RELATIONSHIP BETWEEN DIVIDEND PAYOUT AND MARKET PRICE OF SHARES

(A CASE STUDY OF SELECTED COMPANIES IN FOOD AND BEVERAGES COMPANIES IN NIGERIA)

Alayemi, Sunday Adebayo,

Chief Lecturer
Department of Accountancy,
School of Business and Management Studies
The Federal Polytechnic, OFFA, Nigeria.

ABSTRACT

This paper attempted to find out relationship between dividend payment and share price. The third important decision of a company is the amount of cash to distribute to shareholders. Dividend policy includes the percentage of earnings paid to shareholders in cash dividends, the stability of absolute dividends about a trend, stock dividends and stock splits. Two hypotheses were tested: No significant relationship between profitability and market share price and No significant relationship between profitability and market share price. For the purpose of this study, secondary data obtained from the published financial statements of the companies under consideration to guide against bias and manipulation, thereby making replication possible. Quantitative technique using StataSE12 was employed to find out what association exists if any between dividend and market share price on one hand and profitability and market share price. The results showed that there was negative correlation between share price and profitability and positive correlation between share price and dividend payment.

***Keywords**:* dividend, dividend policy, financial statement, payout, share price,

Introduction:

Maximizing the wealth of the shareholders generally implies maximizing profits consistent with long term stability. It is often found that the greatest short term gains must be sacrificed in the interest of the company's longer term prospects. In the context of this overall objective, there are four main types of decisions facing financial managers: Investment decisions, Financing decisions, Dividend decisions and Liquidity decisions.

Corporate dividend policy has long been the focus of financial economists. This dates back to the irrelevance theory of Miller and Modigliani (1961; M&M) where it was stated that there are no illusions in a rational and perfect economic environment. From that period, their rather controversial findings have been challenged and tested by weakening the assumptions and or introducing imperfections into the analysis.

Dividend is the distribution made out of a company's earnings after the obligations of all fixed income holders have been met. This may be in cash or in kind. The importance aspect of dividend policy is to determine the amount of earnings to be distributed to shareholders and the amount to be retained in the firm for investment purposes in the future. The amount of dividend to be paid is set by the company's Board of Directors. Once the dividend has been set, it must be approved by shareholders at Annual General Meeting. A dividend once declared becomes the liability of the company.

Statement of the Problem:

The economic development of any country depends upon the existence of a well-organized financial system. An efficient functioning of the financial system facilitates the free flow of funds to more productive activities and thus promotes investments.

Dividend policy remains a source of controversy despite years of theoretical and empirical research including aspect of share price (Allen and Rachim, 1996 and Mohammed and Chandhary, 2003). Since payment of dividend or otherwise has information content to the public, the decision whether or not to pay dividend to share- holders and forego profitable investment opportunity is a serious problem that management will have to contend with. If management is going to reduce the amount of dividend (dividend payout ratio) or ignore payment of dividend altogether, reasons must be given so that it will not have negative effect on the shareholders perception of the performance of the company. Therefore, the harder we look at dividend, the more it seems like a puzzle with pieces that just don't fit together.

Objectives of the study:

The broad objective of this study is to determine the impact of payout ratio on market price of share of Nestle Nigeria plc. and Cadbury Nigeria plc. both quoted on the Nigerian stock exchange.
The specific objectives are the following:
To examine the correlation between dividend policy and market price of share.
To examine the relationship between profitability and dividend payment.

Research Questions:

Attempt will be made to answer the following questions in the study:
(i) To what extent does dividend payment (payout ratio) impact market share prices?
(ii) What extent is the relationship between profitability and market share price?

Formulation of Hypotheses:

For the purpose of this study the following hypothesis will be tested :
$H_0$1: Dividend payout ratio has no significant impact on market price of share.
$H_1$1: Dividend payout ratio has significant impact on the market share price.
$H_0$2: No significant relationship between profitability and market share price.
$H_1$2: There is significant relationship between profitability and market share price.

Literature Review:

Dividend in corporate finance is fund appropriated out of profit of a company and distributed among the shareholders. In other words, it is the reward of ordinary shareholders. Payment of dividend is made out of company's profit thus reducing the amount of retained earnings available to the firm for internal financing.
Dividend can be in cash or in kind. If it is cash dividend, cash will be paid out to shareholders, thus reducing the amount cash holding of the company. Other forms of dividend are: stock dividend, bonus shares and script issue. These, however, do not involve movement of cash. Hence, it is recapitalization of the company and proportion of the shareholding and does not affect the cash balance. Stock dividend has the advantage of conserving cash for some other purposes. It may have psychological appeal to investors. However, it is costlier to administer than cash dividend.
Academicians and researchers have developed many theoretical models describing the factors that managers should consider when making dividend policy decisions (Kanwal and Sujata, 2008). Dividend theory includes arguments called dividend irrelevance and dividend relevance which was proposed by Modigliani and Miller ,1961 and Walter, 1963. The signaling model developed by Miller and Rock(1985) have yielded mixed results. Studies by Li and Lie(2006), Mitton(2004), Liu and Hu(2005) and Healy and Palepu(1988) support the signaling (asymmetric information) hypothesis by finding a positive association between dividend increases and future profitability. Farrely, Baker and Edelman(1986) and Asquith and Mullins(1983) find that dividend changes are positively associated with stock returns in the days surrounding the dividend announcement dates and Jensen and Meckling(1976) conclude that there is a positive association between the payout ratio and average rate of return. On the other hand, studies of Pruitt and Gitman (1991) and DeAngelo,DeAngelo, and Skinner (1996) find no support for the hypothesized relationship between dividend changes and future profitability.
Paying large dividends reduces risk and thus influence stock price (Gordon, 1963) and is a proxy for future earnings (Baskin,1989). Since the M and M study, other researchers have relaxed the assumption of perfect capital and offers theories about how dividend affects the firm value and how managers should formulate dividend policy decisions .Over time the number of factors identified in the literature as being important to be considered in making dividend decisions increased substantially. Hence the setting of corporate dividend policy remain a controversial issue and involves ocean deep judgment by decision makers (Sujata,2008).
Rozeff(1982) and Fama and French(2001)point that firm with high growth opportunities will tend to pay less (or not pay) dividend, while Fenn and Liang(2001) propose a mixed for growth options on pay out policy. They suggested that high growth firms not only face more profitable opportunity but also greater uncertainties. With greater uncertainties, firms require a more flexible payout policy and, hence, rely more heavily on repurchases than dividends. This view is supported by Grullon et al(2002) by saying that dividends changes are related to the changes in the growth rate and changes in rate of return on asset(ROA).
Some authors have stressed the importance of information content of dividend (Asquith and Mullin, 1983). Miller and Rock(1985) pointed that announcement of dividend provide the missing process of information about the firm

and allows the market to estimate the firm's current earnings. Denis and Serin(1994) and Ghosh and Khaksari (1994) show that large firms have more stable cash flows and less information asymmetries, showing them to have lower financing costs. With stable cash flows and lower costs of financing, large firms can pay out more dividends than small firms.

Common dividend policies are the stable dividend policy, constant payout ratio and residual dividend policy. In the stable dividend policy, management maintains a fixed dividend per share each year. In the constant payout ratio situation, management maintains a fixed percentage dividend payout ratio. In a residual dividend policy, profits are used to fund new projects with the residual or remaining profit distributed as dividends. Investors prefer steady growth of dividends each year and avoid investment to companies with fluctuating dividend policy.

The bird-in-the-hand argument was put forward by Krishman (1933) in the following words:

"Of two stocks with identical earnings record and prospects but with one paying a larger dividend than the other, the former will undoubtedly command a higher price merely because stockholders prefer present to future values .Myopic vision plays a part in the price making process.Stockholders often act upon the principle that a bird in the hand is worth two in the bush and for this reason are willing to pay a premium for the stock with the higher dividend rate, just as they discount the one with the lower rate".

No matter what the dividend policy adopted a company, the following factors must be put into consideration: legal restriction, liquidity, loan covenant, market expectation, availability of profitable investment, and action of other company in the same sector.

Methodology:

The event study methodology which is well accepted in management research to study the effect on the economic value of firm action such as e-commerce, newproduct introduction earnings press release was adopted in this study. The population of the study is made up of firms that are listed on the Nigerian Stock Exchange. Out of these, food and beverage sector have been selected using judgmental sampling method to select Nestle Nigeria plc and Cadbury Nigeria plc.

There are two sources of obtaining information. The primary and the secondary sources. However, in this study secondary source was used to guide against bias and manipulation of information. Hence, historical data, that is, the financial statements of Nestle Food Nigeria plc and Cadbury Nigeria plc for five years 2005 to 2009 were collected to carry out the study. This period is chosen to coincide with the period Mallam Sanusi Lamido Sanusi came to power as governor of central bank of Nigeria. It was during this period that the banks were called upon to call back all the loans and advances made to business organization.

Data Presentation and Analysis:

The following is summary of the audited financial statement of Cadbury Nigeria Plc. and Nestle Nigeria Plc.for the *last five years.*

Table1 Profit and loss account (2005-2009) –Cadbury Nig. Plc.

Year Ended	2009	2008	2007	2006	2005
	#'mn	#'mn	#'mn	#'mn	#'mn
Turnover	25,585	24,298	19,937	19,215	29,454
Cost of Sales	(16,860)	(17,173)	(15,112)	(12,165)	(18,235)
Gross profit	8,725	7,125	4,825	7,050	11,219
Interest receivable	281	-	-	-	180
Marketing and dis.exp.	(3,192)	(1,805)	(1,480)	(1,396)	(891)
Admi. expenses	(4,792)	(6,236)	(6,019)	(7,358)	(5,563)
Other income	264	63	138	-	-
Operating (loss)/profit	(1,022)	(853)	(2,537)	(1,704)	4,945
Exceptional items	(851)	0	0	(2,539)	0
Interest income	-	152	205	294	0
Int.exp.andsi milarcharges	(2,815)	(2,147)	(1,866)	(1,814)	(1,092)
(Loss)/profit on ord. act.	(1,286)	(2,848)	(4,198)	(5,763)	(3,853)
Tax on profit on ord.act	(1,143)	95	3,471	1,097,350	(1,142)
(Loss/profit on ord. act after taxation	(1,236)	(2,752)	(727)	(4,665)	2,711
Minority interest	-	63	6	0.292	(6)
(Loss)/profitat tributable to members	(1,236)	(2,690)	(721)	(4,665)	2,704
Proposed dividend	0	0	0	0	(1,303)
Transfer to gen.reserve	(1,236)	(2,690)	(721)	(4,665)	1,401
(Loss)/earning s per share(kobo)	-	(0.244)	(0.66)	(0.428)	0. 270
Dividendpers hare(kobo)	-	-	-	-	130

Source: Annual Report and Account

Table 3. Profit and loss account (2005-2009). Nestle Nig. Plc.

	2009	2008	2007	2006	2005
Turnover	63,317	51,742	44,028	38,423	34,336
Cost of sales	39,957	31,301	27,805	23,717	21,116
Gross profit	28,361	20,442	16,222	14,705	13,220
Operating profit	15,732	11904	8,396	8,013	7,642
EBITDA	17,297	13,168	9,625	8,995	8,273
PBT	13,783	11,862	8,464	8,198	7,908
Tax	4,000	3,531	3,022	2,538	2,605
PAT	9,784	8,332	5,442	5,660	5,303

Source: Annual Report and Account

Nestle Nigeria plc:

Table 4 Appropriation of profit and market price per share(2005-2009)- Nestle Nig. Plc.

	2009	2008	2007	2006	2005
	#'mn	#'mn	#'mn	#'mn	#'mn
Profit after tax	9,784	8,332	5,542	5,660	5,303
Dividend paid	8,290	5,549	5,568	5,284	3,699
Dividend payout	0.85	0.67	1.02	0.93	0.70
Retention ratio	0.15	0.33	-	0.07	0.30
Market share price	183.11	227.56	252.88	201.18	158.79

Source: Annual Report and Account

Table 5 Appropriation and market price per share(2005-2009)- Cadbury Nig. Plc.

	2009	2008	2007	2006	2005
	#'mn	#'mn	#'mn	#'mn	#'mn
(Loss)/profit after tax	(1,236)	(2,690)	(721)	(4,665)	2,704
Dividend paid	-	-	-	-	1,303
Dividend payout	-	-	-	-	0.48
Retention ratio	-	-	-	-	0.52
Market share price	13.95	36.30	37.06	67.65	54.68

Source: Annual Report and Account

Cadbury Nig. Plc:

Table 6

Year	Share market price(SMP)	Earnings after Tax(EAT)	Dividend Paid(DP)
2005	60,194	2,704	1,303
2006	74,472	(4,665)	0
2007	40,792	(721)	0
2008	39,961	(2,690)	0
2009	14,311	(1,236)	0

Source: Annual Report and Account

NESTLE NIG. PLC.:

Table 7

Year	Share market price(SMP)	Earnings after Tax(EAT)	Dividend Paid(DP)
2005	83,911	5,303	3,699
2006	106,311	5,660	5,284
2007	167,039	5,342	5,568
2008	150,314	8,332	5,549
2009	120,953	9,784	8,290

Source: Annual Report and Account

Data Analysis and Interpretation:

Variables:

Independent variables:

There are many variables that determine the share market price in the capital market. However, this study is set out to examine only the level of profit made, that is,earnings after tax(EAT) and the amount of dividend actually paid out(DP).

Dependent variable:

The dependent variable of this study is share market price (SMP)
The model specification for the study is given below:
SMP=β_0 + β_1(EAT) +β_2(DP) +ε
Where:
$\beta_{0\,=}$ Intercept
EAT= Earnings after Tax
DP= Dividend paid
Result of Hypothesis Testing
The result of the hypothesis is set in the table below.Decision criteria is that null hypothesis is rejected if t-value is higher than 1.95 and the p-value is lower than 0.05 at 95% level of confidence. Then, it can be inferred that the independent variable has a significant influence on dependent variable.

Nestle Nig.Plc:

```
      Source |       SS       df       MS              Number of obs =       5
-------------+------------------------------           F(  2,     2) =    0.13
       Model |   499945250     2   249972625           Prob > F      =  0.8879
    Residual |  3.9596e+09     2  1.9798e+09           R-squared     =  0.1121
-------------+------------------------------           Adj R-squared = -0.7758
       Total |  4.4595e+09     4  1.1149e+09           Root MSE      =   44495

------------------------------------------------------------------------------
         SMP |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
         EAT |  -3.140574   20.05511    -0.16   0.890    -89.43077    83.14962
          DP |   9.633378   24.49701     0.39   0.732    -95.76876    115.0355
       _cons |   92753.24   82176.28     1.13   0.376    -260822.7    446329.2
------------------------------------------------------------------------------
```

Source: Processed data

Analysis of correlation:

The co-efficient of each of the variable in the model is shown as follows:
SMP= β_0 + β_1(EAT) +β_2(DP) +ε
SMP= 92753.24 -3.14(EAT) + 9.63(DP) + ε
The result above shows that there is negative correlation between earnings after tax and share market price. This shows that as earnings after tax decreases there will be increase in share market price. There is positive correlation between dividend paid and share market price. This means that as dividend paid increases there will be increase in the share market price.

The result of hypothesis 1($H_0$1):

Dividend payout ratio has no significant impact on market price of share.
Relationship between dividend paid and market price of share

Independent Variable	t-value	p-value
DP	0.39	0.732

Since t-value is 0.39 which is less than1.95 and p-value is 0.732 which is higher than 0.05 at 95% level of confidence, the null hypothesis is rejected and the alternate hypothesis which says that there is significant relationship between share market price and dividend paid is accepted.

The result of hypothesis 2($H_0$2):

No significant relationship between profitability and market share price.
Relationship between profitability and market share price

Independent variable	t-value	p-value
EAT	-0.16	0.890

Since t-value is -0.16 which is less than1.95 and p-value is 0.890 which is higher than 0.05 at 95% level of confidence, the null hypothesis is rejected and the alternate hypothesis which says that there is significant relationship between share market price and profitability.

Cadbury Nig.Plc:

Source	SS	df	MS		
Model	1.4832e+09	2	741605241	Number of obs =	5
Residual	596633343	2	298316672	F(2, 2) =	2.49
				Prob > F =	0.2869
				R-squared =	0.7131
				Adj R-squared =	0.4263
Total	2.0798e+09	4	519960957	Root MSE =	17272

SMP	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
EAT	-11.45645	5.643211	-2.03	0.179	-35.73722	12.82433
DP	57.91066	26.35489	2.20	0.159	-55.4853	171.3066
_cons	15714.64	15721.65	1.00	0.423	-51930.16	83359.45

Source: Processed data

Analysis of correlation:

The co-efficient of each of the variable in the model is shown as follows:

$SMP= \beta_0 + \beta_1(EAT) +\beta_2(DP) +\varepsilon$

$SMP= 15714.64 -11.46(EAT) + 57.91(DP) + \varepsilon$

The result above shows that there is negative correlation between earnings after tax and share market price. This shows that as earnings after tax decreases there will be increase in share market price. There is positive correlation between dividend paid and share market price. This means that as dividend paid increases there will be increase in the share market price.

The result of hypothesis 1($H_0$1):

Dividend payout ratio has no significant impact on market price of share.

Relationship between dividend paid and market price of share

Independent variable	t-value	p-value
DP	2.20	0.159

Since t-value is 2.20 which is higher than1.95 and p-value is 0.159 which is higher than 0.05 at 95% level of confidence, the null hypothesis is accepted and the alternate hypothesis which says that there is significant relationship between share market price and dividend paid is rejected.

The result of hypothesis 2($H_0$2):

No significant relationship between profitability and market share price.

Relationship between profitability and market share price

Independent variable	t-value	p-value
EAT	-2.03	0.179

Since t-value is -2.03 which is less than1.95 and p-value is 0.179 which is higher than 0.05 at 95% level of confidence, the null hypothesis is rejected and the alternate hypothesis which says that there is significant relationship between share market price and profitability accepted.

Summary Conclusion and Recommendation:

The thrust of this study is to examine the impact of dividend paid on the market price of share. Two hypotheses were formulated to carry out the study. Data were collected over a period of five years from the financial statements of the two companies under investigation. The results from the two companies show that there is negative correlation between earnings after tax and share market price for the two companies. This shows that profitability does not imply that this will impact market share price. There is positive correlation between dividend payment and share market price. This shows that as dividend payment increases this will impact share market price. This clearly shows that shareholders are desirous of what will come to them as return on the amount invested.

The multiple regression analysis was used to test the hypotheses formulated. The results are as shown in the table of summary of hypotheses. Under Cadbury Nigeria plc, hypothsis one($H_0$1) was accepted which says that there is no significant relationship between dividend payout and share market price. This clearly showed that market share price is not influenced by dividend payout. In the case of Nestle Nigeria plc, hypothesis one ($H_0$1) was rejected which says that there is no significant relationship between dividend payout and share market price. This means that share market price is influenced by dividend payout. The second hypothesis ($H_0$2) which says that there is no significant relationship between profitability and market share price was rejected. This is a situation where a company has profitable investment. Though the company is profitable but payment of dividend is sacrificed for profitable investment.

Dividend payment matters in Nigeria. Therefore the onus is on the finance manager to decide what the optimum payout ratio should be. This is because announcement of dividend has information content which is capable of affecting the market price of share whether positively or negatively. In a situation where there is investment opportunity, the finance manager has to decide whether to pay dividend and forego investment opportunity in one hand or invest now and forego payment of dividend.

Since payout ratio has impact on the market value of share no matter how small company should try and pay some amount as dividend. On the other hand bonus share can be made to shareholders in order to compensate them for not having cash dividend. The regulatory authority should ensure that there are no inside dealings. The organization must analyze the composition of the shareholding. In a situation where there are shareholders who depend on their shareholding in the company as a source of income, the expectation of this set of investors must be considered. The action taken by similar company in the same industry as far as dividend payment is concerned must be considered as well.

References:

[1] Allen, Dave E. and Rachim, Veronica S.(1956)."Dividend policy and stock price volatility:

[2] Australian evidence". Applied financial economics, pp175-88

[3] Asquith, P. and Mullins,D. (1983). The impact of initiating dividends on shareholders weaith". Journal of business 56, pp77-96.

[4] Baskin, J. (1989). "Dividend policy and volatility of common stock". Journal of portfolio Management, 15(3), pp19-25.

[5] Baker, H. K. and Powell, G.E. (2000). Determinants of corporate dividend policy: A survey of NYSE firms. Financial Practice and Education, 10, 29-40.

[6] Baker, H. K. and Smith, D. M.(2006). In search of a residual dividend policy. Review of financial Economics,15(1), 1-18

[7] Born, Jeffery, James, Moses and Dennis, Officer (1983). "Changes in dividend policy and Earnings". Journal of portfolio management, summer. Pp52-56.

[8] DeAngelo, H. and DeAngelo, L. and Douglas, J. Skinner(1992): "Dividends and losses". Journal of finance, (48) pp1836-63.

[9] Denis, D. and Sarin, A. (1994). The information content of dividend changes: Cash flow signaling, overinvestment, and dividend clienteles. Journal of financial and quantitative analysis,29,567-587.

[10] Fama, E. F. and French, K. R.(2001). "Disappearing dividends: changing firm characteristics or Lower propensity to pay? Journal of financial economics, 60(1) 3-43.

[11] Farrelly, G. E., Baker, H. K. and Edelman, R. B. (1986). Corporate dividends: Views of the policy makers. Akron Business and economics review, 17(4), 62-74.

[12] Fenn, G. W. and Liang, N.(2001). "Corporate payout policy and managerial stock incentives". Journal of financial economics. Pp60, 45-72.

[13] Ghosh, D. and Khaksari, S.(eds) (1994), Manageria finance in the corporate economy, publisher: Routledge, London, United Kingdom.

[14] Gordon, M. J. (1963). Dividends, earnings and stock prices. Review of economics and Statistics, pp99-105.

[15] Grullon, G. and Michaely, R. and Swaminathan,B. (2002). Are dividend changes a sign of firm maturity? Journal of business, 75 pp 387-424.

[16] Healy, Paul M. and Krishhna, G. Palepu(1988): "Earnings information conveyed by dividend initiations and omissions". Journal of financial economics, 21 pp 149-175.

[17] Kanwal, Anil and Sujata, kapoor (2008): "Determinant of dividend payout ratios- A study of Indian information technology sector". International Research Journal of finance and Economics. P63.

[18] Jensen, M. C. and Meckling, W. H. (1976). Theory of the firm: Managerial behavior agency costs and capital structure. Journal of financial economics 305-60.

[19] Krishman, John, E.(1933). Principle of investment. McGraw Hill. P737.

[20] Li, W. and Lie, E. (2008). Dividend changes and catering incentives. Journal of financial economics,80, 293-308.

[21] Liu, S. and Hu, Y. (2005). Empirical analysis of cash dividend payment in Chinese listed Companies. Nature and Science,3(1), 65-70

[22] Miller, M. H. and Modigliani, F.(1961): "Dividend policy, growth and valuation of shares". Journal of business,××i□, pp411-433.

[23] Miller, M.H. and Rock, K.(1985) "Dividend policy under asymmetric information". Journal of finance 40, pp1031-1051

[24] Mitton, T.(2004). Corporate governance and dividend policy in emerging markets. Emerging Markets review, 5(4), 409-426.

[25] Mohammed Nishat and Chandhary, Mohammed Irfan(2003): "Dividend policy and stock Volatility in Pakistan. Apaper presented at 11th Pacific Basin. Finance, economics and accounting conference.

[26] Pruitt, S.W. and Gitman, L.J. (1991). The interactions between the investment financing and dividend decisions of major US firms. Financial review, 26(3), 409-430.

[27] Rozeth, G.(1982). Growth betta and agency costs as determinants of payout ratios. Journal of finance. 5(3). Pp 54-60.

******