CORPORATE GOVERNANCE MECHANISMS AND DIVIDEND PAYOUT RATIO OF LISTED CHEMICAL AND PAINTS FIRMS IN NIGERIA

¹Musa Adeiza Farouk & ²Latifat Muhibudeen

¹Department of Accounting, Kaduna State University, Kaduna – Nigeria ²Department of Accounting and Finance, Northwest University, Kano – Nigeria

Abstract

This paper is an empirical analysis of influence of Corporate Governance Mechanisms on Dividend payout ratio of listed Chemical and Paints firms in Nigeria for the period of 2008-2013. The listed Chemical and Paints firms are Eight (8) in numbers as provided by Nigerian stock exchange fact book 2013. All the eight firms were used for the study. Corporate Governance Mechanisms was proxy with Board size, Board composition, Audit committee size and Audit committee composition, while dividend payout ratio was proxy with ratio of dividend paid to total asset. The study adopted multiple regression techniques and data were collected from secondary source through the annual reports and accounts of the firm. The findings revealed that board size and board composition has negatively, strongly and significantly impacted on dividend payout ratio of listed Chemical and Paints firms in Nigeria, while Audit committee size have positive, strong and significant influence on dividend payout ratio. But audit committee composition shows no significant contribution to dividend payout ratio of listed Chemical and Paints firms in Nigeria. It is recommended amongst others that the listed Chemical and Paints firms should increase the number of audit committee members where investors are only interested in dividend payment as it may serve as a sure means of having increase in payment of dividend to shareholders. But where shareholders are only interested in capital gain rather than dividend payment, the number of board members and outside directors should be increased as this will discourage payment of high dividend in favour of capital gain.

Keywords: Dividend payout ratio, Corporate shareholdings structure, Bird-in-hand theory, Signaling theory, Agency theory.

http://international policy brief. org/journals/international-scientific-research-consortium-journals/stats-mgt-and-fin-vol3-no1. The properties of the pr

Background to the Study

The role of corporate governance in affecting dividend policy has been a subject of interest. Most of the previous research has shown that the patterns of corporate dividend payout policies vary tremendously between developed and emerging markets. Corporate governance, as defined by Shleifer and Vishny (1997), refers to the ways in which investors ensure that they will receive maximum return on their investments. Fundamental components of an effective governance structure include managerial ownership, size and composition of the board of directors, CEO and directors" compensation schemes, audit controls, and an external market for corporate control (Keasey and Wright, 1997).

In general, effective governance controls agency conflicts between management and investors in two ways. First, the free-cash flow problem of a firm can be reduced through dividend policy, stock repurchases, capital structure decisions, and investment in long term projects. Second, the likelihood of management entrenchment can be reduced, thus strengthening shareholders "rights."

Dividend is deemed to be a reward to the shareholder for their contribution in raising fund for a company and for bearing the relevant risks. In this regard, management of a company formulates a dividend policy to divide and distribute earnings among the shareholders for their investments. The dividend policy is having a crucial influence on the value of firm because it has to maintain a state of equilibrium between the firm's growth policies and the dividend payout policies. A minor mistake can leads to shareholders dissatisfaction as well as can shake the firm's growth.

Due to the extent of business relationships which led to agency relationships, investors are skeptical that managers may take decisions for their self interest. So, the need for corporate governance is the necessity to restore investors' confidence in business operations through transparency, accountability and responsibility. Corporate governance includes a set of relationships between a company's management, board, shareholders and other interested parties which will determine the direction of companies' movement.

Given to the above theoretical and empirical bases, there has not been unanimous agreement by researchers on this subject matter due to the inconclusive nature of their researches and their mixed findings. Therefore, the main objective of this study is to investigate whether board size, board composition, audit committee size, and audit committee composition have effect on the dividend policy of listed Chemical and Paints companies in Nigeria?

Objectives of the Study

The major objective of the study is to ascertain the level to which corporate governance mechanisms influences the dividend payout ratio of listed Chemical and Paints firms in Nigeria. Therefore the following specific objectives are set out below:

- 1. to examine the impact of board size (BS) on dividend payout ratio of Listed Chemical and Paints firms in Nigeria;
- 2. to investigate the influence of board composition (BC) on dividend payout ratio of Listed Chemical and Paints firms in Nigeria;
- 3. to determine the effect of audit committee size (ACS) on dividend payout ratio of Listed Chemical and Paints firms in Nigeria;
- 4. to determine the contribution of audit committee meeting (ACC) on dividend payout ratio of Listed Chemical and Paints firms in Nigeria;

As a result of the forgoing objective, the following null hypothesis has been set out to test them.

- **Ho**₁ Board size has no significant impact on Dividend payout ratio
- Ho₂ Board composition has no significant influence on Dividend payout ratio
- Ho₃ Audit committee size has no significant effect on Dividend payout ratio
- **Ho**₄ Audit committee composition has no significant contribution on Dividend payout ratio

A study of this nature will in doubt serve as an indispensable planning tool for managers, policy makers, Investors and potential investors. It will assist managers to establish corporate governance that helps in maximizing shareholders wealth through the payment of dividend or capital gain. In order to achieve the above stated objectives, this paper is organized into five sections, with this section being the Introduction. Section 2 deals with the review of relevant and related literatures. Section 3 is dedicated to the methodology of the study. Section 4 present and discuss the result of the data analysis. Section 5 concludes the study by drawing emphasis on the findings and the policy implications of the outcome.

Literature Review and Theoretical Framework

Jensen (1993) and Lipton and Lorsch (1992) have argued that large Boards are less effective and are easier for a CEO to control. Raheja (2005) showed that larger Boards have higher coordination costs. Also smaller Boards reduce the possibility of free riding by individual directors and thus increase their decision-making processes. Studies by Wen et al. (2002) and Abor (2007) found evidence in support of a positive relationship between Board size and leverage. They argued that large Boards with superior monitoring ability pursue higher leverage to raise the value of the firm. There are two competing views in the literature about the effect of board

size. One view is that large boards allow directors to specialize. Greater specialization can lead to more effective monitoring (Klein, 2002), and hence lower dividends are needed for the monitoring role. The other view is that large boards are less effective than small boards due to the difficulties of coordinating large groups (Jensen, 1993).

A general consensus is that non-executive directors are deemed to act as "professional referees" to ensure shareholder value maximization (Fama, 1980). Jiraporn et al. (2008) found a positive and insignificant relationship between the Board structure and both dividend policy and payout. The respective literatures on the theory of the firm and corporate governance suggest that a firm's board of directors is an important institution for mitigating the agency problem that arises with absentee ownership (Farinha, 2003). The agency problem in this context is that the interests of management may differ from the interests of the shareholders for whom they work and that management may make business decisions in response to the former rather than the latter (Michel et al., 2007).

Rozeff (1982) argues that dividend policy is a mechanism to reduce agency costs. In the absence of any other monitoring, shareholders would need the agency monitoring element of dividend policy. On the other hand, independent non-executive directors (NED) may act as a monitoring device on the firm's managers, thus dampening in principle, the need for higher dividend payouts. If independent directors are an effective monitoring device, then board independence and dividend policy should be substitutes in the monitoring of agency problems (Abdelsalam et al., 2008). However, if the monitoring of outside directors is insufficient, it is possible that NEDs may influence higher dividend payouts by a company, to enhance managerial monitoring by external capital markets (Farinha, 2003).

Several empirical studies in accounting have focused on the voluntary formation of audit committees to identify factors affecting an entity's decision to create an audit committee directly responsible for overseeing the financial reporting process (Pincus, Rusbarsky and Wong, 1989). Several studies document that the presence of an audit committee is associated with fewer incidences of financial reporting problems and as such is believed to have influence on the dividend policy of the company. The audit committee is perceived to be fairly competent in reviewing, analyzing and evaluating matters concerning audit, non-finance matters and the accounts of the company. Shamsher and Zulkarnain (2001) while investigating the wealth effects of announcements of audit committee formation by main board of firm, found that significant negative abnormal returns were recorded during the period surrounding the announcement, indicating that investors perceive the mandatory requirement of audit committee as negative news.

Theoretical Framework

Agency theory

Even if a firm does not have free cash flow, dividend payments can still be useful for the shareholders in order to control the overinvestment problem. Easterbrook (1984) argues that dividends reduce the overinvestment problem because the payment of dividends increases the frequency with which firms have to go to equity markets in order to raise additional capital. In the process of attracting new equity, firms subject themselves to the monitoring and disciplining of these markets. This lowers agency cost.

Bird-in-the-hand theory

The "Bird in Hand" theory of Gordon (1962) argues that outside shareholders prefer a higher dividend policy. They prefer a dividend today to a highly uncertain capital gain from a questionable future investment. A number of studies demonstrate that this model fails if it is posited in a complete and perfect market with investors who behave according to notions of rational behavior (Miller & Modigliani, 1961; Bhattacharya, 1979).

Signaling Theory

According to the information content of dividends or signaling theory, firms, despite the distortion of investment decisions to capital gains, may pay dividends to signal their future prospects (Amidu, 2007). The intuition underlying this argument is based on the information asymmetry between managers (insiders) and outside investors, where managers have private information about the current and future fortunes of the firm that is not available to outsiders. For the purpose of this research work, the above theories are used to underpin the study.

Research Methodology and Model Specification

This study adopts the Ex-post factor design method. This is because the study investigates the impact of corporate governance mechanisms on dividend payout ratio of listed Chemical and Paints firms in Nigeria. The data for this study were obtained mainly from secondary sources which were collected from the audited annual reports and accounts of the listed Chemical and Paints firms in Nigeria between the periods of 2008 to 2013. The population of the study consists of the Eight (8) listed Chemical and Paints firms in Nigeria, while the entire eight firm's data were used. This research work is descriptive and highly empirical as it embraces the use regression analysis where Ordinary Least Square Technique is employed. Multiple regression technique was used and SPSS was used as our tool of analysis.

Model Specification

In an attempt to examine the influence of corporate governance mechanisms on dividend payout ratio of listed Chemical and Paints firms in Nigeria, a multiple linear model is built. The model captures the contribution of board size, board composition, audit committee size, and audit committee composition on dividend payout ratio of listed Chemical and Paints firms in Nigeria.

DIVPAY_{it} =
$$\alpha + \beta_1 BS_{it} + \beta_2 BC_{it} + \beta_3 ACS_{it} + \beta_4 ACC_{it} + \mu_{it}$$

Where DIVPAY is Dividend Payout ratio measured as ratio of dividend paid over total asset

BS: Board size measured as the number of board members

BC: Board composition measured as the ratio of outside directors to the total directors.

ACS: Audit committee size measured as the number of audit committee members

ACC: Audit committee composition measured as the ratio of outside committee members to the total members of audit committee.

α is constant

 β_1 – β_4 are the coefficient of the parameter estimate. μ is the error term.

Results and Discussions

This segment presents the analysis of the data and tests of hypotheses formulated in section one of the paper. First, descriptive statistics table is presented and analysed, followed by the correlation matrix table and the summary of Regression Result table, The policy implications and Recommendation are made and drawn from the findings of the study.

Table 4.1: Descriptive Statistics

Variable	Min	Max	Mean	Std. Dev.	Skewness
DIVPAY	.0000	.9786	.087685	.2092192	2.899
BS	5.00	12.00	7.4375	1.60989	.581
ВС	.57	.89	.7454	.07847	072
ACS	4.00	6.00	5.1667	.95279	348
ACC	.50	.60	.5042	.02019	4.737

Extracted from SPSS 15 output file

From Table 4.1 above, the mean value for dividend payout ratio is 9% for firms, while Board size and Audit committee size were having an average value of 7 and 5 respectively. Also, board composition have an average value of about 75% and audit committee composition mean value stood at 50% within the period of the study. The minimum value for dividend payout ratio is 0.000 while the maximum is 0.9786. The minimum value of dividend payout ratio is as a result of the fact that some of the firms do not pay dividend for some years. Board size has a minimum value of 5 and a maximum value of 12. Board composition and Audit committee composition recorded a minimum value 57% and 50% and a maximum value of 89% and 60% respectively. Audit committee size recorded a minimum value of 4 and a maximum value of 6. It is observed that among the independent variables, board size have the highest standard deviation and therefore it shows that the board size have the least contribution to the explained variable. While on the other hand, audit committee composition has the lowest standard deviation and it therefore shows its highest contribution to the explained variable of the study. The skewness values were all close to 0 and 1 which implies that the data is tolerably mild and normally distributed except for dividend payout ratio and audit committee composition that is high than normal. Therefore the result from the normality test substantiates the validity of the regression result.

The Correlation Matrix Table

The table below explains the association between the regressand and the regressors and also the association between the regressors themselves. The values were extracted from the Pearson correlation of two-tailed significance.

Table 4.2: Correlation Matrix

Variable	DIVPAY	BS	BC	ACS	ACC
DIVPAY	1				
BS	-0,333*	1			
ВС	-0.395**	0.079	1		
ACS	-0.314*	-0.118	0.130	1	
ACC	-0.088	-0.057	-0.095	-0.037	1

Extracted from SPSS 15 output file

- *. Correlation is significant at the 0.05 level (2-tailed).
- **. Correlation is significant at the 0.01 level (2-tailed).

Table 4.2 above shows that all the independent variables (BS, BC, ACS and ACC) are negatively related with DIVPAY. However, board size and audit committee composition were significantly related with Dividend payout ratio at 5% level of significance indicating a strong, negative relationship. Also board composition was strongly, negatively and significantly related to dividend payout ratio at 1% level of significance. While for audit committee composition and dividend payout ratio was insignificantly related. Amongst the exogenous variables, the relationship was very weak as expected. While some of the independent variables are negatively related, some were also positively related with themselves. The tolerance values and the variance inflation factor are two good measures of assessing multicolinearity between the independent variables in a study. The result shows that variance inflation factor were consistently smaller than ten (10) indicating complete absence of multicolinearity (e.g Neter et 'al; 1996 and Cassey et 'al; 1999). This shows the suitability of the study model been fit with the four independent variables. Also, the tolerance values were consistently smaller than 1.00, therefore extend the fact that there is complete absence of multicolinearity between the independent variables (Tobachmel & Fidell, 1996).

The Summary of regression result is presented in Table 4.3

This table shows the regression result of the endogenous variable (DIVPAY) and the exogenous variables of the study (BS, BC, ACS and ACC). The presentation is followed by the analysis of the relationship and contribution of all the independent variables to the dependent variable of the study and also the cumulative analysis.

Table 4.3: Summary of Regression Result

Variable	Coefficient	t-values	P-values	Tolerance	VIF
Constant	1.513	2.089	0.043		
BS	035	-2.192	0.034	0.974	1.026
ВС	-1.146	-3.507	0.001	0.967	1.034
ACS	.073	2.717	0.009	0.966	1.036
ACC	-1.370	-1.090	0.282	0.987	1.013
R					0.613
R ²					0.375
Adj R ²					0.317
F-Stat.					6.457
F-Sig					0.000
D/W					0.847

Extracted from SPSS 15 Output File

The cumulative correlation between the endogenous variable and all the exogenous variables is 0.613 showing that the association between Dividend payout ratio and Corporate Governance Mechanisms used in the study is 61% which is positively, strongly and statistically significant. This implies that for any changes in Corporate Governance Mechanisms of listed Chemical and Paints firms in Nigeria; their Dividend Payout ratio will be directly affected.

The cumulative R^2 (0.375) which is the multiple coefficient of determination gives the proportion of the total variation in the endogenous variable explained by the exogenous variables jointly. Hence, it signifies 38% of the total variation in Dividend payout ratio of listed Chemical and Paints firms in Nigeria is caused by their Board size, Board composition, Audit committee size, and Audit committee composition. This indicates that the model of the study is fit and the exogenous variables are properly selected, combined and used. The Durbin Watson tests of first order auto-correlation which have a value of 0.847 which is above 50% indicates that errors are uncorrelated to each other and hence shows the absence of serial correlation within the period of the study.

Board Size and Dividend Payout Ratio

From the table above, board size has a t-value of -2.192 and a coefficient value of -0.035 which is significant at 5%. This signifies that board size has negative, strong and significant influence on the dividend payout ratio of listed Chemical and Paints firms in Nigeria. It therefore implies that for every 1% increase in the number of board members, the dividend payout ratio of listed Chemical and Paints will decrease by N0.04 This provides an evidence of rejecting null hypothesis one of the study which states that board size has no significant influence on dividend payout ratio.

Board composition and Dividend Payout Ratio

From the table above, board composition has a t-value of -3.507 and a coefficient value of -1.146 which is significant at 1%. This signifies that board composition have negative, strong and significant influence on the dividend payout ratio of listed Chemical and Paints firms in Nigeria. It therefore implies that for every 1% increase in the Proportion of outside members on board in listed Chemical and Paints firms in Nigeria, the dividend payout ratio will decrease by N1.15. This provides an evidence of rejecting null hypothesis two of the study which states that board composition has no significant effect on dividend payout ratio.

Audit committee Size and Dividend payout Ratio

From the table above, audit committee size has a t-value of 2.717 and a coefficient value of 0.073 which is significant at 1%. This signifies that audit committee size is positively, strongly and significantly influencing the dividend payout ratio of listed Chemical and Paints firms in Nigeria. It therefore implies that for every increase in the number of audit committee members in listed Chemical and Paints firms in Nigeria, the dividend payout ratio will increase by N0.07 This provides an evidence of rejecting null hypothesis three of the study which states that Audit committee size has no significant impact on dividend payout ratio.

Audit Committee Composition and Dividend Payout Ratio

From the table above, audit committee composition has a t-value of -1.090 and a coefficient value of -1.370 which is insignificant. This signifies that audit committee composition have negative, weak and insignificant influence on the dividend payout ratio of listed Chemical and Paints firms in Nigeria. It therefore implies that for every 1% increase in the Proportion of outside members of audit committee in listed Chemical and Paints firms in Nigeria, the dividend payout ratio will have no any significant changes. This provides an evidence of failing to reject null hypothesis four of the study which states that audit committee composition has no significant effect on dividend payout ratio.

Conclusions and Recommendations

The paper investigates the influence of corporate governance mechanisms on dividend payout ratio of listed Chemical and Paints firms in Nigeria. Board size, board composition, audit committee size, and audit committee composition constitute the corporate governance mechanisms of the selected firms, while the ratio of dividend paid to total asset represents the dividend payout ratio which stands as the endogenous variable of the study. It was found that board size, board composition has negatively, strongly and significantly impacted on dividend payout ratio of listed Chemical and Paints firms in Nigeria, while audit committee size have positive, strong and significant influence on dividend payout ratio. But audit committee composition shows no significant contribution to dividend payout ratio of listed Chemical and Paints firms in Nigeria.

Therefore the result implies that firms that have higher number of board members and also high outside members on board are likely to have reduction in dividend payout ratio, while firms with higher number of audit committee size are more likely to have increase in their dividend payout ratio. It is recommended amongst others that the listed Chemical and Paints firms should increase the number of audit committee members where investors are only interested in dividend payment as it may serve as a sure means of having increase in payment of dividend to

shareholders. But where shareholders are only interested in capital gain rather than dividend payment, the number of board members and outside directors should be increased as this will discourage payment of high dividend in favour of capital gain.

References

- Abor, J. (2007), "Corporate Governance and Financing Decisions of Ghanaian Listed firms Corporate Governance." International Journal of Business in Society, 22(1), 83-92.
- 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), 252-70.
- Abdesalam, O., El-Masry, A. & Elesgini, A. (2008), "Board composition, ownership structure and dividend policies in an emerging market." Managerial Finance, 34(12), 953-964.
- Amidu, M. (2007), "How does Dividend policy Affect Performance of the Firm on Ghana Stock Exchange?" Investment Management and Financial Innovations, 4(2), 103-112.
- Bhattacharya, S. (1979), "Imperfect Information, Dividend Policy, and The Bird In The Hand Fallacy." Bell Journal of Economics, 10(1), 259-270.
- Easterbrook, F. H. (1984), "Two Agency-cost Explanations of Dividends." American Economic Review, 74, 220-30.
- Eckbo, B.E. & Verma, S. (1994). "Managerial share ownership, voting power, and Cash Dividend Policy." Journal of Corporate Finance, 1, 33–62.
- Esmailzadeh, A., Jalili, M. & Zand, A. (2010), "Effect of Corporate Governance on Earnings Quality in Tehran Stock Exchange." Journal of Management Accounting, 3(7), 79-91.
- Fakhari, H. & Yosofalitabar, N. (2010), "The survey of relationship between dividend policy and corporate Governance in Listed Companies in Tehran Stock Exchange." Accounting and Auditing Review, 62, 69-84.

- Farinha, J. (2003). "Dividend Policy, Corporate Governance and The Managerial Entrenchment Hypothesis: An Empirical Analysis." Journal of Business, Finance & Accounting, 30, 1173-1209.
- Fama, E.F. (1980), "Agency problems and the Theory of the Firm." Journal of Political Economy, 88(2), 288-307.
- Fama, E.F. & Jensen, M.C. (1983), "Separation of ownership and control." Journal of Law and Economics, 26, 301-325.
- Gugler, K. & Burcin, Y. (2003). "Corporate Governance and Dividend Pay-out policy in Germany." European Economic Review, 47,731-758.
- Gul, F. & Leung, S. (2004), "Board leadership, Outside Directors Expertise and Voluntary Corporate Disclosures." Journal of Accounting & Public Policy, 23,351-79.
- Jensen, G.R., Donald S. & Thomas, S.Z. (1992). "Simultaneous Determination of Insider Ownership, Debt and Dividend Policies." The Journal of Financial and Quantitative Analysis, 27, 247-263.
- Jensen, M. (1986). "Agency Costs of Free Cash Flow, Corporate Finance, and Takeovers." American Economic Review, 76, 323-329.
- Jensen, M.C. (1993). "The Modern Industrial Revolution, exit and the Failure of Internal Control Systems." Journal of Finance, 48(3), 831-80.
- Jiraporn, P., Kim, J.C. & Kim, Y.S. (2008). "Dividend Policy and Corporate Governance Quality." Available at http://69.175.2.130/~finman/Reno/Papers/DividendGovernanceQuality2008.pdf
- Klein, A. (2002). "Audit Committee, Board of Director Characteristics, and Earnings Management." Journal of Accounting and Economics, 33(3), 375-400.
- Lipton, M. & Lorsch, J.W. (1992). "A Modest Proposal for Improved Corporate Governance." Business Lawyer, 48(1), 59-77.
- Mashayekh, S. & Abdollahi, M. (2011), "The Survey of Relationship between Ownership Concentration, firm Performance, and Dividend policy in listed Companies in the Tehran Stock Exchange." Financial Accounting Research Journal, 4, 71-86.

- Mehrani, Moradi & Eskandar, (2011), "Ownership Structure and Dividend Policy: Evidence from Iran." African Journal of Business Management, 5(17), 7516-7525.
- Michel, L., Steven A. & Mitchell, A. (2007), "The Top Team: Examining Board Composition and firm Performance, Corporate Governance." 7(5), 547-561.
- Miller, M. H. & Modigliani, F. (1961), "Dividend Policy, Growth and the Valuation of Shares." The Journal of Business of the University Chicago, 34(4), 433-43.
- Pincus, K., M. Rusbarsky & J. Wong. (1989), "Voluntary Formation of Audit Committees among NASDAQ firms." Journal of Accounting and Public Policy. Vol. 8, 239-265.
- Raheja, C.G. (2005). "Determinants of Board Size and Composition: A Theory of Corporate Boards." Journal of Financial and Quantitative Analysis, 40, 283-306
- Rozeff, M. S. (1982). "Growth, beta and Agency Costs as Determinants of Dividend Payout Ratios." Journal of Financial Research, Fall, 249-59.
- Wen, Y. & Jia, J. (2010). "Institutional Ownership, Managerial Ownership and Dividend Policy in Bank Holding Companies." International Review of Accounting, Banking and Finance, 2(1), 8-21.
- Setayesh, M.H. & Ebrahimi, F. (2012). "The Effect of Corporate Governance Mechanisms on Earnings Information Content of Listed Companies in Tehran Stock Exchange." Journal of Accountancy, 8, 31-48.
- Shamsher Mohd & Zulkarnain M. Sori. (2001), "The Wealth Effect on Announcements of Audit Committee Formation." in Proceedings of the Asian Academic Accounting Association World Conference, Penang, September.
- Short, H. Hao, Z. & Kevin, K. (2002). "The link between Dividend Policy and Institutional Ownership." Journal of Corporate Finance, 8, 105–22.
- Yermack, D. (1996). "Higher market valuation of companies with a small board of directors." Journal of Financial Economics, 40(2), 185-211.

Appendix A: Population of the Study

- 1. African Paints (Nigeria) Plc
- 2. Berger Paints Plc
- 3 Chemical and Allied Products Plc
- 4. DN Meyer Plc
- 5. IPWA Plc
- 6. Paints and Coatings Manufacturers Nigeria Plc
- 7. Portland Paints and Products Nigeria Plc
- 8. Premier Paints Plc

Appendix B: Regression Result

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std.	Skewn	ess
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error
DIVPAY	48	.0000	.9786	.087685	.2092192	2.899	.343
BS	48	5.00	12.00	7.4375	1.60989	.581	.343
BC	48	.57	.89	.7454	.07847	072	.343
ACS	48	4.00	6.00	5.1667	.95279	348	.343
ACC	48	.50	.60	.5042	.02019	4.737	.343
Valid N (listwise)	48						

Correlations

		DIVPAY	BS	BC	ACS	ACC
DIVPAY	Pearson Correlation	1	333 *	395 **	.314 *	088
	Sig. (2-tailed)		.021	.005	.030	.551
	N	48	48	48	48	48
BS	Pearson Correlation	333 *	1	.079	118	057
	Sig. (2-tailed)	.021		.596	.425	.699
	N	48	48	48	48	48
вс	Pearson Correlation	395 **	.079	1	.130	095
	Sig. (2-tailed)	.005	.596		.379	.520
	N	48	48	48	48	48
ACS	Pearson Correlation	.314 *	118	.130	1	037
	Sig. (2-tailed)	.030	.425	.379		.804
	N	48	48	48	48	48
ACC	Pearson Correlation	088	057	095	037	1
	Sig. (2-tailed)	.551	.699	.520	.804	
	N	48	48	48	48	48

^{*} Correlation is significant at the 0.05 level (2-tailed).

 $^{^{\}star\star}\cdot$ Correlation is significant at the 0.01 level (2-tailed).

Variables Entered/Removed

Model	Variables Entered	Variables Removed	Method
1	ACC, ACS, BS, BC		Enter

- a. All requested variables entered.
- b. Dependent Variable: DIVPAY

Model Summary b

b

							Change Statistics			
Model	D	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change	Durbin- Watson
1	.613 ^a	.375	.317	.1728903	.375	6.457	4	43	.000	.847

a. Predictors: (Constant), ACC, ACS, BS, BC

ANOVA b

Model		Sum of Squares	df	Mean Square	F	Sia.
1	Regression	.772	4	.193	6.457	.000 a
	Residual	1.285	43	.030		
	Total	2.057	47			

a. Predictors: (Constant), ACC, ACS, BS, BC

Coefficients a

		Unstandardized Coefficients		Standardized Coefficients			Collinearity St	atistics
Model		В	Std. Error	Beta	t	Sia.	Tolerance	VIF
1	(Constant)	1.513	.724		2.089	.043		
	BS	035	.016	268	-2.192	.034	.974	1.026
	BC	-1.146	.327	430	-3.507	.001	.967	1.034
	ACS	.073	.027	.333	2.717	.009	.966	1.036
	ACC	-1.370	1.257	132	-1.090	.282	.987	1.013

a. Dependent Variable: DIVPAY

b. Dependent Variable: DIVPAY

b. Dependent Variable: DIVPAY

Collinearity Diagnostics

			Condition	Variance Proportions				
Model	Dimension	Eigenvalue	Index	(Constant)	BS	BC	ACS	ACC
1	1	4.928	1.000	.00	.00	.00	.00	.00
	2	.043	10.644	.00	.64	.00	.24	.00
	3	.020	15.850	.01	.33	.09	.74	.01
	4	.008	25.284	.02	.01	.84	.00	.05
	5	.001	84.130	.97	.02	.07	.02	.94

a. Dependent Variable: DIVPAY

Residuals Statistics

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	165809	.405833	.087685	.1281622	48
Residual	2670991	.6877749	.0000000	.1653697	48
Std. Predicted Value	-1.978	2.482	.000	1.000	48
Std. Residual	-1.545	3.978	.000	.957	48

a. Dependent Variable: DIVPAY