GOVERNANCE PRACTICE AND DIVIDEND PAYOUTS: THE ROLE OF SECTORS

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ABSTRACT

Corporate governance (CG) safeguards shareholders' portfolios and ensures optimal returns in terms of dividend payouts (DPs) on their investment. The association between CG and DPs could be significant in relation to risk exposure, operational and financing activities across firms and sectors. The relationship between the two has been well documented, however; the role of industry classification on the relationship has not been given adequate consideration in the literature. Agency theory underpins the model which captures the effects of CG on DPs. This study, therefore, examines the moderating roles of industry on the relationship in Nigeria between 1995 and 2012; and utilised system generalised method of moments technique in its analysis. Empirical findings of the study indicate that the relationship between CG and DPs is positive in few subsectors while it is negative in some subsectors respectively. Therefore, it is suggested that the Security and Exchange Commission (SEC) in connection with the Nigerian Stock Exchange should provide needed interventions to the subsectors showcase negative relationship so that their CG could be enhanced.

Keywords: Corporate governance, Dividend payouts, Endogeneity bias, Agency theory, Generalised method of moments.
JEL Classification: G20, G23.

Introduction

Emphasis is placed on corporate governance (CG) as a result of the high profile of corporate scandals locally and internationally. Anya (2003) contends that lack of transparency[1]obscured the way economic activities were conducted and consequently, contributed to the alarming proportion of economic/financial crimes in the financial industry. The financial fraud witnessed in Nigerian corporate sector shook investors' confidence in the Nigerian capital market and the efficacy of existing CG practices in promoting transparency and accountability1. Good (bad) CG is not an indication that high (low) dividend is paid or vice versa. Three scenarios can be anticipated or conceived in the relationship. First, good (bad) CG can indicate good (poor) performance but dividend may be low (high) when there are (no) other pressing needs for earnings such as good investment opportunities and portfolio-diversification. Hence, a firm that has good (bad) CG with good (poor) performance may

[1] An act of being free from pretence or deceit

either pay low (high) dividend or none. Second, dividend may be high (low) in firms with good (poor) performance whereas CG is weak (strong). Lastly, good (bad) CG may make firms pay high (low) dividend when corporate performance is high (low) or vice versa.

Dividend payouts (DPs) and CG are two of the most researched areas in financial economics literature but little is known about the relationship between the two in Nigeria. However, Uwuigbe, et al (2015), Osegbue et al (2014), Nwindobe (2012), Abdulkadir *et al*, (2016) estimated the relationship between dividend policy and corporate governance/performance but there seldom exists studies in Nigeria that have explored the relationship at sectoral level using system generalized method of moments.Further, few studies in financial economics literature have given due attention to the relationship between CG and DPs but have not taken into account the sectoral focus. But the link is important because the association between CG and DPs varies quite significantly in relation to risk exposure, sectoral diversification factors, operational and financial activities, all of which could affect dividend payment (Akhtar, 2006). The foregoing motivates this research which specifically, investigates how CG influences dividend behaviour of corporate firms in Nigeria.

It contributes to literature in the following ways: First, it uses firm level measures of governance indicators (four) in contrast to the country level measure employed by Sawicki (2009); Byme and O'Connor (2012) and O'Connor (2012). Moreover, its empirical findings show that the relationship between CG and DPs is heterogeneous among subsectors in Nigeria's corporate sector; thereby underlying the importance of taking into account sectoral classification. The rest of the work is as follows: section 2 gives the theoretical framework and empirical review as section 3 focuses on methodology and data. Empirical findings are presented in section 5 while section 5 concludes and offers recommendations.

Review of Literature

Theoretical Framework

Agency theory is the theoretical foundation of this study. It has been extensively examined in literature with supported evidence, on the relationship between CG and DPs. The source of agency problems dated back to the Berle and Means (1932). Among various finance theories, the agency theory perspective is the most popular and has received considerable attentions (Jensen and Meckling, 1976; Fama and Jensen, 1983, Adelegan, 2003b). It provides the basis for governance standards and attempts to solve any conflicts of interests in corporate firm/company (Maher and Anderson, 1999). In addition, the significance it accords to equity financing makes it most suitable for the current analysis given the focus on listed firms. One shortcoming of agency theory is that it 'relies on an assumption of self-interested agents who seek to maximise personal economic wealth' (Bruce, 2005). However, this assumption is not pronounced in Nigeria due to the fact that, prerogative power of dividend declaration lies with the Board of directors.

Empirical Evidence

CG indicators refer to a set of mechanisms that influence the decisions made by managers when there is a separation of ownership and control. Some of the indicators are: board size, managerial shareholding, institutional shareholding, foreign shareholding, number of independent directors,

leverage, ownership concentration and operations of the market for corporate control (see, Babatunde and Olaniran, 2009). This paper surveys studies that examined the governance indicators affecting a firm's decision to pay or not to pay dividend in a particular year.

Institutional shareholding refers to portfolio of large institutions such as governments, insurance firms, banks, pension funds, and other nominee firms. (Koh, 2003). Following Short *et al* (2002),it is defined as the percentage of shares held by governments, foreign and domestic institutional investors in a firm at a particular point in time. The presence of institutional investors influences firms' behaviour basically due to their substantial shareholdings. Institutional investors, with more available resources and knowledge at their disposal monitor and influence corporate information which individual investors cannot (Michaely and Shaw, 1994). Agrawal and Mandelker (1990) point out that institutional investors offer important monitoring services and operate as a control unit to opportunistic behavior of managers and consequently help in reducing agency cost. Eckbo and Verma (1994) show that institutional investors prefer free cash flow to be distributed in form of dividends.

According toHarada and Nguyen (2009), Short *et al* (2002), and Karathanassis and Chrysanthopoulou (2005), managerial ownership refers to the total percentage of equity held by inside shareholders that take part in the company's management, either through their natural presence or representation in the Board of directors or the undertaking of managerial tasks or a combination of the two. Chen *et al.* (2005) claim a negative relationship between managerial ownership and dividend policy in Hong Kong. Jensen *et al.*, (1992) show that insider ownership is associated with lower dividend payout. In addition, some studies suggest that dividend payment can be regarded as an apparatus to control management as inside ownership provides direct opportunity to use internal funds on unprofitable projects (Rozeff, 1982; Short, Zhang and Keasey, 2002; Odeleye, 2015; Adjei-Mensah, *et al*, 2015; Odeleye, 2017).

The board is considered to be an important part of a firm's governance mechanism. It is regarded as the apex court of appeal for resolving various issues, including the agency problem. It acts as a monitor, and maintains discipline in the firm. It is believed that the decision of the board is supreme (Fama and Jensen, 1983, Adelegan, 2003a). The findings show that there is a positive and significant relationship between board size and dividend policy. Bokpin (2011) points out that there is significant and positive relationship between board size and dividend paid. In contrast, Subramaniam and Susela (2011) empirical analysis of effect of CG on dividend policy of over 300 listed companies in the Malaysian Stock Exchange supports negative and significant relationship between board size and dividend policy. The analysis shows that board independence and dividend policy serve as substitutes in the principal-agency perspective.

Fama (1980) observes that the board of directors' competency could be enriched when independent directors also known as "outside" directors are on the board; as they are regarded as useful device in reducing agency problem in the firm through monitoring and controlling of executive actions (Jensen and Meckling 1976). Implying that, independent/non-executive directors serving on the board help in monitoring and controlling the expropriation behaviour of management and also assist in appraising the management more objectively (Abidin, Kamal, and Jusoff, 2009). Literature has emphasised positive and significant influence of independent, non-executive directors in relation to

DPs (Abdelsalam et al., 2008; Abor and Fiador, 2013; Mansourinia et al., 2013; Uwuigbe, et al 2014). However, an insignificant and negative relationship exists between independent directors and their firm's willingness to pay dividend (Jones, 2002; Mansourinia et al. 2013; Borokhovich et al. 2005; Nwindobe, 2012).

Methodology and Data

Our model is formulated in the spirit of Sawicki (2009) post-Asian crisis modified agency model which extends the agency cost of equity version in the investigation conducted at country-level in which five countries were represented. The choice of adapting Sawicki (2009) model is driven by its panel framework. According to Baltagi (2008), panel data analysis provides a better understanding of most economic phenomena, which in most cases are dynamic in nature. Therefore, dynamic panel data model, is the best suited and adopted method in this analysis. This is done by employing panel estimation and including the lag of the dependent variable as one of the independent variables.

Dynamic panel data models are useful when the dependent variable is a function of its own past realizations, therefore; the introduction of lags becomes crucial to control for the dynamics of the process. The use of dynamic panel data makes it possible to uncover a result favouring an equalization behavior. It allows controlling the dynamics of the process introduced in the regression equation, temporal dependency (lags) of the dependent variable. The general approach to estimate a dynamic panel data model relies on Arellano and Bond, (1991); Arellano and Bover, (1995) which suggest a 2 step System Generalised Method of Moments (SYSGMM) estimator using the instrumental variables technique. In a GMM context, more efficient estimates of the dynamic panel data model can be constructed; taking into account all the potential orthogonality conditions.

SYSGMM originated in Arellano and Bover (1995) but Blundell and Bond (1998) articulated the condition in which the novel instruments associated with it are considered valid (ibid).It provides consistent estimation if the underlying assumption of no second order autocorrelation in the residuals is fulfilled. Arellano and Bover (1995) however, suggests a specification test (Sargan) to check for the over-identification in the model. Sargan test confirms validity of the instruments used in a given model. Another important diagnostic test in the dynamic panel data estimation is the autoregressive (AR) test for autocorrelation of the residuals. By construction, the residuals of the differenced equation should possess serial correlation, but if the assumption of serial independence in the original errors is warranted, the differenced residuals should not exhibit significant AR (2) behaviour.

Endogeneity bias is a commonplace in static model whether fixed or random. In quantitative analysis endogeneity problems occur when an explanatory variable is correlated with the error term. Endogeneity bias can arise as a result of measurement errors of some variables, simultaneous causality and omitted variables. Moreover, it is noted that under the hypothesis of no correlation between regressors and individual effects, Ordinary Least Squares (OLS) estimators are unbiased and consistent, but not efficient (Davidson and MacKinnon, 2004). Simultaneity is the major cause of endogeneity in dynamic panel models. It arises when one or more regressors, is jointly determined with the regress and typically through an equilibrium mechanism. Classically, endogeneity refers to the simultaneity problem; where the direction of causality is not purely from the right hand side (RHS) variables to the

left hand side (LHS) variable. In other words, if changes in the LHS variable cause changes in the RHS variable or that the LHS variable and the RHS variable are being jointly determined, then there is simultaneity and consequently, the error term will correlate with the regressors. To eliminate endogeneity bias in a dynamic panel model, SYSGMM is often employed. It has a set of variables, termed instruments that are both correlated with the explanatory variables in the equation, and uncorrelated with the disturbances, which it uses to eliminate the correlation between right-hand side variables and the disturbances. In SYSGMM, error term has zero mean, constant variance, and is uncorrelated across time and individuals. Also, time-invariant variables can be included as regressors in the estimation (Roodman, 2006).

Following Sawickhi (2009),

$$DIV_{i,t} = \alpha_0 + \alpha_1(Gov_{i,t}) + \alpha_2(\Pr ofit_{i,t}) + \alpha_3(Beta_{i,t}) + \alpha_4(Gr_{i,t}) + \alpha_5(Sz_{i,t}) + \alpha_6(Per_{i,t}) + \sum \beta_c Ctrc + \sum \beta_s Ind_s \quad \text{.....(1)}$$

Where: $Div_{i,t}$ = dividend payout of firm i, at time t . Gov_{it} = index score for firm i at time t. $Profit_{it}$ represents net income divided by sum of various equity types. ROI is return on investment of firm i, time t. Beta $_{i,t}$ proxy for risk(operating and financial leverage) of firm i at time t. $Gr_{i,t}$ is% change in assets of firm $_i$, time $_t$. $Sz_{i,t}$= size firm of i (logarithm of market value of common equity, USD millions, year t), $Per_{i,t}$ = binary variable partitioning pre-crisis (1994-1996) and post-crisis (1999 to 2003)periods, Ctr indicates binary variable to distinguish between countries, and Ind is binary variable to distinguish between industries (consumer, industrial, basic materials, energy, technology, utilities and financial)

Five countries were represented in Sawicki (2009): Indonesia, Malaysia, Thailand, Hong Kong and Singapore. The investigation was conducted at country level, using only one governance indicator and comparing dividend payouts across governance systems provided by different legal regimes. However, his study is quite different from the present one which uses for four governance indicators at firm level. Based on equation 1, a dynamic panel data model is considered and specified as:

$$y_{it} = \gamma y_{it,t-1} + \beta' X_{it} + \rho' Z_i + \alpha_i + \varepsilon_{it} \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (2)$$

for $i = 1, \ldots . N$ and $t = 1, \ldots, T . .$ α_i^* are the (unobserved) individual effects X_{it} is a vector of K_1 Ktime invariant explanatory variables Z_i is a vector of K_2 time invariant explanatory variable and ε_{it} the error (idiosyncratic) term with $E(\varepsilon_{it}) = 0$ and $E(\varepsilon_{it}\varepsilon_{js}) = \sigma_\varepsilon^2$ if j = i, t=s and $E(\varepsilon_{it}\varepsilon_{js}) = 0$. It is assumed also that:

$$E(\alpha_1) = 0 \;\; E(\alpha_1 X_{it}) = 0 \quad E(\varepsilon_{it} X_{it}) = 0 \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (3)$$

The estimated model is expressed as:

$$Div_{it} = \beta_1 Div_{it-1} + \beta_2(BS_{it}) + \beta_3(INST_{it}) + \beta_4(INDDIR_{it}) + \beta_5(MANS_{it}) + \beta_6(\log GENit)$$
$$+\beta_7(\log PAT_{it}) + \text{SEC1}_{it} + ... + \text{SECn}_{it} + \varepsilon_{it} \quad (4)$$

Where:

Div_{it} is the dividend paid of firm i at time t. Div_{it-1} is the lagged value of the dividend paid of firm i at time t. (BS_{it}) is the board size of firm i at time t. ($INSTT_{it}$) represents the stake of institutional investors of firm i at time t. ($MANS_{it}$) is the managerial shareholding of firm i at time t. ($INDDIR_{it}$) refers to number of independent directors of firm i at time t. (PAT_{it}) is the profit after tax of firm i at time t. (GEN_{it}) refers to the gross earnings of firm i at time t. SEC_{1it} represents sector 1 and $SECn_{it}$ depicts sector n. β_1 ...β_7 are coefficients of the parameters. ε_{it} represents the stochastic term.

This study uses internal governance indicators: institutional ownership, board size, managerial shareholding and number of independent directors as proxies for CG. The choice is justified on the grounds that they are more flexible in principle and can be varied as circumstances dictate. Profits after tax (PAT) and gross earnings are controlled for. 97 non-financial firms in 12 subsectors listed on the Nigerian Stock Exchange are the dataset, covering a time span of 1995 to 2012. The choice of period and subsectors is informed by availability of data. The 12 subsectors of the non-financial corporate firms covered in the study are: agriculture, (5); automobile and tyres, (5); building materials, (8); brewery, (6); chemical and paints, (9); conglomerates, (9); construction, (6); food and beverages, (17); healthcare, (11); industrial and domestic products, (10); petroleum and marketing, (9) and printing and publishing, (3). Data is mainly sourced from Analysts' Data Services & Resources Limited, Ibadan, Nigeria and the sector selection is defined by the data.

Table 1: Operational Definitions of Key Variables

Variables	Name	Definition	Measurement
Dependent variable			
Dividends payout	DIV	It is the return on equity payable to shareholders. It is also referred to as dividend per share.	Kobo
Independent variables			
Board size	BS	Total number of directors on the Board of directors.	Nominal value
Institutional Shareholding	INST	The total percentage of shares owned by governments, foreigners and companies.	%
Managerial Shareholding	MANS	Proportion of managers' shareholding to total shares in the paid-up share capital.	%
Independent Directors	INDDIR	Number of independent directors on the Board of directors. It is the number of directors without shareholding in the firms. It is also called outsiders on the Board.	%
Controlled variables			

Profits after tax	PAT	It is calculated as profits before tax, less tax and other expenses. It is expressed in its logarithm form.	Naira
Gross Earnings	GEN	Total Turnover. It is expressed in its logarithm form.	Naira

Source: *Author*

Empirical Findings

Descriptive Analysis

Table 2 shows the details of descriptive statistics of variables that affect dividend payments of the 97 selected firms, quoted on the Nigerian Stock Exchange between 1995 and 2012. The table shows that DPs ranges from ₦0 to ₦10 with a mean of ₦0.45 and standard deviation of ₦1.20. The institutional shareholding (INST) ranges from 0% to 100 percent with a mean and standard deviation of 45.44 percent and 26.23 percent respectively. Managers' shareholding (MANS) ranges from 0% to 46.8 percent with a mean of 2.15% and a standard deviation of 26.23 percent. The mean number of independent directors (INDDIR) is 41 percent; implying that for the sampled firms, some of the Board members are relatively less independent with 41 percent being non-executive directors. The profits after tax (PAT) reports a minimum value of ₦0 billion, while the maximum value is ₦10.3 billion. On the other hand, the variation in gross earnings is between ₦5.44 and ₦11.8 billion. The mean Board size (BS) is nine, with a maximum of twenty-one directors, this suggests that Nigerian quoted companies have board size considered ideal (SEC/CAC, 2011). Institutional shareholding records the highest mean value (45.44 percent) amongst other governance indicators.

Table 2: Descriptive Statistics of Variables

ALL FIRMS	DIV	BS	INST	INDDIR	MANS	PAT	GEN
N	1,235	1,102	1,235	1,073	1,141	1,068	1,217
Min	0	3	0	0.33	0	0	5.44
Max	10.00	21	100	0.92	46.8	11.1	11.83
Mean	0.45	9	45.44	0.41	2.15	10.3	9.4
Std. Deviatn	1.20	2.63	26.23	0.24	26.23	0.32	0.91

Source: Author

Sectorial Representation

Table 3 depicts the representation of the sampled firms among listed subsectors on the floor of Nigerian stock exchange as at February, 2012. The dataset is made up of 81.5 percent non-financial firms of the corporate sector, therefore, our dataset is highly representative.

Table 3: Sample Breakdown

S/N	Subsector	Frequency	Percentage Selected
1	Agriculture	6	83.3
2	Automobile &Tyres	5	100
3	Brewery	7	85.7
4	Building	10	80
5	Chemical	10	90
6	Conglomerates	9	100
7	Construction	10	60
8	Food & Beverages	18	88.8
9	Healthcare	12	91.7
10	Industrial/Domestic	14	71.4
11	Petroleum/Marketing	14	64.3
12	Printing	4	75
	Total Firms	**119**	**100**
	Total Sampled	**97**	**81.5%**

Source: Author

The sectoral effects of CG on DPs are captured in Tables 4a-4d. Each of the subsectors depicts that past dividend exerts significant and positive influence on current dividend per share of most of the subsectors. This is in support of Lintner (1956). Their Wald/F statistics show the reliability of the models while the Sargan tests verify the validity of the instruments employed. Generally, a negative relationship exists between DPs and managerial shareholding in all the subsectors. This may imply that the shareholders of the firms in these sub-sectors are not protected against expropriation of their management. Consequently, their firms' values and shareholders' wealth could be at stake. This evidence is in support of Jensen (1986), Eckbo and Verma (1994), Short *et al* (2002), Chen, Chen and Wei (2003); which suggest that managers are reluctant to pay out dividends, but prefer to retain cash flow for their perquisites. The relationships in the 12 subsectors are explained below.

Agricultural subsector has been neglected for some decades. Oil discovery made agriculture subsector to be secondary to oil sector in Nigeria's economic growth. Perhaps, the reason for the existence of non-significance of its governance indicators; such as the lower stake of its board members. Also, the number of independent directors, who are specialists in various areas in the subsector, is relatively small. Therefore, applied innovation that would have enhanced productivity and performance for higher profitability which could have influenced DPs are ruled out. The prevalent environmental factors (Niger Delta region for example) also might have been another reason. The estimated results in the automobile and tyres subsector show that the higher the institutional shareholding and number of independent directors' shareholdings, the higher the dividend per share that is paid out by the firms in the sub-sector. As expected, profits after tax also exert a positive and significant influence on the dividend payout of the firms. This is in line with the a-priori expectation that high profits after tax increases the dividend payout of firms. In the same vein, the proportion of independent directors on the

Board is positively related to the dividend payout of the firms. As expected, firms' gross earnings have positive and significant relationship with the dividend payouts. In addition, only profits after tax and the proportion of independent directors, significantly and positively affect the dividend payout of the firms in the brewery sub-sector (see table 4a).

It is discovered that independent directors' shareholdings, profits after tax and gross earnings have positive and significant effects on the dividend payout behaviour of the firms in the building materials, However, only number of independent directors is statistically significant in conglomerate and chemical & paints but the institutional shareholdings exert a negative effect on the dividend payout in the chemical/paint subsector. It can be inferred that the assumption of wealth maximization of shareholders' wealth might have been grossly compromised in the subsectors (table 4b).

Based on the empirical findings, the negative relationship of board size, institutional investors, and the number of independent directors with dividend payouts in construction sub-sector implies that the shareholders of the firms in the sub-sector are not protected against expropriation of their management. Consequently, their firms' values and wealth are greatly at stake. In the food & beverage sub-sector, institutional investors and gross earnings have significant positive impacts on the dividend per share of the firms while directors' shareholding exerts a negative impact on the sub-sector. In healthcare sub-sector, only numbers of independent directors and profits after tax have significant and positive effects on dividend per share (see table 4c).

The estimation of the industrial/domestic products sub-sector shows that all the corporate governance indicators have overall significant influences on the dividend payout. As expected, profits after tax and gross earnings exert a positive and significant impact on the dividend payouts of the firms. This is in line with the a-priori expectation that higher profits after tax and gross earnings increase the dividend payout of firms. There is a positive and significant impact of board size on dividend per share of the selected firms in the petroleum/marketing sub-sector. This is expected because majority of board members has large stake in its shareholding. Also, the estimated results of the printing/publishing sub-sector indicate that the profits after tax, the number of independent directors, and institutional investors exert positive and significant influences on the dividend payouts behavior of the firms in the sub-sector. Additionally, a positive association between the number of independent directors and dividend payouts is predicated as larger boards have more independent directors and, thus, more dividend payments (table 4d).

Summarily, the reported results infer that the link between CG and DPs differs by sector of operations. The relationship[2] is positive in only automobile/tyres, breweries, building/materials, chemical & paints, conglomerate, industrial/domestic products, petroleum and printing/publishing subsectors respectively. In contrast, it is negative in agriculture, construction, food & beverages, and healthcare sub-sectors respectively. This may be due to risk exposure, sectoral diversification factors, operational and financial activities; all of which could affect dividend payment [Baker, (1988); Michel, (1979); Baker, Farrelly and Edelman, (1985); Horace, (2002); Kapoor (2009); Alzomaa and Al-Khadhiri (2013)

Table 4a: Sectoral Analysis of the Sampled Subsectors (Agriculture, Automobile &Tyres, Breweries)

	Agriculture	Automobiles & Tyres	Breweries
DIV (-1)	0.527 (0. 880)	0.505*** (0.000)	0.574*** (0.000)
BS	-0.472 (0.877)	-0.0001 (0.966)	0.114 (0.657)
INST	0.254 (0.755)	0.001 (0.686)	0.003 (0.579)
MANS	-0.053 (0.758)	0.392 (0.977)	1.451 (0.960)
INDDIR	6.736 (0.564)	0.217*** (0.000)	4.61*** (0.000)
PAT_L	7.782 (0.647)	0.011* (0.086)	2.801** (0.025)
GEN_L	-9.933 (0.905)	0.092** (0.019)	3.112 (0.78)
Cons	9.103 (0.905)	-55.415* (0.066)	-38.412* (0.085)
NUM OF OBS	38	42	48
F-STATISTICS	435.21*** (0.000)	43.59*** (0.000)	1514.86*** (0.000)
AR(1)	-5.30*** (0.001)	-2.90* (0.032)	-1.46* (0.051)
AR(2)	-0.73 (0.760)	-1.89 (0.927)	-1.12 (1.000)
SARGAN TEST	16.38238 (0.9035)	40.12371 (0.8193)	38.1648 (0.9689)

NOTE: Two-step SYS*GMM* ***results are reported***

, ** and * depict 10%, 5% and 1% levels of significance respectively.t Stat arein parentheses.*

Source: Author's compilation

Table 4b: Sectoral Analysis of the Sampled Subsectors (Building Materials, Chemical & Paints and Conglomerates)

	Building Materials	Chemical & Paints	Conglomerates
DVDP (-1)	-5.004 (0.840)	0.25** (0.042)	2.625** (0.044)
BS	-0.014 (0.796)	-0.01 (0.726)	0.795 (0..739)
INST	-0.001 (0.845)	0.006 (0.706)	0.039 (0.831)
MANS	1.511* (0.070)	-0.002 (0.727)	-0.569 (0.705)
INDDIR	8.511** (0.000)	0.095* (0.057)	18.28** (0.038)
PAT_L	9.136* (0.089)	0.275 (0.821)	16.816* (0.075)
GEN_L	-0.597 (0.848)	0.326 (0.785)	0.136 (0.642)
_cons	-92.05 (0.701)	-513.00 (0.715)	171.985 (0.760)
NUM OF OBS	59	89	83
F-STATISTIC	23.61*** (0.001)	1809.1*** (0.000)	326.00*** (0.000)
AR(1)	0.01372* (0.0891)	-2.1043*** (0.003)	-3.0401*** (0.001)
AR(2)	-0.7008 (0.4834)	-0.2814 (1.000)	-0.3818 (0.7026)
SARGAN TEST	2.01 (1.0000)	47.475 (0.875)	0.0597 (1.000)

NOTE: Two-step SYS**GMM **results are reported

, ** and * depict 10%, 5% and 1% levels of significance respectively.t Stat are in parentheses.*

Source: Author's compilation

Table 4c: Sectoral Analysis of the Sampled Subsectors (Construction, Food & Beverage and HealthCare)

	Construction	Food & Beverage	HealthCare
DIV (-1)	0.603** (0.035)	0.195** (0.048)	0.098*** (0.000)
BS	0.205 (0.672)	-0.008 (0.778)	0.011 (0.805)
INST	-0.015 (0.856)	0.002 (0.019)	-0.005 (0.725)
MANS	0.0003 (0.918)	0.05 (0.890)	-0.041 (1.000)
INDDIR	-0.091 (0.742)	-0.166 (0.736)	-0.200 (0.910)
PAT_L	0.593** (0.046)	0.204 (0.668)	0.013** (0.020)
GEN_L	0.630*** (0.001)	0.177** (0.033)	0.318 (0.990)
_cons	-85.089 (0.872)	0.663 (0.773)	-178.288 (0.254)
NUM OF OBS	56	120	62
F-STATISTIC	258.39*** (0.000)	25081.2*** (0.000)	523224.7*** (0.000)
AR(1)	-2.6599* (0.053)	-1.1679* (0.0428)	-1.26797* (0.0512)
AR(2)	-0.2468 (0.8509)	-1.067 (0.786)	-1.0761 (0.580)
SARGAN TEST	31.8254 (0.6335)	7.13619 (1.0000)	14.8334 (0.9013)

NOTE: Two-step SYS**GMM **results are reported

, ** and * depict 10%, 5% and 1% levels of significance respectively. t Stat are in parentheses.*

Source: Author's compilation

Table 4d: Sectoral Analysis of the Sampled Subsectors (Industrial/Domestic, Petroleum/Marketing and Printing/Publishing)

	Industrial/ Domestic	Petroleum/ Marketing	Printing/ Publishing
DIV (-1)	0.62*** (0.002)	0.270** (0.035)	0.215** (0.049)
BS	-0.103 (0.63)	0.069* (0.075)	0.168 (0.96)
INST	0.001* (0.040)	0.010 (0.27)	0.024** (0.048)
MANS	0.006 (0.37)	-0.675 (0.98)	-0.262 (0.88)
INDDIR	1.467* (0.067)	2.639 (0.225)	-4.400 (0-560)
PAT_L	0.099 (0.626)	15.313 (0.975)	0.099** (0.037)
GEN_L	0.135 (0.842)	4.874 (0.738)	-0.003 (0.945)
_cons	-35.114 (0.929)	212.311 (0.845)	-145.28 (0.789)
NUM OF OBS	96	84	47
F-STATISTIC	35619.9*** (0.0000)	19.19*** (0.008)	1436.45*** (0.0000)
AR(1)	-2.2687 (0.0044)	-2.2867 (0.0004)	-2.0223 (0.0008)
AR(2)	0.1973 (0.988)	0.19337 (0.847)	-0.6080 (0.843)
SARGAN TEST	47.9647 (0.6614)	22.6317 (1.0000)	12.3843 (0.9130)

NOTE: Two-step SYS**GMM **results are reported

, ** and * depict 10%, 5% and 1% levels of significance respectively.t Stat are in parentheses.*

Source: Author's compilation

Concluding Remarks and Recommendations

This study contributes to the ongoing debate on the role of CG on DPs of corporate firms. It is carried out to examine the effects of CG on DPs of 97 non-financial quoted firms in Nigeria between 1995 and 2012. The specific objective of this study is to examine the effect of CG on dividend policies at sectoral level. The modified agency model of Sawicki (2009) is adapted with the system GMM estimation technique within a dynamic panel framework. The four indicators capturing CG are board size, institutional shareholding, number of independent directors and directors' shareholding while profits after tax and gross earnings are the remaining regressors.

The results are robust as they attenuate endogeneity bias via system GMM, in which the direction of causality is purely from the regressors to the regress and and not vice versa. Nevertheless, the study does not support the agency theory assumption of principal-agent conflicts. This is as a result of the high concentration of shareholding which is the feature of the Nigerian corporate sector, where managers/agents have little room to exercise corporate discretions. This work extends the theoretical prediction of the agency theory and disaggregates the relationship between CG and DPs into sectors of operations in the modified Sawicki (2009) model. The empirical results also demonstrate that the sectoral mode of operations matters in the relationship between CG practices and DPs in Nigeria.

Based on the results of the study, the following are recommended:

First, considering gross earnings and profit after tax, the results show that they significantly influence DPs. Nigerian government therefore, needs to make business environment more enabling in ensuring that costs of doing business in Nigeria reduce to the barest minimum so that existing companies can be motivated to continue in business and new ones can also come on board. Enabling environment would lead to good performance, consequently, higher profit before tax which tends to be a juicy avenue for the government to generate more revenue in the form of corporate/companies' tax. In addition, firms' good performance will positively affect DPs, withholding taxes from dividend payments to the shareholders would increase accrued revenue to the government for further investment in the economy.

Second, boards of directors of agriculture, brewery, construction, food and beverages, and healthcare sub-sectors respectively in which a negative relationship between CG and DPs is observed should maintain a regular and steady increase in their dividend payment so as to maximise shareholders' wealth and improve welfare of other stakeholders. In addition, policy makers especially, Security and Exchange Commission (SEC) in connection with the Nigerian Stock Exchange should provide needed interventions to these subsectors so that their CG can be enhanced. More independent directors should be on the boards of corporate firms and the proportion of institutional shareholding should also be increased to improve monitoring.

Third, our results show that CG does not impact DPs of agriculture subsector. The prevalence of environmental factors associated with the subsector might be part of the cause. Agriculture subsector has been neglected for decades. Institutional shareholders and independent directors that might have promoted innovations and growth in the subsector have shied away from it; hence, food insecurity remains a concern in the country. For Nigeria to contribute to feeding

Africa, the government should intensify efforts in ensuring that Nigerian agriculture & Agro-Allied subsector is assisted so that it can perform better. This will enhance its returns thereby attracting more investors to the subsector and consequently creating a vicious cycle of wealth. The government of Nigeria through the Ministry of Food and Agriculture should encourage youth participation in the agricultural sector. The sector offers career opportunities in research, environment, financial management and other technical areas for the youth to explore for higher productivity.

Fourth, in addition, Nigerian capital market regulatory authorities should ensure that corporate firms strictly comply with the codes of CG to minimise market infractions and promote investment in the capital market. When this is done, local and foreign investors will be motivated to come to the market. More equity financing will be harnessed with dynamic growth which invariably will lead to more job creation in the economy. Finally**,** the Nigerian corporate firms should disclose more governance information in their annual reports and statements of accounts so that prospective researchers and investors (local and foreign) could evaluate them adequately for more rigorous research and portfolio management respectively.

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