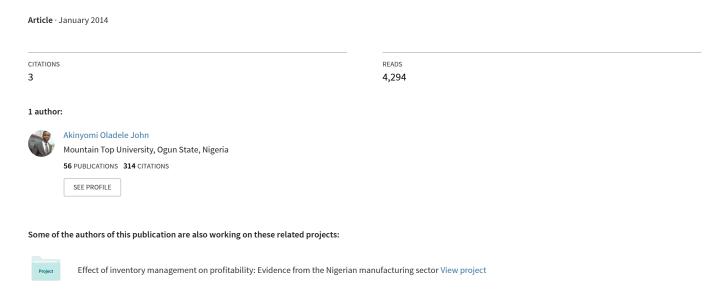
## Relationship between dividend payout and financial performance of manufacturing firms in Nigeria.



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# RELATIONSHIP BETWEEN DIVIDEND PAYOUT AND FINANCIAL PERFORMANCE OF MANUFACTURING FIRMS IN NIGERIA

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#### **ABSTRACT**

Previous studies have indicated that dividend policy remains a controversial issue in corporate finance. Specifically, the results of prior studies on the relationship that exists between dividend payout and organizational performance have been conflicting and open to further research. Thus, this study examined the effects of dividend payout on performance of manufacturing firms in Nigeria. Data were obtained from secondary sources, particularly five (5) years audited financial statements of ten randomly selected companies, making a total of fifty firm years. The results of the regression analysis revealed a significant and positive relationship between dividend payout and profit after tax on one hand; but no significant relationship between dividend payout and shareholders' funds on the other hand. One of the recommendations is that the boards of directors of the manufacturing firms are to ensure that dividends payment is sustained so as to continually boost the firms' profitability.

Keyword: Dividend Payout, Profitability, Manufacturing, Nigeria.

#### **INTRODUCTION**

Comprehending dividend policy has for many years been one of the most significant challenges in finance. In fact, the issue of dividend policy is a very important one in the current business environment. According to Uwuigbe, Jafaru and Ajayi (2012), dividend policy remains one of the most important financial policies, not only from the viewpoint of the company, but also from that of the shareholders, the consumers, employees, regulatory bodies and the government. For a company, it is a pivotal policy around which other financial policies rotate. Dividend or profit allocation decision is one of the four decision areas in finance. Dividend decisions are important because they determine what portion of a firm's profits is distributed to investors and what proportion is to be retained by the firm for further investment (Ross *et al.*, 2002). In addition, it communicates important information to stakeholders concerning the firm's performance. The firm's current investments determine its future earnings and its future potential dividends, and influence the cost of capital.

The patterns of corporate dividend policies differ over time and across countries, especially between manufacturing firms in developed and emerging economies (Amidu, 2007). It has been observed that dividend payout ratios in the developing countries were only about two thirds of that of developed countries (Amidu, 2007). Ramcharran (2001) also reported a low dividend yields for business organizations in emerging markets. Thus, it appears there is not yet a universally accepted dividends payout ratio appropriate for all organizations in all countries. Akinyomi (2013) observed that dividend policy remains a controversial issue in corporate finance. Although several studies that focused on dividend policies and how such policies affect firms' earnings have been conducted by previous researchers (Adelegan, 2003; Lie, 2005; Amidu, 2007); the results of these previous studies have been inconsistent and controversial. While the results of some of these studies indicated a positive relationship between dividend payout and firms' earnings (Amidu, 2007); others reported a negative relationship between dividends payout and firms' earnings (Lie, 2005). Thus Amidu (2007) observed that many firms are undecided on whether to pay a large, small or zero percentage of their earnings as dividends

or to retain them for future investments. This indecision becomes complicated as the management tries to satisfy the needs of the various stakeholders; such as the shareholders, bankers, employees, creditors and regulatory authorities amongst others. Thus, the need to ascertain the nature of the relationship between dividend payout and financial performance of Nigerian manufacturing companies necessitates the current study. The objective of the study is to determine the relationship between dividend payout and profit after tax as well as shareholders' funds in manufacturing firms in Nigeria.

#### LITERATURE REVIEW

Profitability is the primary goal of all business ventures. Without it, the business will not survive in the long run. Profitability is a measure of organizational financial performance; it indicates the earnings generated by the company (Fama & French, 2006). Meanwhile, a dividend is a distribution of a company's earnings, decided by the board of directors, to a class of its shareholders (Arthur & Sheffrin, 2003). It is a distribution of profits. When a company earns a profit, it can either re-invest it in the business (called retained earnings), or it can distribute it to shareholders. A company may retain a portion of its earnings and pay the remainder as a dividend (Arthur & Sheffrin, 2003). The following theoretical foundations are among the most popular on the concept of dividends. A brief description of each of them is provided as follows:

#### Agency Theory

This theory suggests that dividend policy is determined by agency costs arising from the divergence of ownership and control. Managers may not always adopt a dividend policy that is value-maximizing for shareholders but would choose a dividend policy that maximizes their own private benefits. Making dividend payouts which reduces the free cash flows available to the managers would thus ensure that managers maximize shareholders' wealth rather than using the funds for their private benefits (DeAngelo, DeAngelo & Stulz, 2006).

#### Signaling Theory

The theory proposes that dividend policy can be used as a device to communicate information about a firm's future prospects to investors. Cash dividend announcements convey valuable information, which shareholders do not have, about management's assessment of a firm's future profitability thus reducing information asymmetry. Investors may therefore use this information in assessing a firm's share price. Dividend policy under this model is therefore relevant (Al-Kuwari, 2009).

#### Bird-in-hand Theory

This theory proposes that a relationship exists between firm value and dividend payout. It states that dividends are less risky than capital gains since they are more certain. Investors would therefore prefer dividends to capital gains (Amidu, 2007). Because dividends are supposedly less risky than capital gains, firms should set a high dividend payout ratio and offer a high dividend yield to maximize stock price.

Arnort and Ashess (2002) investigated the relationship between the growth in dividends and revenue. They explored why the dividend payment ratio has reduced but price/earnings per share ratio continued to increase from 1995 to 2001. The results of Arnort and Ashess (2002) showed that lower dividend payment ratio and higher price earnings per share ratio suggest the future growth in revenues.

Zhou and Ruland (2006) supported the findings of Arnort and Ashess (2002). Zhou and Ruland (2006) examined the possible impact of dividend payouts on corporate future earnings' growth. The study used a sample of active and inactive stocks of listed firms in NYSE and NASDAQ with positive, non-zero payout ratio companies covering the period from 1950-2003. The regression results revealed a strong positive relationship between payout and future earnings growth. Zhou and Ruland (2006) concluded that a possible reason for this was to be found in the

free cash flow hypothesis; that is, that high dividend payouts would reduce agency costs and curb over-investment, thereby creating a favourable environment for future earnings growth.

Huang, You and Lin (2009) carried out an investigation on dividend payout ratios and subsequent earnings growth in Taiwanese stock-listed companies. Data for the study were obtained from Taiwan Economic Journal for a five year period. The analysis was conducted using the ordinary least square regression. The results revealed that for the dual-dividend sample, high dividend payout ratios equate to higher earnings growth. As regards future returns, high dividend payout ratios were also found to be associated with subsequently strong high returns for the dual-dividend sample.

Murekefu and Ouma (2013) conducted a study on the relationship between dividend payout and firm performance among listed firms in the Nairobi Security Exchange in Kenya. The study used correlation analysis to establish the relationship between dividend payout and financial performance. The population of the study consisted of the fifty-eight companies listed on the Nairobi Security Exchange. Secondary data were obtained from the accounts of forty-one selected companies. The result of the regression analysis revealed that a strong and positive relationship exists between dividend payout and performance.

Ajanthan (2013) examined the relationship between dividend payout and firm profitability among listed hotels and restaurant companies in Sri Lanka. The study used correlation analysis to establish the relationship between dividend payout and financial performance. The population of the study consisted of the sixteen hotels and restaurant companies listed on the Colombo Stock Exchange. The result of the regression analysis revealed that a strong and positive relationship exists between dividend payout and performance.

In Pakistan, Khan (2012) examined the effect of dividend announcements on stock prices of companies within the chemical and pharmaceutical industry of Pakistan. A sample of twenty five companies listed at KSE-100 Index was taken from the period of 2001to 2010. Results of the

study was based on the Fixed and Random Effect Model which was applied on Panel data to explain the relationship between dividends and stock prices as well as control variables such as earnings per share, retention ratio and return on equity. Results indicated that cash dividends, retention ratio and return on equity has a significant positive relationship with stock market prices and significantly explains the variations in the stock prices of the chemical and pharmaceutical sector of Pakistan, while earnings per share and stock dividends have a negative insignificant relationship with stock prices. The study further showed that the dividend irrelevance theory was not applicable in the case of the chemical and pharmaceutical industry of Pakistan.

Ling, Mutalip, Shahrin and Othman (2008) studied the characteristics of dividend paying companies of Malaysia. Results of their study show that dividend paying companies are more profitable, less risky and more mature in their activities as compared to non-dividend paying companies. Their results further indicate that managers of Malaysian companies understand the importance of paying dividends and they pay dividends even if the companies are not earning profit at the moment; in other words, dividends are being paid out of retained earnings.

Another study conducted by Ho (2002) using panel data approach and fixed effect regression model show a positive relationship between dividend policy and size of Australian firms and liquidity of Japanese firms. He found a negative relationship between dividend policy and risk in the case of only Japanese firms. The overall industrial effect of Australia and Japan was found to be significant.

#### MATERIAL AND METHODS

This study employs the correlation analysis to investigate the relationship between dividend payout and financial performance of Nigerian manufacturing firms. The population of this study comprises of the twenty-eight (28) Food and Beverage firms listed under the manufacturing industry in the Nigerian stock exchange. Data for the study was obtained from the secondary sources, specifically, five (5) years audited financial statements of ten (10) randomly the selected

companies, making a total fifty (50) firm. The analysis was carried out using the regression analysis.

$$Y_1 = \beta_0 + \beta_1 X_1 + \tag{i}$$

$$Y_2 = \beta_0 + \beta_2 X_2 + \varepsilon_2 \tag{ii}$$

Where:  $Y_1$  and  $Y_2$  = Actual Dividends Paid (ADP);  $X_1$  = Profit after Tax (PAT);  $X_2$  = Shareholders Funds (SHF);  $\beta_0$  = Constant or intercept;  $\beta_1$  = Coefficient of  $X_1$ ;  $\beta_2$  = Coefficient of  $X_2$ ;  $\varepsilon_1$  and  $\varepsilon_2$  = Error term or Stochastic factor.

#### RESULTS AND DISCUSSION

**Table 1**: Descriptive Statistics

	Minimum	Maximum	Std.		
Millimuni		Maximum	Mean	Deviation	N
ADP(N'00)	543219.12	19632412.82	6226019.17	7462253.189	50
PAT(N'00)	1206781.14	22757236.45	8855714.50	7925587.327	50
SHF(N'000)	3366002.63	41680774.35	20750967.67	16035125.612	50

**Source:** Annual Reports of the selected firms for various years

The result in table 1 shows that the actual dividend payout of the sampled firms during the study period ranges from N543 million (\$337,600) to N19.63 billion (\$122,045,840). The profit after tax lies between N1.20 billion and N22.75 billion and the shareholders fund lies between N3.36 billion and N41.68 billion. The result also indicates that on average the selected firms pay out N6.22 billion as dividend and a standard deviation of 7462253.189. Profit after tax has a mean of N8.85 billion and a standard deviation of 7925587.327 and shareholders fund has an average of N20.75 billion and a standard deviation of 16035125.612.

Table 2 reports the result of the correlation analysis between actual dividend payout and profit after tax for the sampled manufacturing firms within the food and beverage sector in Nigeria.

Table 2: Results of correlation between actual dividend payout and profit after tax

Items	Values	Items	Values

Relationship between dividend pa	lationship between dividend payout and financial performance		
R	0.957	R Square Change	0.916
Rsquare	0.916	F Change	43.519
Adjusted R-Square	0.895	df1	1
Std. Error of the Estimate	2420583.330	df2	4
Sig. F Change	0.003	Durbin- Watson	2.219

Source: Author's computations

The results in Table 2 indicate that the value of the coefficient of correlation (R) is 0.957. This shows a strong positive correlation. The coefficient of determination ( $R^2$ ) stood at 0.916. This indicates that only 91.6% of the total variation of actual dividend payout is accounted for by profit after tax, while the remaining 8.4% is accounted for by other variables. The adjusted  $R^2$  of 0.895 compliments the high explanatory power of the  $R^2$ . The standard error of the estimate is 2420583.330. This is low compared to the standard deviation of the mean of the actual dividend paid 7462253.189 (Table 2). The model is therefore adequate and preferred. The Durbin-Watson (DW) statistics is 2.219. Table 3 also presents the analysis of variance between the actual dividend paid and profit after tax. In all, a significant and positive relationship (p = 0.003) was established between actual dividends payout and profit after tax of the firms. Thus, this study fails to accept the null hypothesis and therefore concludes that there is a significant relationship between profit after tax and dividend payout in manufacturing firms in Nigeria.

**Table 3:** Analysis of Variance (ANOVA<sup>b</sup>) result for actual dividend payout and profit after tax

	Sum of Squares	Df	MeanSquare	Fstatistics	PValue
Regression	$2.550 \text{x} 10^{14}$	1	$2.55 \times 10^{14}$	43.519	0.003
Residual	$2.344 \times 10^{13}$	4	$5.859 \times 10^{12}$		
Total	$2.784 \times 10^{14}$	5			

Predictors: (Constant), PAT (N'000) b. Dependent Variable: ADP (N'000)

Source: Author's computations

Table 4 reports the result of the correlation analysis of actual dividends payout and shareholders' funds of the firms.

**Table 4:** Correlation results of actual dividends payout and shareholders' funds of the firms

Items	Values	Items	Values
R	0.715	R Square Change	0.511
Rsquare	0.511	F Change	4.181
Adjusted R-Square	0.389	df1	1
Std. Error of the Estimate	5833743.654	df2	4
Sig. F Change	0.110	Durbin- Watson	1.653

Source: Author's computations

The results from Table 4 indicate that the value of the coefficient of correlation (R) is 0.715. This shows a strong positive correlation. The coefficient of determination ( $R^2$ ) stood at 0.511. This indicates that only 51.1% of the total variation of actual dividend payout is accounted for by the shareholders' fund, while the remaining 48.9% is accounted for by other variables. The adjusted  $R^2$  of 0.389 compliments the high explanatory power of the  $R^2$ . The standard error of the estimate is 5833743.654. This is low compared to the standard deviation of the mean of the dependent variable 7462253.189. The model is therefore adequate and preferred. The Durbin-Watson (DW) statistics is 1.653. Table 5 also presents the analysis of variance between the dependent and the independent variables. In all, no significant relationship (p = 0.110) was established between actual dividends payout and shareholders' funds of the firms. Thus, we accept the null hypothesis and therefore conclude that there is no significant relationship between the shareholders' fund and dividend payout in manufacturing firms in Nigeria.

**Table 5:** Analysis of Variance (ANOVA<sup>b</sup>) result for actual dividends payout and shareholders' funds of the firms.

	Sum of Squares	Df	MeanSquare	Fstatistics	PValue
Regression	$1.423 \times 10^{14}$	1	$1.423 \times 10^{14}$	4.181	0.110
Residual	$1.361 \times 10^{14}$	4	$3.403 \times 10^{13}$		
Total	$2.784 \times 10^{14}$	5			

Source: Author's computations

The result of the correlation analysis between actual dividends paid and profit after tax revealed that a significant and positive relationship exists between actual dividends payout and profit after tax of the firms. Firms that pay higher dividends do report higher profitability. This result aligns with the findings of Zhou and Ruland (2006), Ling *et al.* (2008), Ajanthan (2013) and Murekefu and Ouma (2013) who each reported a positive relationship between dividend payout and profitability. However, the result of the correlation analysis between actual dividends payout and shareholders' funds of the firms revealed no significant relationship between actual dividends payout and shareholders' funds of the firms. The result aligns with the findings of Ho (2002) who reported an insignificant relationship between dividend payout and shareholders' funds in Japanese firms.

#### CONCLUSION AND RECOMMENDATION

#### **Conclusion**

This study investigated the relationship between dividend payout and profitability of selected manufacturing companies in Nigeria. The results revealed a significant and positive relationship between dividend payout and profit after tax of the manufacturing firms. However, it shows no significant relationship between dividend payout and shareholders' funds of the manufacturing firms.

#### **Recommendations**

The result of this study revealed a positive relationship between dividend payout and profit after tax in the selected manufacturing firms. In other words, payment of dividends enhances profitability of the manufacturing firms. Thus, it is recommended that the board of directors of the manufacturing firms ensure that dividend payments are sustained so as to continually boost the firms' profitability.

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