Dividend Policy and Share Price Volatility

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Abstract

We examined the relationship between dividend policy and share price volatility across companies listed in the Nigerian Stock Exchange Market. 26 sampled firms across a number of sectors were selected through simple random sampling technique over a period (2004 – 2011). Our model specification captured share price volatility (P.vol) as the dependent variable, while dividend yield (Dyld) and dividend payout ratio (Payout) were the independent variable; firm size (size), long-term debt (Debt), earnings volatility (E.vol) and asset growth rate (AsGRt) were the control variables. For robustness purposes, the regression analysis was conducted using the pooled OLS and Panel EGLS. We also conducted various tests (i.e. Multicollinearity, Heteroskedasticity, Autocorrelation and Model specification tests) using Eviews 7.0. Our finding indicated that dividend yield exerts a positive and significant influence on share price volatility of firms while dividend payout exerts a negative and insignificant influence on share price volatility. We recommended therefore that companies should be consciously meticulous in their thoughts on efficient approach to maximizing the wealth of shareholders and simultaneously meeting the company's needs to finance its investments.

Keywords: Dividend Policy, Share Price Volatility, Autocorrelation, Heteroskedasticity.

1. Introduction

Corporate financial management involves three important decisions namely; financing decision, investment decision, and dividend decision (Baker & Wurgler, 2004). The latter is the focus of this study. With regards to dividend payments, business managers must approach this decision strategically. Managers must not only consider the question of how much of the company's earnings are needed for investment, but also take into consideration the possible effect of their decisions on share prices (Bishop, Crapp, Faff, & Twite, 2000). The basic question that arose in respect of dividend payment was: Should the firm distribute all or proportion of earned profits in the form of dividends to the shareholders; or should it be ploughed back into the business? In answering this question, different dividend policies have been adopted by different firms. Dividend policy is the action program used by a firm to decide how much of its residual profits should be paid out to shareholders in dividends. In any circumstance, the portion of the residual profits not paid as dividend is referred to as retained earnings. Dividends are usually distributed in the form of cash (cash dividends) or share (share/stock dividends). Therefore, dividend payout ratio indicates the proportion of total residual profits distributed as dividend to shareholders (Oyejide, 1976; Fama & French, 1988; Bali, 2003; Gill, Biger & Tibrewala, 2010).

Dividend has been adjudged to be the catalyst for the movement of firms' share prices. The theories that exist within the framework of dividend and dividend policy, and empirical researches thereon, have demonstrated positive linear relationship between dividend payment and share price volatility (Alli, Khan & Ramirez, 1993; Allen & Rachim, 1996; Adelegan,

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2000; Anil & Kapoor, 2008). The volatility of stock prices has been of concern to researchers. Stock return volatility which represents the variability of stock price changes could be perceived as a measure of risk faced by investors. In financial markets, volatility clustering emerges when a high return (positive or negative) is more likely to be followed by another high return, or when a low return (positive or negative) is more likely to be followed by another low return. volatility-clustering is a natural result of a price formation process with heterogeneous beliefs across traders, and that volatility clustering is not attributable to an autocorrelated news-generation process around public information such as macroeconomic news releases or firms' earnings releases.

Mandelbrot (1963); Fama (1965); Black, (1976), Rajni and Mahendra (2007) noted that stock price volatility tends to rise when new information is released into the market, however the extent to which it rises is determined by the relevance of that new information as well as the degree in which the news surprise investors. The focus of this study was to examine the impact of dividend policy on stock price volatility in Nigeria. The existing empirical evidence so far is observed to be vacillating and largely polarized. The arguments have been between theories that suggest that divided policy has no effect on stock prices (Irrelevance theory) and those who think otherwise. Hence, the broad objective of this study was to examine with empirical evidence from a developing economy (Nigeria) dividend policy and share price volatility. More specifically, the objectives were to:

1. ascertain the relationship between dividend yield and share price volatility;
2. determine the effect of dividend payout on the volatility of share price; and
3. examine the relationship between firm's debt and share price volatility.

The remainder of this study is organized as: section 2 addressed empirical evidence on dividend policy and share price volatility. Section 3 presented methodological issues with emphasis on data and model specification and estimation techniques. Section 4 focused on presentation and analysis. Section 5 highlighted the summary, conclusion and recommendations.

2. Empirical Evidence on Dividend Policy and Share Price Volatility

2.1 Dividend Policy and Share Price Volatility

According to Allen and Rachim (1996), paying large dividends reduces risk and thus influence stock price (Gordon, 1963) and is a proxy for the future earnings (Baskin, 1989). A number of theoretical mechanisms have been suggested that cause dividend yield and payout ratios to vary inversely with common stock volatility. These are duration effect, rate of return effect, arbitrage pricing effect and information effect. Duration effect implies that high dividend yield provides more near term cash flow. If dividend policy is stable, high dividend stocks will have a shorter duration. Gordon Growth Model can be used to predict that high-dividend will be less sensitive to fluctuations in discount rates and thus ought to display lower price volatility. Agency cost argument, as developed by Jensen and Meckling (1976) proposed that dividend payments reduce costs and increase cash flow, that is payment of dividends motivates managers to disgorge cash rather than investing at below the cost of capital or wasting it on organizational inefficiencies (Rozeff, 1982 and Easterbrook 1984). Some authors have stressed the importance of information content of dividend (Asquith & Mullin, 1983; Born, Moser & officer 1983). Black and Scholes (1974) found no relationship between dividend policy and stock prices. Their results further explained that dividend policy does not affect the stock prices and it depends on investors' decision to keep either high or low yielding securities; return earned by them in both cases remains the same. Miller and Rock (1985) suggested that dividend announcements provide the missing pieces of

information about the firm and allows the market to estimate the firm's current earnings. Investors may have greater confidence that reported earnings reflect economic profits when announcements are accompanied by ample dividends.

Baskin (1989) took a slightly different approach and examined the influence of dividend policy on stock price volatility, as opposed to stock returns. He advanced four basic models which related dividends to stock price risk. He called these as: the duration effect, the rate of return effect, the arbitrage pricing effect and the informational effect. The difficulty in many empirical works examining the linkage between dividend policy and stock volatility or returns lies in the setting up of adequate control over the factors that influence both. For example, the accounting system generates information on several relationships that are considered by many to be measures of risk. Baskin (1989) suggested the use of the following control variables in testing the significance of the relationship between dividend yield and price volatility; operating earnings, the size of the firm, the level of debt, the payout ratio and the level of growth. So he had tried to explain the underlying linkage between dividend policies (dividend yield and dividend payout ratio) and stock price risk in his empirical work on USA.

2.2 Dividend Yield and Share Price Volatility

Allen and Rachim (1996) observed no relationship between the dividend yield and stock market price even after studying 173 Australian listed stocks but it showed positive relation between stock prices and size, earnings and leverage and negative relation between stock prices and payout ratio. Baskin (1989) examined 2344 U.S common stocks from the period of 1967 to 1986, and found a significant negative relationship between dividend yield and stock prices.

Adesola and Okwong (2009) found that dividend policy is significantly associated with earnings, earnings per share and previous year dividends but discovered that growth and size had no effect on dividend policy.

Akbar and Baig (2010) studied a sample of 79 companies listed at Karachi Stock Exchange for the period of 2004 to2007. Results of their study showed that announcement of dividends; either cash dividend or stock dividend or both had positive effect on stock prices. Nazir, Nawaz, Anwar, and Ahmed (2010) studied the effect of dividend policy on stock prices. Results of their study showed that dividend payout and dividend yield had significant effect on stock prices while size and leverage had negative insignificant effect. Earning and growth had positive significant effect on stock prices.

Khan, Aamir, Qayyum, Nasir, and Khan (2011) studied the effect of dividend payment on stock prices by taking a sample of fifty five companies listed at Karachi Stock Exchange. Results of their study showed that dividend yield, earnings per share, return on equity and profit after tax were positively related to stock prices while retention ratio had negative impact on Stock Prices.

Okafor, Mgbame, and Chijoke-Mgbame, (2011) examined the relationship between dividend policy and share price changes in the Nigerian Stock Exchange market using a multiple regression analysis. Dividend yield showed a negative impact on share price risk while dividend payout ratio, showed negative influence in some years. The study supports the fact that dividend policy is relevant in determining share price changes for a sample of firms listed in the Nigerian Stock Exchange.

2.3 Firm Size and Share Price Volatility

Ho (2002) used the panel data approach and fixed effect regression model to study the relevance of dividend policy. Results of his study showed a positive relation between

dividend policy and size of Australian firm and liquidity of Japanese firms. He observed a negative relation between dividend policy and risk in case of only Japanese firms.

Kashif, (2011) empirically investigated the factors that determine the dividend payout decisions in Pakistan's Engineering sector by using the data of thirty-six firms listed on Karachi Stock Exchange from the period 1996 to 2008. The results suggested that the previous dividend per share, earnings per share, profitability, cash flow, sales growth, and size of the firm were the most critical factors determining dividend policy in the Engineering sector of Pakistan.

Contrary to Al-Kuwari (2009) and Glen, Karmokolias, Miller, and Shah (1995), Aivazian, Booth, and Cleary (2003) found no difference in the dividend pattern of firms in emerging market with U.S firms. The higher the earnings of a firm, the greater the size. Firms with foreign ownership prefer to distribute a higher and constant amount in dividend payouts according to their earnings and size (Eriotis 2005).

2.4 Earnings and Share Price Volatility

Kanwal, Muhammad, Arslan, Adeel and Maryam, (2011) attempted to explain the effect of dividend announcements on stock prices of Chemical and Pharmaceutical industries of Pakistan. A sample of twenty five companies listed at KSE-100 Index was taken from the period of 2001 to 2010. The result of the study was based on fixed and random effect model which is applied on panel data to explain the relationship between dividends and stock prices after controlling for variables like earnings per share, retention ratio and return on equity. The results indicated that cash dividend, retention ratio and return on equity had significant positive relation with stock market prices and significantly explained the variations in the stock prices of Chemical and Pharmaceutical sector of Pakistan while earnings per share and stock dividends had negative insignificant relation with stock prices.

3. Methodology

3.1 Data and Model Specification

We employed a cross-sectional research design using secondary data from the Nigerian Stock Exchange (NSE), annual reports of randomly selected sampled firms and the Central Bank of Nigeria (CBN) Statistical Bulletin. Based on yearly observation of publicly listed firms over the period (2004 – 2011), we selected twenty-six (26) firms, using convenient random sampling technique.

For purpose of the study, an econometric model was specified and estimated. The model examines the relationship between share price volatility (P.vol) and dividend policies (dividend yield (Dyld), dividend payout ratio (Payout)), with some control variable (firm size (size), Debt (debt), earnings volatility (E.vol) and asset growth rate (AsGRt)). This model was adopted from the studies of Baskin (1989) and Hashemijoo, Ardekani and Younesi (2012), and modified to suit our specific purpose.

$$\boldsymbol{P.vol_i = a_0 + a_1 Dyld_i + a_2 Payout_i + a_3 Size_i + a_4 Debt_i + a_5 E.vol_i + a_6 AsGRt_i + \xi}$$

where $\boldsymbol{P.vol_i}$ *= Share Price Volatility,* $\boldsymbol{Dyld_i}$ *= Dividend yield,* $\boldsymbol{Payout_i}$ *=Dividend payout ratio,* $\boldsymbol{Size_i}$ *= Size of the firm,* $\boldsymbol{Debt_i}$ *=Long-term debt,* $\boldsymbol{EV_i}$ *= Earnings Volatility,* $\boldsymbol{AsGRt_i}$ *=Asset growth rate,* ξ *= Stochastic Error Term, Apriori expectation;* $\alpha_0, \ldots, \alpha_6 > 0$.

3.1 MEASUREMENT OF VARIABLES

Variable	Measurement
Share Price Volatility, ($Pvol_i$)	$= \sqrt[2]{\frac{\sum_{i=1}^{7}\left((H_i - L_i)/\left(\frac{H_i + L_i}{2}\right)\right)^2}{7}}$
Dividend yield ($Dyld_i$)	$\sum_{i=1}^{7}\frac{D_i/MV_i}{7} \quad or \quad \frac{DPS_i/MPS_i}{7}$
Dividend payout ratio ($Payout_i$)	$\sum_{i=1}^{7}\frac{D_i/E_i}{7}$
Size of the firm, ($Size_i$)	$ln\left(\sum_{i=1}^{7}\frac{MV_i}{7}\right)$
Long-term debt ($Debt_i$)	$\sum_{i=1}^{7}\frac{L\,D_i/Asset_i}{7}$
Earnings Volatility (EV_i)	$\sqrt[2]{\frac{\sum_{i=1}^{7}(R_i - \bar{R})^2}{7}}$
Asset growth rate ($AsGRt_i$)	$\frac{\sum_{i=1}^{7}\left(\frac{\Delta Asset_i}{Asset_i}\right)}{7}$

Source: Baskin (1989) and Hashemijoo et al., (2012)

P.vol*:Share price volatility;* H_i *:Highest stock price for year i;* L_i *:Lowest stock price for year i;* ***Dyldl*** *: Dividend yield;* D_i*: Dividend Paid in year i;* MV_i *:Market value of firm at the end of year i;* DPS_i *:Dividend per share in year i;* MPS_i *:Market price per share in year i;* E_i *:Net profit after tax for the year i;* R_i *: Ratio of operating income to total asset for year i;* $\bar{R}$*:* $\sum_{2006}^{2011} R_i/7$*;* LD_i *: Long-term debt at the end of year i;* $Asset_i$ *:Total Asset at the end of year i;* $\Delta Asset_i$ *: Change of total asset in year i;* $Asset_i$*: Total Asset at the beginning of year i; and* ***i (from 1 – 7)*** *indicates years from 2005 to 2011. We used both Cochrane Orcutt and the EGLS techniques in this study to control for the suspected serial correlation in the model.*

4. Presentation and Analyses of Result

Table 1: Descriptive statistics

	PVOL	DYLD	PAYOUT	SIZE	DEBT	EVOL	ASGRT
Mean	0.274	0.248	0.0598	0.373	0.019	0.0353	0.026
Median	0.248	0.011	0.0347	0.446	0.009	0.0232	0.018
Maximum	0.681	5.443	1.626	3.856	0.148	0.754	0.295
Minimum	0.000	0.000	-0.493	-2.639	0.000	0.000	-0.142
Std. Dev.	0.146	0.561	0.178	1.524	0.024	0.0622	0.045
Jarque-Bera	6.333	13192.23	13161.5	2.504	695.342	73531.9	640.077
Probability	0.042	0.000	0	0.286	0.000	0.000	0.000
bservations	181	181	181	181	181	181	181

Source: Researchers Computation (2013)

Where PVOL= share price volatility, DYLD= Dividend Yield, PAYOUT=Dividend Payout ratio SIZE= Firm Size, DEBT = Debt, EVOL=Earnings Volatility, ASGRT=Asset Growth.

As observed in Table 1, the standard deviation, maximum, minimum and median values for **PVOL** stood at 0.146, 681, 0.000 and 0.248 respectively with an average volatility rate of over 27% for the study period. The mean value for **DYLD** stood at 0.248 and suggests a dividend yield of about 24% over the study period with a standard deviation of 0.561. The maximum, minimum and median values for the period under review were 5.443, 0.000 and 0.011 respectively. The mean value for **PAYOUT** stood at 0.0598 which suggest a dividend payout average of about 5.9% with a standard deviation stood of 0.178. The maximum, minimum and median values were 1.626, -0.493 and 0.0347 respectively. **SIZE** was observed to have a mean value of 0.373 and a standard deviation of 1.524. The maximum, minimum and median values were 3.856, -2.639 and 0.446 respectively. **DEBT** is observed to have a mean value of 0.019 and a standard deviation of 0.024. The maximum, minimum and median values were 0.148, 0.00 and 0.009 respectively. **EVOL** is observed to have a mean value of 0.035 which suggest an average earnings volatility rate of about 3.5% and a standard deviation of 0.06. The maximum, minimum and median values were 0.754, 0.00 and 0.023 respectively. Finally, **ASGRT** was observed to have a mean value of 0.026 which suggest an average asset growth rate of about 2.6% and a standard deviation of 0.045.The maximum, minimum and median values were 0.295, -0.142 and 0.018 respectively. The Jarque-Bera statistic and p-value for all the variables suggest that the series indicates that the data satisfies normality with no likelihood of outliers in the series except for **size** which suggest that the series do not appear normal.

Table 2: Pearson Correlation Results

	PVOL	DYLD	PAYOUT	SIZE	DEBT	EVOL	ASGRT
PVOL	1						
DYLD	0.079	1					
PAYOUT	-0.061	-0.015	1				
SIZE	-0.223	0.051	-0.012	1			
DEBT	0.173	-0.054	0.027	-0.139	1		
EVOL	-0.027	0.050	-0.071	-0.028	0.268	1	
ASGRT	0.108	-0.014	0.107	0.052	-0.010	-0.081	1

Source: *Researchers Computation (2013)*

As observed from the result in table 2, PVOL and DYLD were observed to be positively correlated (0.079). PAYOUT was observed to be negatively correlated with PVOL (-0.061) and with DYLD (-0.015). SIZE was observed to be negatively correlated with PVOL (-0.223) and PAYOUT (-0.012) but positively correlated with DYLD (0.051). DEBT was positively correlated with PVOL (0.173), PAYOUT (0.027) but was however observed to be negatively correlated with DYLD (-0.054) and SIZE (-0.139). EVOL also appears to be positively correlated with DYLD (0.050) and DEBT (0.268). It however appeared to be negatively correlated with PVOL (-0.027), PAYOUT (-0.071) and SIZE (-0.028). Finally, ASGRT was positively correlated PVOL (0.108), PAYOUT (0.107), and SIZE (0.052) but negatively correlated with DYLD (-0.014), DEBT (-0.010) and EVOL (-0.081). The correlation coefficients suggested that none of the variables suffered the problem of multicollinearity.

4.1 Step Wise Regression Test

In this study, we adopted the stepwise forward regression to determine the best model by comparing R^2 value for the possible model as shown in the table 3 below.

Table 3: Step wise Regression

SIZE	PAYOUT	EVOL	DYLD	DEBT	ASGRT	R^2
-0.018						0.130
-0.018	-0.884					0.143
-0.018	-0.086	-0.064				0.143
-0.017	-0.087	-0.068	0.032			0.156
-0.014	-0.086	-0.179	0.032	1.237		0.185
-0.015	-0.092	-0.164	0.032	1.237	0.222	0.191

Source: *Researchers Computation (2013)*

The model with the highest R^2 (0.191) value is that which incorporates both the explanatory and control variables. Thus based on the stepwise forward regression, all the explanatory variables were included in the model.

4.2 Diagnostic Test Results

Before conducting the regression analysis, we examined the OLS assumptions. Namely: Multicollinearity, Heteroskedasticity, Autocorrelation and Model specification tests. The various tests were conducted using Eviews 7.0. The results and analysis are presented below;

i. Multicollinearity Test

We investigated the collinearity status of the variables using the Variance Inflation Factor (VIF) tests. Basically, VIFs above 10 are seen as a cause of concern (Landau and Everitt, 2003). As observed *(see appendix 1)*, none of the variables had VIF's values exceeding 10. Hence, none gave serious indication of multicollinearity.

ii. Heteroskedasticity Test

The ARCH test was performed on the residuals as a precaution with a lag specification of 2. The results showed probabilities in excess of 0.05, which leads us to reject the presence of heteroscedasticity in the residuals. *(See appendix 2)*

iii. Serial Correlation Test

With a lag specification of 2, the Lagrange Multiplier (LM) test result showed evidence of the presence of serial correlation in the residuals of the model as the probabilities (Prob. F, Prob. Chi-Square) were less than 0.05*(see appendix 3).* In correcting for the suspected serial correlation in the model, we adopted the Cochrane Orcutt method which implies including an autoregressive (AR) term as part of the exogenous variables and re-estimating the model. However, in the case of panel data (with effects) where the inclusion of AR terms is not allowed, we applied the EGLS (Estimated General Least Squares).

iv. Model Specification test

The results showed high probability values that were greater than 0.05, meaning that there was no significant evidence of model miss-specification. *(See appendix 4)*

4.3 Regression Analysis

The regression results conducted to examine the causal-relationship between dividend policy and share price volatility. The Cochrane Orcutt method EGLS without lags of the dependent variables was utilized in this study to control for the suspected serial correlation in the model. For robustness purposes, the regression analysis was conducted Using the pooled OLS, and

the panel OLS (with effects). Before, performing the regression (panel) we first conducted the Hausman test to identify the effects applicable to the data. *(See Table 4).*

Table 4: Hausman Test

Correlated Random Effects - Hausman Test			
Test cross-section random effects			
Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	44.069626	4	0.00

Source: *Researchers Computation (2013)*

The Hausman (1978) test revealed that the fixed effect option was applicable to the study since the Prob chi.sq was less than our confidence level of 5%.

Table 5: Regression Result (dependent variable=PVOL)

	POOLED OLS		PANEL OLS (FIXED EFFECTS)	
VARIABLE	**COEFFICIENT**	**PROB.**	**COEFFICIENT**	**PROB**
C	0.2533	0.968	0.257	0.000*
EXPLANATORY	**VARIABLES**			
DLYD	0.032	0.097**	0.039	0.046*
PAYOUT	-0.092	0.106	-0.079	0.176
CONTROL	**VARIABLES**			
SIZE	-0.015	0.086**	- 0.021	0.149
EVOL	-0.164	0.035*	-0.229	0.197
DEBT	1.237	0.013*	1.258	0.026*
ASGRT	0.222	0.297	0.129	0.000*
R^2	0.191			0.44
ADJ R^2	0.157			0.305
F-Stat	5.711			3.135
P(f-stat)	0.000			0.000
D.W	1.9			1.97

Source: *Researchers Computation (2013)*

Table 5 shows that the result for the pooled (stacked) OLS has an R^2 value of 0.191, which suggests a 19.1% explanatory ability of the model for the systematic variations in the dependent variable with an adjusted value of 0.157. The F-stat (5.711) and p-value (0.00) indicates that the hypothesis of a significant linear relationship between the dependent and independent variables could not be rejected at 5% level. As observed, DYLD (Dividend yield) appeared positive (0.032) and significant at 10% (p=0.097) and this suggests that an increase in dividend yield will result in an increase in share price volatility. PAYOUT had a negative coefficient of (-0.092) which implied that higher payout ratios could signal lesser stock volatility. However, the result appear insignificant at 5% and 10% (p=0.106). SIZE (Firm Size) was negative (-0.015) and significant at 10% (p=0.086) and this suggest that larger firms may have lower volatility in their share prices. EVOL (Earnings Volatility) also appeared negative (-0.0164) and significant at 5% (p=0.035) and this indicates that lower earnings volatility may signal more stock volatility. DEBT appeared positive (1.237) and significant at 5% (p=0.013) and thus suggest that higher levels of debt could also signal more stock volatility. Finally, ASGRT (Growth) also appeared positive (0.222) suggesting that high growth firms will have their stocks behaviour more volatile. The result is however

statistically insignificant at 5% and 10% levels (p=0.297). The D. W statistics of 1.9 indicates the absence of serial correlation of the residuals in the model.

In line with the Hausman test result, the fixed effects panel data analysis was conducted and the results appeared to perform better and explains a significantly higher proportion of systematic variations in the dependent variable than the pooled (stacked) OLS and panel OLS without effects. This suggests that the impact of dividend policy on share price volatility in our sample is influenced by cross-section specific effects. As observed, the R^2 value improved considerably to 0.44 which suggested that the fixed effects Panel regression explains about 44% of the systematic variations in the dependent variable with an adjusted value of 0.305. The F-stat (21.279) and p-value (0.00) indicated that the hypothesis of a significant linear relationship between the dependent and independent variables cannot be rejected at 5% level. An evaluation of the effects of the explanatory variables revealed that DYLD (Dividend yield) appeared positive (0.039) and significant at 5% (p=0.046). Hence we rejected the null hypothesis (H1) of no significant relationship between dividend yield and share price volatility at 5% level. The center-point of most researches on dividend policy and share prices has been either to support or to refute the irrelevance theory proposed by Miller and Modigliani (1961).

4.4 Discussion of Findings

Our result revealed that DYLD (Dividend yield) appeared positive (0.039) and significant at 5% (p=0.046) and as such refutes the irrelevance theory. The finding is in line with that of Hussainey et al., (2011) but is however at variance with Baskin, (1989) who reported a significant negative association between dividend yield and volatility of stock prices. The findings of Baker and Powell, (1999) also show that dividend policy has impact on value of firm. Our finding is also in tandem with that of Travlos, Trigeorgis, and Vafeas, (2001) which provides strong evidence for refuting the irrelevance hypothesis. Also similar to our finding is that of Suleman et al., (2011) conducted for firms on the Karachi Stock for the period of 2005 to 2009 which found that share price volatility has significant positive relationship with dividend yield. PAYOUT appeared negative (-0.079) and insignificant at 5% and 10%. Hence we accepted the hypothesis (H2) of no significant relationship between dividend payout and share price volatility. The finding for PAYOUT seems to support the irrelevancy theory that in a perfect market, dividend policy does not affect the shareholder's return. Uddin and Chowdhury, (2005) also found that dividend payout does not provide value gain for investors and shareholders. Of the control variables included in the model, DEBT appeared to impact positively on stock price volatility (1.258) and is also significant at 5% level (0.026). Hence, we rejected the null hypothesis (H3) of no significant relationship between Debt and volatility of share prices. In addition, ASGRT (Asset Growth) impacted positively on stock price volatility (0.129) and was also significant at 5% level (0.00). SIZE (Firm Size) appeared negative (-0.021) and insignificant at 5 and 10% (p=0.149) EVOL (Earnings Volatility) also appeared negative (-0.229) and insignificant at 5% and 10% levels (p=0.197).

5. Summary of Findings, Conclusion and Recommendations

5.1 Summary of Findings

We made the following findings:

1. Expectedly, we found that dividend yield exerts a positive and significant influence on share price volatility having reported a coefficient of 0.032 at 10% (p=0.097) significant level.

2. Surprisingly, we found that the influence of dividend payout on share price volatility was negative and insignificant at 5% and 10% respectively (p=0.106), having reported a coefficient of -0.092.
3. We also found a positive relationship between debt of the firm and the volatility of the share price, significant at 5% (p=0.013) with a coefficient of 1.237.
4. Firm Size appeared negative (-0.015) and significant at 10% (p=0.086)
5. Earnings Volatility also appeared negative (-0.0164) and significant at 5% (p=0.035)
6. ASGRT (Growth) was positive (0.222) but was however statistically insignificant at 5% and 10% levels (p=0.297).

5.2 Conclusion

The broad objective of this study was to examine the impact of dividend policy on share price volatility with a focus on companies listed on the Nigerian Stock Exchange market. For this purpose, a sample of 26 companies was examined by applying multiple regressions for a period of seven years from 2005 to 2011. The primarily regression model was expanded by adding control variables including size, earning volatility, debt and growth. The empirical results of this study showed mixed findings between the measures of dividend policy (dividend yield and payout ratio) and their impact on share price volatility. While dividend yield appeared positive and significant, payout ratio appeared negative and insignificant. Of the control variables included in the model, DEBT appeared to impact positively on stock price volatility and was also significant at 5%. ASGRT (Asset Growth) impacted positively on stock price volatility and was also significant at 5% level. SIZE (Firm Size) and EVOL (Earnings Volatility) were both negative and insignificant.

5.3 Recommendations

The impact of cash dividend policy on the current prices of company shares is considered to be very important, not only for policy makers, but also for investors, portfolio managers, and researchers interested in the performance of capital markets. Though the finding show mixed results in the effects of dividend yield and dividend payout ratio, the study recommends that whatever ideology that a firm chooses to adopt between the two extreme theories; (that dividend does not affect the value of the company as the company‘s value will not be affected by how earned profits are divided but rather affected by the ability to achieve profits on one hand and the opinion that dividends affect the company‘s value through an increase or decrease in the demand for the company on the other), companies should be consciously meticulous in their thoughts on efficient approach to maximizing the wealth of shareholders and simultaneously meeting the company’s needs to finance its investments.

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APPENDICES

Appendix 1: Variance Inflation Factor test for Multicollinearity

	Coefficient	Centered
Variable	Variance	VIF
SIZE	4.87E-05	1.025126
PAYOUT	0.003538	1.019341
EVOL	0.031019	1.095748
DYLD	0.000351	1.008899
DEBT	0.21328	1.105274
ASGRT	0.054689	1.021578
C	0.000278	NA

Source: *Researcher's Computation (2013)*

Appendix 2: ARCH test for Heteroskedasticity

F-statistic	1.9053	Prob. F(4,15)	0.246
Obs*R-squared	1.9182	Prob. Chi-Square(4)	0.244

Source: *Researcher's Computation (2013)*

Appendix 3: Breusch-Godfrey Serial Correlation LM Test

Breusch-Godfrey Serial Correlation LM Test:			
F-statistic	0.5035	Prob. F(2,15)	0.00
Obs*R-squared	1.509	Prob. Chi-Square(2)	0.00

Source: *Researcher's Computation (2013)*

Appendix 4: Ramsey-Reset Test for Model Specification

Ramsey RESET Test

Specification: AUDFEE C FIRMSIZE COMPLEXITY PAT

	Value	***df***	***Probability***
t-statistic	1.642226	10	0.1316
F-statistic	2.696905	(1, 10)	0.1316

Source: *Researcher's Computation (2013)*