio', *Asian Social Science*, vol. 6, No. 7, pp. 36-42.
- Syed, ZAS, and Wasim, U 2011, 'Impact of Ownership Structure on Dividend Policy of Firm evidence from Pakistan', *Management and Economics IPEDR*, Vol. 3, 22-26.