

**CORPORATE DIVIDEND POLICY AND SHARE PRICE VOLATILITY IN
NIGERIAN LISTED CONGLOMERATES**

BY:

DAUD, OMOTOSHO SAHEED

B.Sc. Finance (Malete)

MATRIC NO., 16/27/MFI011

BEING A THESIS SUBMITTED AND PRESENTED IN PARTIAL
FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF MASTER
OF SCIENCE (M.Sc.) DEGREE IN FINANCE OF THE DEPARTMENT OF
ACCOUNTING AND FINANCE, COLLEGE OF HUMANITIES,
MANAGEMENT AND SOCIAL SCIENCES, KWARA STATE UNIVERSITY,
MALETE, NIGERIA.

Supervisor: Prof. A. R. ONAOLAPO

APRIL, 2018.

ProQuest Number: 10936524

All rights reserved

INFORMATION TO ALL USERS

The quality of this reproduction is dependent upon the quality of the copy submitted.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if material had to be removed, a note will indicate the deletion.



ProQuest 10936524

Published by ProQuest LLC (2018). Copyright of the Dissertation is held by the Author.

All rights reserved.

This work is protected against unauthorized copying under Title 17, United States Code
Microform Edition © ProQuest LLC.

ProQuest LLC.
789 East Eisenhower Parkway
P.O. Box 1346
Ann Arbor, MI 48106 – 1346

DECLARATION

I wish to state that this research is solely conducted by me under the guidance of my supervisors, Prof. Abdulrahman Onaolapo; that all the sources of information used in this work have been acknowledged and to the best of my knowledge, this work has not been submitted elsewhere for the award of any degree or any certificate. However, any omission or commission is from me, not intentional and is regretted.

Daud, Omotosho Saheed

CERTIFICATION

This thesis titled “Corporate Dividend Policy and Share Price Volatility in listed conglomerates firms in Nigeria” by Daud Omotosho Saheed meets the regulations governing the award of degree of Master of Science (M. Sc.) in Finance of Kwara State University, Malete. Hence, it is approved for its literary presentations.

<hr/> Supervisor	<hr/> Date
<hr/> Head of Department	<hr/> Date
<hr/> Dean, School of Postgraduate Studies	<hr/> Date
<hr/> External Examiner	<hr/> Date

DEDICATION

This project is dedicated to Almighty Allah for His mercies and wisdom given to me to endure this great task.

ACKNOWLEDGEMENTS

First and foremost I offer my sincerest gratitude to my supervisor Prof. Abdulrahman Onaolapo who has supported me throughout my thesis with his patience and knowledge whilst allowing me the room to work with him despite his tight schedules. I attribute the level of my Master's Degree to his encouragement and the efforts/support of numerous good advisers which few to mention are Dr. Olubiyi E. A, Dr. Sanni Mubaraq, Mr. Mustapha, Abdulrasaq, Mr. Lukman Oke and several others which space will not permit me to mention. This thesis would not have been completed or written without their efforts and one simply could not wish for better or friendlier advisers. They read my numerous revisions and helped make some sense of the confusion while also providing me with materials needed to complete my thesis. Also thanks to my Head of Department Professor Nassar who offered guidance and support.

Thanks to my Department, School of Postgraduate Studies and Kwara State University, Malete at large for giving me the opportunity to fulfill my dreams. And finally, thanks to my wonderful family once more and my numerous friends who endured this long process with me, always offering support and love. Finally, I thank my parents for supporting me throughout all my studies at the University.

Saheed Daud Omotosho

TABLE OF CONTENTS

	Pages
Title Page	i
Declaration	ii
Certification	iii
Dedication	iv
Acknowledgements.....	v
Table of Contents.....	vi
Abstract	x
 CHAPTER ONE: INTRODUCTION	
1.1 Background to the Study.....	1
1.2 Statement of the Problem	4
1.3 Research Questions.....	5
1.4 Objectives of the Study.....	5
1.5 Statement of Hypotheses.....	6
1.6 Justification for the Study.....	6
1.7 Scope of the Study.....	8
1.8 Plan of the Study.....	9
 CHAPTER TWO: LITERATURE REVIEW	
2.1 Conceptual Review.....	10
2.1.1 Concept of Dividend Policy.....	10
2.1.2 Concept of Share Price Volatility.....	13
2.2 Theoretical Review.....	15

22.1	Dividend Irrelevance Theory.....	15
2.2.2	Agency Theory and Free Cash Flow Hypothesis.....	17
2.2.3	The Bird in Hand Theory.....	17
2.2.4	The signaling Hypothesis.....	17
2.2.5	Arbitrage Realization Effect.....	18
2.2.6	Tax Preference Theory.....	19
2.2.7	Theoretical Framework.....	19
2.3	Review of Empirical Studies	20
2.3.1	Dividend Policy and share price volatility.....	20
2.3.2	Other determinant of Share Price Volatility.....	24
2.5	Empirical Gap	26

CHAPTER THREE: METHODOLOGY

3.1	Research Design.....	28
3.2	Models Specification.....	28
3.2.1	A priori Expectation.....	30
3.3	Methods of Data Collection.....	30
3.4	Method of data analysis.....	31
3.5	Criteria for Decision Making.....	32
3.6	Variables Description and Measurements	33

CHAPTER FOUR: DATA PRESENTATION AND ANALYSIS.

4.1	Descriptive Statistics.....	40
4.2	Pairwise Correlation.....	44
4.3	Regression Analysis.....	47

CHAPTER FIVE: SUMMARY CONCLUSION AND RECOMMENDATION

5.1	Summary	63
5.2	Conclusion.....	64
5.3	Recommendations	65
5.4	Suggestions for Further Studies.....	65

References

Appendices

List of Tables

Table 3.1	Summary of Variables Description and <i>a priori</i> expectation
Table 4.1	Descriptive Statistics
Table 4.2	Pairwise Correlation
Table 4.3	Hausman Test (dividend policy and share price volatility)
Table 4.4	Regression Results on dividend policy and share price volatility

ABSTRACT

Despite years of empirical research, the linkage between corporate dividend policy and stock price volatility remains controversial among the researchers and scholars. Against this background, this study examines the effect of corporate dividend policy on share price volatility in Nigeria listed conglomerates. The specific objectives are to: (i) examine the extent at which dividend yield influence stock price volatility in Nigerian listed conglomerates; (ii) investigate the influence of dividend payout ratio on stock price volatility in Nigerian listed conglomerates and (iii) examine the impact of firm specific factors (firm size, firm growth, leverage and earning volatility) on share price volatility in Nigerian listed conglomerates. Descriptive research design was used and a sample of six listed conglomerates from the totality of firms listed in Nigeria stock exchange market was used. The study used descriptive statistics, pairwise correlation and panel data regression technique to analyze the secondary data extracted from the audited financial statements of the selected listed conglomerates for the period of 2007 to 2016. The study revealed that (i) dividend yield has a negative impact on the share price volatility in Nigerian listed conglomerates' and significant at 1% level (ii) dividend payout ratio has a negative influence on the share price volatility in Nigerian listed conglomerates' and significant at 1% level; (iii) firm size has a negative effect on the share price volatility in Nigerian listed conglomerates' and significant at 1% level; (iv) Financial leverage have an insignificant negative impact on the share price volatility in Nigerian listed conglomerates'. On the other hand; (v) growth opportunity has a positive impact on the share price volatility in Nigerian listed conglomerates' and significant at 1% level and (vi) Earning volatility has a positive impact on the share price volatility in Nigerian listed conglomerates' and significant at 1% level. Consequently, the study concludes that corporate dividend policy plays a significant role in the Nigerian listed conglomerates' share price volatility. The study therefore recommends that listed conglomerates in the Nigeria Stock Exchange should maintain dividend policy that fit in to the existing and prospecting investors. Also, the study recommends 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.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Dividend policy is one of the most important factors that concern both managers of companies and shareholders. It is important because it is one of the financial benefits of the investors. But dividend policy problem, although well researched, has defied solution. The issue of dividend policy is a very important one in the current business environment. It 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 (Alii, 2014). Dividend or profit allocation decision is one of the four decision areas in finance. Dividend decisions are important because they determine what funds flow to investors and what funds are retained by the firm for investment (Peron, 2018).

Dividend policy provide information to stakeholders concerning the company's performance. Firm investments determine future earnings and future potential dividends, and influence the cost of capital. The survival of any company is dependent on the continuous investment in facilities and the employment of internal financing, through the use of retained earnings from an integral part of the sources of finance to foot the investment needs (Foong, 2017). Government fiscal policy tend to put some restrictions on the amount of dividend a company may pay. This invariably has forced part of the realized profits to be ploughed back. This was very obvious during the indigenization exercise of the seventies. The restriction is further strengthened by section 379 (2) of the company and allied matters act (CAMA) 2004 reviewed, which provides that the general meeting shall have power to decrease the amount recommended. One of the

reasons behind the dividend decision policy of the Nigerian government is to ensure that funds are available for continuous investment in assets, so that the companies will continue to operate on the going concern principle (Peron, 2018). The realization of the laudable goals of entrepreneurial investment in Nigeria has been inhibited by lack of sufficient funds. In fact the low level of investment capital available to most industrial organizations has accounted for the low capacity utilization (Chiwen, 2018).

The dividend policy of a company determines what proportion of earnings is distributed to the shareholders by way of dividends, and what proportion is ploughed back for reinvestment purposes Razaq (2016). Since the main objective of financial management is to maximize the market value of equity shares, one key area of study is the relationship between the dividend policy and market price of equity shares. Dividend policy connotes a payout policy, which managers pursue in deciding the size and pattern of cash distribution to shareholders over time (Davis 2016). Since managements primary goal is shareholders' wealth maximization, which translates into maximizing the value of the company as measured by the price of the company's common stock. This goal can be achieved by giving the shareholders a "fair" payment on their investments.

Similar to the observation made by Nishat and Irfan (2011) on the Pakistani capital market, the Nigerian market is a high risk, high return market. In a high risk, high return market, researches are expected to help reduce the mystery of dividend policy. This is definitely good for the development of the market. Since Baskin (1989) developed the models that permit the test of the relationship between dividend policy and stock return volatility, interest has grown by both researchers and practitioners alike. This interest is reflected by works of several researchers on this linkage. Recently, there have been increasing studies on the linkage of dividend policy and

stock volatility in many developing countries. Since stock volatility is the systematic risk faced by investors in the capital market (Guo, 2017). Efforts to rationalize it should not be surprising because investors will be interested in researches in this area. Stock volatility may affect price negatively and its persistence in a capital market can be detrimental (Davis 2016).

The Nigerian capital market is one of the emerging markets that witnessed increase on stock return just before the beginning of the present financial and economic crises. The report given by the Securities and Exchange Commission was a booster for investors in the Nigerian capital market. The increase in entry into the Nigerian capital market might have been connected with reduced volatility and increased dividends (Ismail, 2014). The efforts by the Nigerian security and exchange commission to create awareness and strongly regulate the market are objectives to minimize stock market volatility in order to increase investors' confidence. This efforts to some extents appears a success.

Recently some prominent Nigerian companies have withdrawn from the stock market. With all the advantages of listing the securities of a company on the Stock Exchange, these companies still go on to delist. If the advantages of delisting cannot match the volatility of the market, the companies will have no option than to withdraw from the market. This will at least save the image of the company because the company will no longer be affected by the fads of the market. Stock price volatility and dividend are global phenomena. Because of this, exploring the relationship between the two variables will be of paramount use to stock market participants.

1.2 Statement of Research Problem

Nigerian firms' are confronted with the issue of whether to pay a significant, little or zero rate of their earning as a dividend or retain their earning for future financing ventures (Chiwen, 2018). This issue is persistent, because financial managers also want to fulfill the needs of shareholders

to satisfy them being the part owners of the company, so it is crucial for managers to take such steps which satisfy them. Some shareholders need money on a continuous basis, so they prefer a dividend; while others are interested in following payments and would favor capital gain.

Furthermore, shareholders prefer high dividend yielding companies as they need continuous income from their investments, due to the fact that price appreciation is less important than current consumption income. Because of the reality of dealing with contending interests of different shareholders and the sort of dividend policies, companies embrace either immediate positive or negative consequences for the share prices of the organizations or whether they should set a high dividend pay-out ratio and offer a high dividend yield to maximize stock price. Consequently, managers are not able to conjecture with assurance at what degree dividend policy strategy will influence the share price changes in the long run.

A review of related prior studies such as Allen and Rachim, (1996), Asamoah (2010) Nishat and Irfan (2011) shows further that the main factors that influence a firm's share price volatility include firm size, leverage, earnings volatility and future growth projection of a firms'. This view however corroborates the suggestions of Brigham (2005) where a firm's dividend policy is seen as a major determinant for a share price changes. Nevertheless, many studies have been conducted on the relationship between dividend policy and stock price volatility, with those in developed capital markets relatively earlier.

Recently, studies on the relationship between dividend policy and share price volatility have been growing in volume in emerging markets, but such studies are rarely found in Nigeria. Most studies in Nigeria concentrate on the determinants of dividend policy and the role of dividend

policy in value creation. Concentrating on these two aspects of dividend policy ignores an important aspect, the linkage between dividend policy and stock price volatility.

1.3 Research Questions

In the light of above problems, the study intended to raise the following research question

- i. To what extent does dividend yield affect stock price volatility?
- ii. To what extent does dividend payout ratio stock price volatility?
- iii. To what extent does firm specific factors (firm size, firm growth, leverage and earning volatility) impact stock price volatility in Nigerian listed conglomerate?

1.4 Objectives of the Study

The broad objective of this study is to examine the impact of dividend policy on the stock price volatility in Nigeria listed conglomerates firms. Specifically, the study sought to:

- i. examine the extent at which dividend yield influence stock price volatility in Nigerian listed conglomerates.
- ii. investigate the influence of dividend payout ratio on stock price volatility in Nigerian listed conglomerates; and
- iii. examine the impact of firm specific factors (firm size, firm growth, leverage and earning volatility) on share price volatility in Nigerian listed conglomerates.

1.5 Statement of Hypotheses

The hypotheses of this study are stated in the null form as follows:

H₀₁ Dividend yield has no significant effect on stock price volatility.

H₀₂ Dividend payout ratio does not have significant influence on stock price volatility.

H₀₃ Firm specific factors (firm size, firm growth, leverage and earning volatility) has no significant impact on share price volatility.

1.6 Justification for the Study

The relative importance of dividend policy stems from the fact that it is a pivotal policy around which other financial policies rotate, hence, central to the maximization of shareholders wealth and valuation of firms' wealth, the work is therefore meant to benefit various groups that are directly or indirectly linked to the capital market. These groups are mainly policy makers, financial analysts, investors and researchers.

For the: *Policy Makers* such as managers of companies would find the work useful. Managers of companies would use the results of this research to influence share price through stock price volatility. Since as theorized, when dividend is reduced, share price can be boosted up. Managers would use dividend policy by reducing it to create wealth for the shareholders. This would in turn attract prospective investors to the market. Where the wealth of the company is boosted up, the company can raise additional funds to cater for its developmental projects.

Financial analysts such as stockbrokers, portfolio and fund managers and jobbers would use dividend policy for their respective professional functions. Stockbrokers who represent both buyers and sellers of quoted securities would use the findings of this study in helping their clients, especially if the findings of the study are in line with expected results. Stockbrokers usually perform the function of pricing quoted securities. This they do by analyzing the securities. Stockbrokers would thus assist their clients in pricing the buying and selling of the securities through considering the influence of dividend policy on stock price volatility. This is because low volatility stocks are expected to command high prices and vice versa.

Investors constitute another clientele in the capital market. Here, by investors, are meant those individuals that select their investments on the basis of long term holdings rather than short term trading, like jobbers. These are individual investors that are knowledgeable on the capital market. These individual investors can use capital market research while giving orders to their brokers. Just as the others in the preceding discussion, they would use the linkage of dividend policy and stock price volatility in giving orders to their agents.

Researchers would use the study in developing the discipline of the capital market. Researchers would use the work because it will add to literature in the area of capital market. These researchers include academics, researchers in research institutes and professional members who want to help in developing the discipline through their continuing education. Academics such as University Lecturers, whose one major function is research, would use the work since it will add to literature. Workers of research institutes also undertake research as their major function. The work will also help as literature. Research students can also use the work as reference materials in course of their studies.

1.7 Scope of the Study

This study restricts itself to the impact of dividend policy on stock price volatility in the. The choice of this topic is predicated on the fact that there are rarely studies on this topic in Nigeria. In addition, market risk is a very important variable to the investors.

The study therefore covers listed conglomerates firms' in Nigeria. This is because information on the firms' is available and obtainable both on the website of the exchange and in its offices. Data collection on listed firms' is further eased by the fact that the exchange has branches all over the country making it easy to access the offices.

The study uses data for 10 years period of 2007-2016. This period was specifically chosen to find out how the Nigerian capital market behaves for periods during and after the financial crises that started in 2007 as it's also long enough to dictate a structural change in the economy.

CHAPTER TWO

LITERATURE REVIEW

The relationship between dividend policy and share price volatility has been written by many researcher both locally and internationally. This chapter therefore presents the review of related conceptual literatures, theoretical literature, empirical studies, theoretical framework, conceptual model, summary and gap identified in literature.

2.1 Conceptual Issues

2.1.1 Concept of Dividend Policy

Dividend policy is a well discussed and researched aspect of corporate finance. However, dividend policy remains a source of controversy despite years of theoretical and empirical research (Allen and Rachim, 1996; Asamoah (2010); Nishat & Irfan 2011). Dividend policy is one of the most important policies not only to the firm, but also to the shareholders, customers, regulatory bodies and the government (Uwuigbe, Jafaru & Ajayi, 2015). Dividend policy, therefore, concerns a wide clientele that are related to the firm. From 1938 to Lintnar (1959), to Gordon (1956) to Miller and Modigliani (MM) (1961) to Black (1976) to De Angelo, De Angelo and Skinner (1996) to De Angelo and De Angelo (2004) and to date, researchers have not been able to solve the dividend question. According to Black (1976), the more one looks at the dividend picture, the more it seems like a puzzle, with pieces that do not just fit together.

Dividend policy can be described as a mirror in which the image of the dividend object does not resemble the object. What makes dividend policy difficult to settle in theory and in practice is that the demands of the investors operate in opposing directions. Coming up with a dividend policy is challenging because investors prefer both dividends and capital gains (Akinsulire, 2011) and firms generally adopt dividend policy that suites their life cycle (Waithara, Ngugi,

Aiyabei, Itunga & Kirago, 2012). Also firms adopt dividend policies that maximize their values (Waithara *et al.*, 2012). But this statement is better stated that firms adopt dividend policies that meet investors' needs and necessary conditions. Several attempts have been made to define dividend policy. Dividend policy is the policy of the firm on how much of the profit made is distributed as dividend and how much is retained in the business (Zee, 2018).

Davis (2016) states that dividends are usually decided by the board of directors and paid to the shareholders who are registered on the record date. Dividend payment is justified on the ground that dividends are cash in hand whereas capital gains are cash in the bush (Al-malkawi, 2007; Al-malkawi, 2008). But dividends may be in form of property or stock which may be difficult to realize. According to Lee (2017), dividend policy is meant to answer several questions such as: how much dividend should a company pay to shareholders? What will be the impact of dividend policy on the company's share price? What happens if the amount of dividend changes from year to year? Dividend policy centers on decisions that are positive to the firm. Indeed, it would be unthinkable to see managers taking decisions that have negative consequences because the managers' job would be at stake. Van Horne & Wachowicz (2010) another view is that dividend policy is an integral part of a firm financing.

Van Horne and Wachowicz, (2010) posited that a major aspect of the firms dividend policy is determining the appropriation of profit between dividend payment, while considering legal, liquidity and control issues. Dividend policy is sometimes constrained by certain circumstances such as debt obligation extinguishment. Firms seem to increase dividends with a lag which is an unspecified decision process (Foong, 2017). Dividend policy is counter balanced by retention policy, investment policy, financing policy and growth policy. Dividend policy is also said to be

a set of guidelines a company uses to decide distributable part of profit and retention Companies pay more attention to two types of dividend policies, residual and stability policies.

Gordon (1963) cited in Farquod (2015) posited that several theoretical models have attempted to help ease the complexity of dividend policy. One approach is that paying large dividends reduces risk which in turn reduces the cost of capital leading to increased firm value. As Baskin (1989) notes, establishing regularity between dividend policy and stock price volatility would help investors predict risk. But establishing regularity between dividend policy and price volatility would not only help investors predict risk, but also helps managers manage risk. This is because dividend policy can be used to reduce risk in order to increase shareholders wealth. Easterbrook (1984) and Rozeff (1982) cited in (Zee, 2018), concord that dividend policy can be used as an agency cost in monitoring managers. This is done by the company resorting to the capital market, where members of the market scrutinize for their investments. The signaling model posits that dividend carries information and as such, can be used to boost the company's value (Asguith & Mullins, 1983; Battacharya, 1979; Miller & Rock, 1985). The capital structure substitution theory (CSST), suggests the use of leverage, stock return and profit to predict the size of dividend, while the dividend discount model (DDM) uses dividends to assess firms value (Gordon, 1959). In practice, however, investors seem to prefer a steady dividend growth (Foong, 2018). The dividend discount model is considered by many authors to enjoy support of practitioners.

Dividend policy is measured by using Dividend Yield (DY) and Dividend Payout Ratio (POR) proxies. POR seems to be the most commonly used measure of dividend policy used by researchers, especially in establishing the determinants of dividend policy. In establishing the linkage between dividend policy and stock price volatility, however, DY and POR are mostly

used. This may be that investors' dividend decisions are based on considerations from the angle of earnings or capital invested.

2.1.2 Concept of Stock Price Volatility.

Stock price volatility has been a capital market issue. Investors are never comfortable when stock returns are, especially very volatile. Many researchers and writers such as Baskin (1989), Porterba and summers (2015) and Ismail (2014) cited Zee, (2018) and Foong (2018), look at price volatility as the standard deviation of stock price. The issue of stock volatility is not that volatility exists, but that the volatility varies, hence the question as to why there is volatility of volatility. Amadeo (2012) and Commonwealth Financial Network (2009), See stock volatility as the pace stock prices move overtime. Bail (2016) states that in practice, price volatility is measured on minute by minute base over 30 days. Volatility is always observed to occur over time. Gujarati and Porter (2009) report that financial time series experience periods of relative calm and wide swings, but Pandian (2012) and Guo (2017) posit that volatility is the systematic risk faced by investors in the market place and for only which they should be rewarded since they can diversify away unsystematic risk. There exist historic and implied volatility. Implied volatility is more relevant to practitioners because it is forward looking.

The directional consideration for volatility is immaterial since the proxy, which is the variance, is implied by squaring the return figures, and the Black-Scholes model loses significance in a changing volatility. Stock price volatility moves in the same direction with market risk (Cuthbertson & Nitzsche, 2015). Stock market volatility can therefore be used as a proxy for stock market risk. Studies on the influence of stock volatility have been inductive, but the knowledge of price volatility can be enhanced by modeling. Several studies exist attempting to find evidence for factors that impact on stock volatility with few theories to explain the

phenomena, as Zee (2018) notice. The few thoughts and intuitions that attempt to solve this problem are mostly informal. Roll (1983) and Glosten and Milgrom (1985) suggest microstructure and liquidity respectively as factors that impound in stock price risk, while Vaknin (2014) believes that short selling on the stock exchange is responsible for price volatility. Other views are (Peron, 2018) for trade cycle and macroeconomic variables. But the open views are for computerized trading; limit trading, off trading, auction trading and margin requirements and the presence and absence of floor brokers (Roll, 1988). Volatility creates market inefficiency where stock price is mispriced because it is believed to be caused by mass fear, mass disagreement and mass greed. Black and Scholes (1973), try to solve the problem of volatility measurement by developing the Black-Scholes (B-S) model pricing option, while Oseni and Nwosa (2011) believe that price volatility is affected by future cash flow.

Several proxies are used to represent price volatility. Leon (2007) suggests a realistic proxy for stock volatility using a percentage of change in stock price. Peron (2018) uses the stock return (R) and the square of the stock return (R^2) as proxies for price volatility. Some researchers use the standardized covariance of the stock return and the market portfolio such as S&P 500, known as Beta (B) (Beaver, Kettler & Scholes, 1970; lee, 2017), while Parkinson (1980) comes up with a calculation which uses the difference between the highest and lowest prices a year divided by the average of the same highest and lowest prices. The proxy according to Parkinson (1980) is superior to just the difference between the highest and the lowest prices. Most recent researchers consider the Parkinson (1980) model as quite appealing (see, for example, Asghar, Shah, Hamid & Suleiman, 2011; Habib, Kiani & Khan, 2012; Hashemijoo, Ardekani & Younesi, 2012; Hussainey, Mgbame, & Chijioke -Mgbame, 2013; Jecheche 2012, Nazir, Abdullahi, & Nawaz,

2012; Nazir, Nawaz, Anwar, & Ahmad 2010; Rasheed & Rahman, 2008; Zakaria, Muhammad & Zulkifli, 2012). This study uses this method of measuring price volatility.

2.1.3 Concept of Conglomerates

Conglomerate, in business is a corporation formed by the acquisition by one firm of several others, each of which is engaged in an activity that generally differs from that of the original. The management of such a corporation may wish to diversify its field of operations for a number of reasons: making additional use of existing plant facilities, improving its marketing position with a broader range of products, or decreasing the inherent risk in depending on the demand for a single product. There may also be financial advantages to be gained from the reorganization of other companies (Tsui, 2012 cited in Sanusi, 2014).

A conglomerate is a combination of two or more corporations engaged in entirely different businesses that fall under one corporate group, usually involving a parent company and many subsidiaries. Often, a conglomerate is a multi-industry company. Conglomerates are often large and multinational. A corporation that is made up of a number of different, seemingly unrelated businesses.

In a conglomerate, one company owns a controlling stake in a number of smaller companies, which conduct business separately. Each of a conglomerate's subsidiary businesses runs independently of the other business divisions, but the subsidiaries' management reports to senior management at the parent company. The largest conglomerates diversify business risk by participating in a number of different markets, although some conglomerates elect to participate in a single industry (Bligh, 2006).

According to McDonald & Wasko, (2010), there are two philosophies guiding many conglomerates either by participating in a number of unrelated businesses, the parent corporation is able to reduce

costs by using fewer resources, or by diversifying business interests, the risks inherent in operating in a single market are mitigated.

A strategy of diversification spurred the formation of many conglomerates in the mid-20th century, especially as firms sought to acquire unrelated companies whose products and services might better withstand economic slowdowns. In that era, a holding company such as the former ITT Corporation or Gulf + Western might have had interests that included hotels, film studios, telephone service, and insurance. By the late 20th and early 21st centuries, however, global competition created conditions that favoured industry consolidation, as evidenced by mergers among large corporations in the banking, automotive, telecommunications, computer, retail, and entertainment industries (Bligh, 2017).

History has shown that conglomerates can become so diversified and complicated that they are too difficult to manage efficiently. In the late 19th century many American conglomerates, such as the Standard Oil Company and Trust, sought to control all aspects relating to the development, production, marketing, and delivery of their products (McDonald & Wasko, 2018).

2.2 Theoretical Review

After the pioneering work of Modigliani and Miller (1958) on dividend policy, some conflicting theories of dividend policy have been developed. They are namely: Agency theories and free cash flow hypothesis, the bird in hand theory, signaling hypothesis and arbitrage realization Theory.

2.2.2 Agency Theory and Free Cash Flow Hypothesis

Agency cost is the cost of conflict of interest between managers and shareholders. It is also the cost of conflict of interest between creditors and shareholders. Jensen and Meckling (1976) state that, agency cost arises when owner managers divest part of their holdings to outsiders. Miller and Modigliani posit that managers are perfect agents of the shareholders and no agency costs can arise between them. Al-Malkawi (2007) argues that managers may conduct some activities

that may incur costs to shareholders such as undertaking investments that yield negative net present value and unnecessarily paying high compensations to themselves.

Agency cost as regards dividend policy was developed by Easterbrook (1984) and Zoreff (1982). They argue that dividend policy can be used to reduce agency cost. Shareholders, they argue, require the funds that can be used for firms' growth. The dividend paid to shareholders reduces the cash flow of the firm, forcing managers to raise funds from the capital market. Capital market funds are strictly scrutinized. This replaces the monitoring of managers by shareholders, hence reducing monitoring

Jensen (1986) developed the free cash flow hypothesis. According to Jensen, free cash flow is the cash flow of the company in excess of that required to invest in all positive net present value projects. Jensen argues that the agency problem can be worse in the presence of free cash flow. He argues further that managers invest the company's free cash flow in negative net present value projects for their utility maximization. The agency cost that results reduces the value of the firm. The free cash flow hypothesis excludes the growth opportunities of the firm. Thus the free cash flow hypothesis cannot hold when there are investments opportunities available to the firm.

Just as the dividend irrelevance theory, this theory and this study are related by way of the fact they concern dividend. The prediction of this theory, however, differs from that of this study. There is no prediction in this theory that links any independent variable to stock price volatility. The prediction of this theory, however, proposes a relationship between policy and stock price volatility.

2.2.3 The Bird in Hand Theory

The bird-in-hand theory proposes that in a world of uncertainty, and information asymmetry, investors prefer dividends because a bird at hand is worth more than two in the bush. The consequence of high dividend will reduce the cost of capital and hence increasing the stock price. According to Al-Malkawi, this theory has not received much support. The advocates of this theory include Gordon (1959). The indeterminate nature of the irrelevance theory gives impetus to the bird in hand theory (Al-Malkawi, 2007). This theory and this study, apart from being linked directly by way of dividend, are also linked by way of stock price. Increase in volatility implies that stock price will be low. And decrease in volatility implies that stock price is high. So, if low dividends increase stock price, it suggests that the prediction of this theory and that of the model for this study oppose each other.

This theory proposes ultimate increase in risk leading to reduced price. Nishat *et al.* (2001) posit that Gordon (1963) developed the rate of return effect. The theory proposes that in a low dividend paying company, shareholders have high expectation of a company's growth. The expectation of growth will swing to uncertainty in the distant future. The theory suggests a negative relationship between dividend policy and stock price volatility. Uncertainty is associated with distant future. This may be the premise upon which this theory is built. The theory proposes low level of uncertainty in the short term and high level of uncertainty in the long term.

2.2.4 The Signaling Hypothesis

The signaling hypothesis is referred to as the information content hypothesis. The hypothesis proposes that dividend payment indicates current and future profitability performance of the company. According to the theory, a company that pays dividends passes information that the

current and future profitability performance of the firm is and will be good. Nishat *et al* (2011) state that, if investors are certain about their opinion, they will react less irrationally to questionable information. Researchers are consensus that dividend conveys information but there is no agreement as to the nature of the information conveyed. This has led to formulation of subsidiary theories. Bhattacharya (1979) developed the cash flow signaling hypothesis. The cash flow signaling hypothesis posits that the current cash flow of a firm serves as signal for the future cash flow. It suggests that the future cash flow will be good. The proponents of signaling hypothesis include Bhattacharya (1979), Miller and Rock (1985), Asquith and Mullins (1983) and Zoreff (1982)

This theory shows one of the mechanisms that link dividend policy and stock price volatility. The model here explains and predicts stock price volatility.

2.2.5 Arbitrage Realization Effect

The arbitrage realization effect is built on the assumption of inefficient market, portrayed by Baskin (1989). Allen and Rachim (1996) stated that a number of authors have argued to that. The arbitrage realization effect posits that the realization of profit from mispricing of stock might be possible even though it could be very difficult, particularly where the forces of equilibrium take effect slowly.

A fully informed investor who knows the extent of the underpricing and the value of the expected dividend in each period is assumed to be concerned with the return over the next investment period. Allen and Rachim (1996) state that this investor considers that others will not be aware of the underpricing and the stock will continue to sell at a discount at the end of the period. Thus, a mispriced common stock which pays no dividend and which shows no tendency

to return to its intrinsic value cannot provide an arbitrage profit. The higher the dividend yield, the greater the scope for realizing the arbitrage profit.

In developing this theory, Baskin (1989) predicts that dividend policy is negatively related to stock price volatility study. Nishat *et al* (2011) state that this theory is one of the mechanisms that predict an inverse relationship between dividend policy and price volatility.

The duration effect proposes that a high dividend paying company has near term cash flow. Baskin (1989) states that, like short term debt, where the price remains at par, the price of high dividend paying company will remain at par, even when there is fluctuating rate of return. Short term debts are low risk securities, just as a company with high dividend payment is. The prediction of this model is that increasing the dividend of a company reduces its stock volatility. This prediction is an inverse relationship between dividend and stock volatility.

2.3 Empirical Review

Numerous empirical studies have been carried out to investigate the relationship between dividend policy and stock price volatility.

International Studies:

Allen & Rachim (1996) examined the relationship between dividend policy and stock price volatility of 173 Australian listed firms from the period 1972 to 1985. Their findings show that there is no relationship between dividend yield and stock price volatility. In addition, they also found that stock price volatility has a positive relationship with earnings volatility, but a negative relationship with the pay-out ratio. Their findings imply that dividend policy does not clearly impact volatility of stock price since there are mixed causality from the results, which is not in line with the findings of Baskin (1989). Carper and Yang (2008) investigated whether the

relationship between dividend policy and stock return volatility may have changed over time because of the US capital gains tax relief. Using data on common stocks from 1967 through 1986, and using the model symmetric with Baskin's (1989), their estimation result provide insights into different trading strategies and investment method Rashid, *et al* (2008), in their study dividend policy and share price volatility in in the firm listed Bangladesh stock exchange market frm 2001-2005, found no relationship between dividend yield and stock return volatility and a negative relationship between dividend payout ratio and stock return volatility, report that institutional shareholding and insider activities were responsible for their results.

Asamoah (2010) investigates the impact of dividend policy on share price volatility in 10 selected quoted manufacturing firms in Ghana using panel data regression technique finds significant negative relationship between the two measures of dividend policy and stock price volatility. Nazir, Nawaz, Anwar and Ahmed (2010) in their study dividend policy and share price volatility using least square established positive relationship between dividend yield and stock return volatility and a negative relationship between dividend payout ratio and stock return volatility.

Asgar, Shah, Hamid and Suleiman (2011) find a negative relationship between dividend policy and stock return volatility. Jecheche (2012) finds that the Zimbabwe stock market agrees with the dividend policy models as regards stock return volatility. Habib, Kiani and Khan (2012) find that dividend and payout ratios show no sign of impact on stock return volatility. Hashemijoo, Ardekani and Younesi (2012) have mixed results on the measures of the relationship between dividend policy and stock return volatility.

A study conducted by Habib *et al* (2012) discusses the impact of dividend policy on stock returns with special reference to Pakistan using the cross sectional regression analysis. The results

revealed that payout ratio and price volatility is significantly positively related. Nazir *et al* (2012) also investigated the role of corporate dividend policy in determining the volatility in the stock prices in Pakistan using a sample of 73 firms from Karachi stock exchange (KSE) for the period of 2003-2008. Both fixed effect and random effect models on the panel data was applied and found that the dividend policy has a strong significant relationship with the stock price volatility in KSE. It concluded that price volatility may be reduced by employing an effective corporate dividend policy.

Hashemijoo (2012) examined the relationship between dividend policy and share price volatility with a focus on consumer product companies listed in Malaysian stock market. This study shows a significant negative relationship between share price volatility with two main measures of dividend policy which are dividend yield and dividend payout.

Hussainey, *et al.* (2013) establish a positive relationship between dividend yield and stock return volatility and a negative relationship between dividend payout ratio and market risk. Several studies were conducted in 2010 on the linkage of dividend policy and stock return volatility. Using a sample of 10 firms. Sadiq (2013) analyzed the stock price volatility by taking non - financial firms listed on KSE. This study concluded that price volatility of stocks has a negative relationship with the dividend yield. Irandoost *et al.* (2013), assessed the effect of dividend policy on stock price volatility and investment decisions using a sample of 65 firms from Tehran Stock Exchange for the period of 2007 to 2012. The research results indicated that the dividend policy has a significant effect on stock price volatility in a short time and does not have a significant effect on stock price volatility in a long time. Moreover, it discovered that the dividend policy does not have a significant effect on investment decisions in terms of cash and accrual.

On the other hand a case study by Foerster and Sapp (2016) reveals significant facts on the changing role of dividends from the nineteenth to twenty first century. They have selected the Bank of Montreal, the oldest financial institution in Canada and studied how the dividend policy has evolved since its establishment in 1817. Importantly, the bank has paid dividends for 175 years consistently since 1829. As per the findings, annual dividends and earnings changes move together and are more variable in the early periods and more stable in the subsequent periods, with the dividend payout ratio decreasing since World War II. And there is a distinctive shift in dividend policy since the end of World War II to one maintaining a specific level of dividends rather than a specific payout ratio.

Furthermore, Dewasiri and Weerakoon Banda (2017) examined the relationship between dividend policy and stock price volatility using a sample of 40 companies listed in the Colombo Stock Exchange for a period of ten years from 2005 to 2014. They found that there is a significant negative impact from dividend payout, a significant positive impact from company size and no evidence of significant impact from dividend yield on stock price volatility. The findings suggested that high dividend payout would lead to less volatile stock price, whilst higher dividend yield pave the way towards more volatility in stock price in the short run.

Using a sample of firms listed in the Dakar stock exchange, Rasheed and Rahman (2018) find evidence of positive but insignificant relationship between dividend yield and stock return volatility in Bangladesh. They however find a significant negative relationship between dividend payout ratio and stock return volatility.

Hamid et al. (2017) using data from 2006 to 2014 in textile firms in Bangladesh. The study reveal a significant positive impact between the two

dividend measures dividend yield, dividend payout ratio and share price volatility.

Local Studies:

In Nigeria, Okafor *et al.* (2010) in their study dividend policy and share price volatility establish that dividend yield is negatively related to stock return volatility, while payout ratio is positively related to stock return volatility. Okafor *et al.*'s (2010) study is the only one on the linkage of dividend policy and stock return volatility in Nigeria. They find a significant negative impact of dividend yield and positive impact of payout ratio on stock return volatility respectively.

Ilaboya and Aggreh, 2016) conducted a study on the relationship between dividend policy and share price volatility selecting 26 firms listed in the Nigerian stock exchange from year 2005 to 2015 with the objective of examining evidence from a developing country. They employed pooled OLS and panel EGLS in analysis and identified share price volatility as the dependent variable and the dividend yield, dividend payout ratio as the independent variables. Further, the firm size, long-term debt, earnings volatility and asset growth rate were also considered as control variables. The findings of the study reveal that the share price volatility is positively and significantly influenced by the dividend yield and negatively and insignificantly influenced by the dividend payout ratio. Thus, they emphasize that the companies must carefully identify an efficient approach to maximizing shareholders wealth simultaneously meeting the needs of financing investments.

2.4 Summary and Gap identified in Literature

All the reviewed works serves as basis for further studies in the area of dividend policy and share price volatility because most of them have touched areas where necessary and important and as may be required in respect to sample of the study especially Nazir, *et al.* (2011), Okafor, *et al.* (2010) and Ilaboya & Aggreh, (2016) with thirty (30) Malaysian firms, ten (10) Nigerian quoted firms and (10) Nigerian firms respectively which are representative enough.

It was discovered that the majority of their work largely focused on some sectors, like the studies of Pratomo and Ismail (2014) focusing on the Islamic Banks of Malaysia, Berger and Wharton (2002) on only the banking industry of US, Ong and Teh (2011) studied on the Bangladesh construction companies, Ilaboya and Aggreh (2010) concentrated on the Nigerian petroleum industry, Okafor, *et al.* (2011) concentrated on the Nigerian manufacturing firms only. However, none of the aforementioned researchers put into consideration the Conglomerate firms' in their respective works. Nonetheless, most of the studies fall under the same range of period of 1999-2007 as their years of assessment which may be considered relatively short for the work of this nature with, the exception of Ilaboyah and Aggreh (2016) reviewed between 2006- 2014 which may be considered relatively latest on a period of ten years. Finally, the findings of the foreign studies are very vital only that, differences in political and, economic situations among the nations may hardly allow their findings applicable to Nigeria.

Therefore, with the gaps observed from these studies, this study attempts to bridge those gaps by extending the year of assessment to ten (10) years from 2007 to 2016, a period considered moderately longer and at the same time studying the conglomerate firms, thereby having a focused sample in the study and eventually allowing the findings to stand a better chance of being represented on non-financial firms generally in Nigeria.

2.5 Theoretical Framework

Following the review of various theories relevant to dividend policy and share price volatility, the main thrust of this study revolves around how dividend policy influence the share price volatility in Nigerian listed conglomerates. In view of this, this study adopted dividend signaling theory and bird in hand theory to serve as the theoretical underpinning for this studies. This is because both theories capture all the indices crucial to the explanation of dividend policy i.e. dividend payout ratio and dividend yield.

Linking these theories to this study, firstly, Dividend Signaling Theory emphasizes that due to the information content in dividends, dividend announcements are taken as a signal of the companies' good position that will raise the stock prices and vice versa. Investors with imperfect information about company conditions would use dividends as a clue to the prospects of the companies. Further, Investors could use the special payout announcement by company as a hedged managerial indication about future profitability. Thus, this theory is relevant to this study as it provides a premise for a financial manager in making decisions regarding dividend policy to be adopted by firm.

Bird in hand theory on the other hand proposes that in a world of uncertainty, and information asymmetry, investors prefer dividends because a bird at hand is worth more than two in the bush. Consequently, high dividend reduces the cost of capital and hence increases the stock price volatility. Increase in volatility implies that stock price will be low and decrease in volatility implies a higher stock price. The theory further posited that in a low dividend paying company, shareholders have high expectation of a company's growth. The expectation of growth will swing to uncertainty in the distant future. The theory suggests a negative relationship between dividend policy and stock price volatility. Uncertainty is associated with distant future. This may

be the premise upon which this theory is built. Hence, bird in hand theory is key to this study as it determines the kind of dividend policy that financial manager should adopt that will maximize shareholders values.

Sequel to the propositions of theories adopted for this study, the dividend policy theories addresses the components of dividend policy as having influence on the share price volatility of firms. The adopted theories goes further by emphasizing that the dividend payout ratio, dividend yield, firm size, firm growth opportunity, leverage and earning volatility have significant effect on the firm's share price volatility. In view of this and coupled with the empirical evidence observed from the empirical review, the relationship between the independent variables (dividend payout ratio, dividend yield, firm size, firm growth opportunity, leverage and earning volatility) and dependent variable is depicted below:

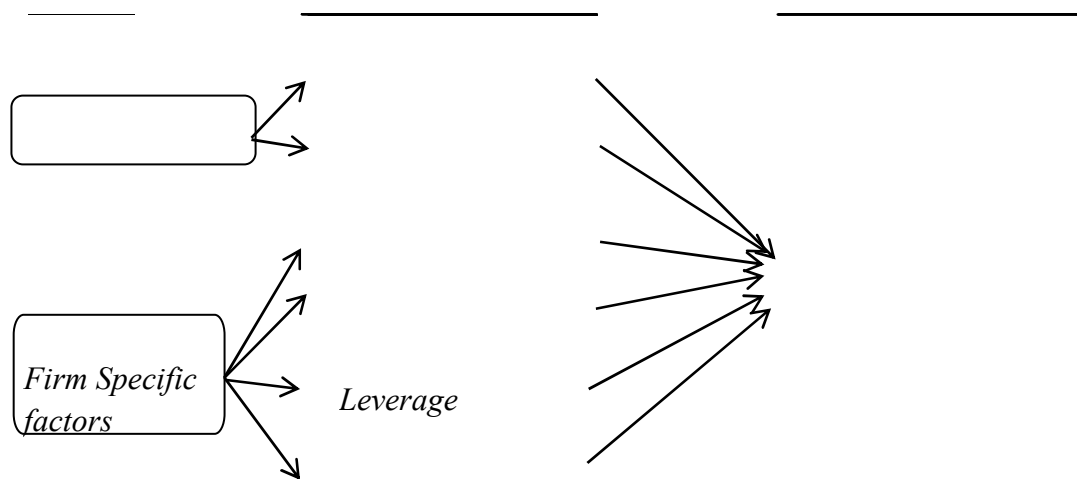


Figure 2.1: Conceptual Model

Source: Adapted from the work ofZuriawati *et al.* (2014).

From the figure 2.1 above, further clarifications is shown on the relationship between the variables of study. Different study on the area of dividend policy have shown a mixed result as to

the effect of determining variables in the studies. Some study present positive relation while some reveals negative relationship between the dependent and independent variable. For instance Nazir, Abdullahi and Nawaz (2011), Okafor *et al.* (2010) and Ilaboya & Aggreh, 2016) study revealed a significant negative impact of dividend yield and positive impact of payout ratio on stock return volatility respectively. And all it is expected that each of the variable identified will react in one way or the other with stock price volatility.

CHAPTER THREE

METHODOLOGY

This chapter describes the techniques and procedures used by researcher in conducting this study and accumulating the data for the study as it also encompasses the description of research design, model specification, method of data collection, variable description, method of data analysis and summary of variable description and *a priori* expectation

3.1 Research Design

The study employed descriptive research design to explore the relevance of dividend policy and share price volatility in listed conglomerate firms in Nigeria. Analysis was based on available annual secondary data collected over the study period (2007-2016). The data related to dividend policy and share price volatility. Since the study was insight-gaining with emphasis on time patterns and longitudinal volatility, the design was deemed appropriate for empirical investigations of the relevance of the dividend policy on the share price volatility. Thus, the design enhanced detailed analysis of the impact of dividend policy on listed conglomerates firms share price volatility in Nigerian economy and ensured that inferences were drawn from the outcomes of logical sequences.

3.2 Model Specification

The following model is adapted from the work of zuriawati *et al.* (2014), Yasir *et al.* (2015) to develop a relationship between share price volatility and dividend policy.

$$PVol = f(DivPol) \dots \dots \dots \text{eq. 3.1}$$

$$DivPol = DY + DPR \dots \dots \dots \text{eq. 3.2}$$

$$PVol_{it} = \beta_0 + \beta_1 DYield_{it} + \beta_2 DPR_{it} + \mu_{it} \dots \dots \dots \text{eq. 3.3}$$

Using only dividend payout ratio and dividend yield as a measure for dividend policy, multicollinearity problem likely to arise since both variables are closely related to each other. There are other variables that could influence share price volatility. Thus, the model was expanded by adding the four firm specific factors (size, earning volatility, leverage ratio and growth) as other microeconomics factors that influence share price volatility in the selected firms. According to Baskin (1989) cited Ilaboya & Aggreh (2016) proposed that size, earning volatility, debt and growth affect the both share price volatility.

The model to be estimated becomes:

$$PVol_{it} = \beta_0 + \beta_1 DYield_{it} + \beta_2 DPR_{it} + \beta_3 Size_{it} + \beta_4 Growth_{it} + \beta_5 Lev_{it} + \beta_6 Evol_{it} + \mu_{it} \dots \dots \text{eq. 3.4}$$

Where:

- DivPol = Dividend Policy
- PVol = Share Price Volatility of firm i in year t
- DYield = Dividend yield of firm i in year t
- DPR = Dividend payout ratio of firm i in year t
- SIZE = Assets size of firm i in year t
- GROWTH = Growth of firm i in year t
- LEV = Debt of firm i in year t
- EVol = Earning Volatility of firm i in year t

β_0 = intercept μ = error term

$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5,$ and β_6 = coefficient

3.2.1 *A priori expectation*

Theoretically, dividend yield, dividend payout ratio, growth and size are expected to have negative relationship with share price volatility while earnings volatility and leverage were expected to have positive relationship with share price volatility. This can be further expressed using mathematical notation as: $\beta_1, \beta_2, \beta_3 \& \beta_4 < 0. \beta_5 \& \beta_6 > 0$

3.3 **Method of Data Collection**

The study employed quantitative research technique to carry out its findings, using secondary data. The data was mainly quantitative because information concerning dividend policy and share price volatility can easily be obtained from the audited financial reports.

The data were sourced from the Nigeria Stock Exchange (NSE) fact book, audited financial reports of selected firms' (Nigeria listed conglomerate firms). The time series information covered a period of 10 years from 2007 to 2016. On the other hand, the panel research design covers the period between year 2007 and 2016. This category of data was mainly in quantitative form. Access to the data will not be a problem as these were published annually in the print and electronic media for public consumption.

The researcher intend to benefit in so many ways from the use of this type of information for the study. First this is less expensive to collect, in term of time and money. It also afford researcher the opportunity to collect high quality of data which would not have been of the same quality if the researcher were to collect it in the primary form.

3.4 **Method of Data Analysis**

Tables and chart were used to present the data. Pairwise Correlation examine the relationship between dependent and independent variables while Panel data regression analysis was used to

investigate the extent to which dividend policy affect the share price volatility of listed conglomerates firm in Nigeria in the period between 2007-2016.

Panel data estimation technique is adopted because “it takes care of heterogeneity associated with individual company by allowing for individual specific variables. Also, by combining time series of cross sectional observations, panel data give more informative data, more variability, less co-linearity among variables, more degrees of freedom and more efficiency”. Besides, panel data will minimize the bias that can result if individual firms are aggregated. It also enriches empirical analysis in such a way that may not be possible if either only time series data or cross sectional data is used.

The panel model for the study is specified thus:

$$Y_i = \alpha X_{it} + \beta Z_i + \epsilon_{it} \dots\dots\dots 3.7$$

Where:

Y = dependent variable

X = independent variable

α = intercept

β = coefficient of the explanatory variable

e = error term

i = cross-sectional variable

t = time series variable

3.2.2 Description of variables used in the study:

Share price volatility (Pvol):

This variable is the dependent variable in this study. For calculating share price volatility, firstly, the annual range of stock price is divided by average of the highest and lowest adjusted price for

each year and the result is raised to second power. Then the average of this amount is computed for all 10 years and the square root transformation is used to achieve a variable comparable to standard deviation. This calculation method for share price volatility is consistent with (Baskin, 1989) and (Parkinson, 1980).

Dividend yield (Dyield):

This variable is one of the main independent variables of this study. For computing this variable, the sum of cash dividends paid to common shareholders is divided by the market value of each company at the end of the year. Then the average for 10 years is utilized. This followed Sulong and Mat Nor (2008) and Schooley and Barney (1994).

Payout ratio (Payout):

This variable is one of the two main independent variables of this study. For computing this variable, the sum of cash dividend paid to common shareholders is divided by the net income after tax for each year {Hussainey *et al.* (2013), Nazir *et al.* (2010), Rashid and Anisur Rahman, (2008)}. Then the results are averaged for 10 years.

Baskin (1989) study indicated share price volatility has negative relationship with both dividend yield and dividend payout. (Allen & Rachim, 1996) analysis showed a positive relationship between share price volatility and dividend yield. Their study also showed dividend payout has significant negative impact on share price volatility.

Size:

Size is one of the specific variable the influence share price volatility was measured by using the natural logarithm of total asset (Smith and Watts, 1992; Kouki and Guizani, 2009; Chae *et al.*, 2009).

It is possible that size of firm affects the price volatility because small firms usually have less diversification in their activities. Moreover, it is possible that small firms have less information available to investors about their stock market. Another reason for impact of size on share price volatility is that small firms' stock may be more liquid, so their share price can be more volatile than larger firms. (Baskin, 1989) proposed that firms which have more scatter body of shareholders are more likely to use dividend as a signaling device, so the size can affect the dividend policy too.

Earning volatility (Evol):

This variable is one of the specific variable that influence share price volatility in this study. For calculation of earnings volatility, firstly, the ratio of operating income to total asset is calculated for each year and then the results are averaged for 10 years. Finally, the average of second power deviation from overall average is computed and a square root transformation is used. This method of calculation is gathered from Hussainey *et al.* (2013), Nazir *et al.* (2010), Rashid and Anisur Rahman, (2008).

Leverage:

This variable is is one of the specific variable that influence share price volatility in this study. For calculating this variable, firstly, the ratio of long-term debt (obligations of firm with maturity greater than one year) to total asset is computed for each year. Then the average of results is utilized. It can be calculated based on this formula:Hussainey *et al.* (2013), Nazir *et al.* (2010), Rashid and Anisur Rahman, (2008).

Growth:

This variable is one of the specific variable that influence share price volatility in this study. For calculation, firstly, the ratio of change in total asset at the end of the year to total asset at the

beginning of the year is computed for each year. Then the average of results is utilized. Dividend policy may have an inverse relationship with growth because firms in their growth stage are more likely to keep their income for investing in new investment opportunities. Based on arbitrage effect the level of growth and share price volatility could be inversely related. So, a control variable (Growth) is added to primarily regression equation as a measure of growth.

Table 3.1: Summary of Variables Measurement and *a priori* expectations

<i>Variable</i>	<i>Determinants</i>	<i>Proxies</i>	<i>Measures</i>	<i>Notations</i>	<i>Expected Relationship</i>
DEPENDENT	PRICE VOLATILITY	Price Volatility	$\sqrt{\frac{\sum_{t=1}^n \left\{ \frac{H_t - L_t}{H_t + L_t / 2} \right\}^2}{n}}$	Pvol	
INDEPENDENT VARIABLES	DIVIDEND POLICY	Dividend Yield	$\sum_{i=1}^n \left\{ \frac{Dt / MVt}{n} \right\}$	Dyield	Negative(-)
		Dividend Payout Ratio	$\sum_{t=1}^n \frac{Dt / Et}{n}$	Dpr	Negative(-)
CONTROL VARIABLES	Firm size	Nat. Log of Total Assets	lnTA	size	Negative(-)
	Growth	Change in total Asset	$\frac{\sum_{t=1}^n \left(\frac{\Delta TA}{TA} \right)}{n}$	growth	Negative (-)
	Leverage	Debt Ratio	$\sum_{t=1}^n \frac{TD / TA}{n}$	Lev	Positive(+)
	Earning volatility	Earning volatility	$\sqrt{\frac{\sum_{t=1}^n (R_t - \bar{R})^2}{n}}$	Evol	Positive(+)

Source: Author's computation (2018).

CHAPTER FOUR

DATA PRESENTATION AND ANALYSES

This chapter covers the presentation as well as analyses of the data collected through secondary source (financial statement) and the discussion of findings by the researcher. In this chapter the data collected during the process of conducting the research work will be presented using descriptive table and analyzed using panel data regression analysis.

4.1 Descriptive Statistics

Table 4.1 presents the descriptive statistics for the dependent variable (share price volatility) and explanatory variables (dividend yield, dividend payout ratio, size, growth, leverage and earning volatility of selected listed conglomerates firms' in Nigeria.

Table 4.1: *Descriptive Statistics of the dividend policy and share price volatility Variables*

Variable	Obs	Mean	Std. Dev.	Min	Max
pvol	60	.6492912	.340797	-.016476	.15546
dyield	60	.1928564	.1159786	.1033318	.8241141
dpr	60	.5964420	.3159720	-.0242415	.0879047
size	60	11.85418	3.086418	.121342	.967756
growth	60	.1859378	.0136392	0	1.406169
Lev	60	.2330137	.2104195	-.020533	.1034181
evol	60	.1024853	.6009783	.0304372	.3286561

Source: Author's Computation (2018)

From the table, the mean of the dependent variable, price volatility (PVol), is 0.649212. If it is assumed that stock price follows a normal distribution, the mean of the stock price volatility can be found. The mean price volatility of 0.6492912 is multiplied by the constant number, 0.6008, derived by Parkinson (1980). The result is 39%. This figure is close to Baskin's (1989) result which is 36% for the US market. For Australia, the mean price volatility is 29.91% (Allen and Rachim, 1996), while Nishat and Irfan (2001) obtain 29.42% and 32.56% for the Pakistani pre

and reform periods respectively. The result for the UK is obtained by Hussainey, *et al.* (2013) as 17.66%. The Nigerian result, 39%, suggests a within range figure, indicating that stock price in Nigeria approximately follows a normal distribution.

The standard deviation of price volatility is 0.340797. This is the extent to which stock price volatility varies across firms in Nigeria. On average, the volatility variance in Nigerian capital market is moderate. One would expect a high level of volatility variance in Nigeria, but it does not actually appear to be so. The mean and standard deviation of dividend yield are 0.1928564 and 0.1159786 respectively. The average (mean) of dividend yield, being about 19% is not too low. This result indicates that Nigeria listed conglomerate, investors receive dividend of 19% on their investments. It may be that investors prefer dividends to capital gains in Nigeria listed conglomerate firms, and hence are willing to take low dividend because it is sure bet.

The mean payout ratio of the sample companies is 0.596442. The ratio suggests that, on average, Nigerian listed conglomerates firms' payout more than 50% of the profits made. The payout appears to conform to the provision of the various dividend policy models. The standard deviation of 0.315972 for the dividend payout ratio of the samples firms shows that the fluctuation in the payout ratio is small compared to mean payout. This standard deviation reflects the persistent payout of the Nigerian listed conglomerates firms'.

The mean leverage of 0.2330137 and the standard deviation of 0.2104195 suggest that Nigerian listed conglomerates firms' on average utilize less than 50% of the capital used by them as loan. This may not be unconnected with the fact that the Nigerian capital market is a thin market that cannot provide large sources of long term funds. Of course, being risky, providers of funds would prefer short term financing because it is less risky. The average size of 11.85418 and standard deviation of size of 3.086418 indicate that Nigerian listed conglomerates firms' are of

average size and that they do not differ much in size. The average growth rate of 19.63% of the Nigerian companies indicates that there is reasonable growth rate of companies in Nigeria. Also the standard deviation of the growth rate of 0.13% indicates that Nigerian companies maintain steady growth.

Conclusively, the table portrays that the selected conglomerate firms' earning volatility (Evol) has a mean value of 0.1024853 with standard deviation of 0.60097831. The minimum and maximum values are 0.0304372 and 0.3286561 respectively. The standard deviation indicates that the value of earning volatility of the listed conglomerates firms deviates from the mean value from both sides by 2.6097831 implying that there is a significant dispersion of the data from the mean because the standard deviation is larger than the mean.

In summary, among all the variables, firm size has the highest mean and standard deviation (mean = 11.85418 and SD = 3.086418) while earning volatility and firm growth recorded the lowest mean and standard deviation respectively. (Mean = 0.1024853 and SD = 0.136).

4.2 Pairwise correlation

The section summarizes the results of correlation analyses among the variables. This exercise serves two important purposes. First is to determine whether there are bivariate relationship between each pair of the dependent and independent variables. The second is to ensure that the correlations among the explanatory variables are not so high to the extent of posing multicollinearity problems.

Table 4.2. Pairwise correlation

variables	Pvol	Dyield	dpr	size	growth	lev	evol
pvol	1.0000						
dyield	-0.1597	1.0000					
dpr	-0.2885	-0.0798	1.0000				
size	-0.0360	-0.4122*	0.2151	1.0000			
growth	0.7793**	-0.0192	-0.1682	<u>0.0188</u>	1.0000		
lev	0.1214	0.0432	-0.0217	-0.1376	-0.0304	1.0000	
evol	0.4198	-0.2189	0.0621	0.1972	0.2671	-0.0455	1.0000

Source: author's computation (2018).

The table 4.2 reports the correlations among price volatility, dividend yield, dividend payout ratio, leverage, firm size and firm growth. The data in the table show that the pair wise correlation between price volatility and dividend yield is -0.1597 which confirms to the expectation that stock price volatility and dividend yield are negatively related. This correlation between price volatility is quite lower than that obtain for the US market by Baskin (1989), which is -0.643, but close to the figure for the Pakistani market derived by Nishat and Irfan (2011), which is -0.218. This result suggests that emerging markets manifest similar characteristics. Although Allen and Rachim (1996) do not establish significant relationship between dividend yield and stock return volatility, they find evidence of positive correlation of 0.006 between dividend yield and price volatility. The correlation between price volatility and dividend payout ratio is -0.2885. Again this result differs from the value of 0.542 for Baskin's (1989) US result of -0.177. Allen and Rachim (1996) obtain -0.210 for the Australian market.

The correlation between price volatility and leverage is 0.1214. This result also agrees with expectation. Thus, the correlation coefficient seems to support the a priori expectation that price volatility is positively related to leverage. Firms' size and volatility have a correlation coefficient of -0.0360. This also supports the hypothesis that large firms are diversified across both

industry and geographical wise. Hence such firms have lower risk. Firm growth is also positively correlated with price volatility with a co-efficient of 0.7793. This result is contrary to expectation. Firm growth is expected to be negatively correlated with price volatility. This expectation is in congruence to that of size. Firms with growth opportunities are expected to have lower risk. Earning volatility is positively correlated with price volatility with coefficient of 0.4198 this is in tandem with the finding of (Elrasaq, 2015).

Generally, the pairwise correlations among the independent variables are low, suggesting that there is no multicollinearity among the variables. To summarize these results, the correlation between dividend yield and payout ratio is 0.2798. The correlation coefficient between dividend yield and leverage is 0.0432. Between dividend yield and firm size, the coefficient is -0.0718, and between dividend yield and growth the coefficient is -0.0192. Between payout ratio and leverage, the correlation coefficient is -0.0217. Between POR and Size the correlation coefficient is -0.1682 and between payout ratio and growth the coefficient is -0.1682. The coefficient between leverage and size is -0.1376, while the coefficient between leverage and growth is -0.0304. The coefficient between size and growth is 0.0188.

The highest correlation among the independent variables is that between dividend yield and size, which is, -0.4122. This coefficient is not large enough to cause any multicollinearity problem. This may be a good reason to believe that the situation aids the results of the regression results being in agreement with most expectations. The low correlation of -0.0798 between dividend yield and payout ratio is only suggestive of the absence of multicollinearity between the two variables and generally others.

4.3 Regression Analysis

The broad objective of this study is to examine the impact of corporate dividend policy on the share price volatility of selected listed conglomerates firms in Nigeria. To achieve this, a panel data regression analysis was conducted and the result is presented in the table below. Perhaps, both random and fixed effect model were analysed and hausman test was conducted to decide on the best estimates from the both model results.

Table 4.3 *Hausman specification test*

Variables	Fixed	Random	Difference	S.E.
dyield	-0.1063164	-0.108825	0.0025086	0.0107829
dpr	-0.1289815	-0.2252998	0.0963183	0.0978832
size	-0.0615238	-0.056307	-0.0052168	0.0035837
growth	0.0868755	0.0793506	0.0075249	0.0046311
lev	-0.1975424	-0.1898479	-0.0076945	0.0170899
evol	0.072217	0.0926684	-0.0204514	0.0088741

Test: Ho: difference in coefficients not systematic

chi2(6) = 11.27

Prob>chi2 = 0.0803

Source: Author's Computation (2018)

Table 4.3 presents the result for hausman specification statistics for the model, the result reveals chi2 value of 11.27 with 0.0803 probability which is above the 0.0500 significant margin. Accepts the null hypothesis that difference in coefficients are not systematic. From the above result the random effect was accepted and interpreted as the appropriate model.

Table 4.4 Panel data regression results (Random Effects GLS regression)

pvol	Coef.	Std. Err.	z	P> z 	[95% Conf. Interval]	
Dyield	-.108825	.0261507	-4.16	0.000	-.1600794	-.0575705
Dpr	-.2252998	.0759571	-2.97	0.003	-.374173	-.0764266
Size	-.056307	.0149541	-3.77	0.000	-.0856166	-.0269974
Growth	.0793506	.0093721	8.47	0.000	.0609817	.0977195
lev	-.1898479	.1065754	-1.78	0.075	-.3987319	.019036
Evol	.0926684	.0328132	2.82	0.005	.0283558	.1569811
_cons	.0587527	.0145227	4.05	0.000	.0302888	.0872166
R-sq:	0.8135					
F-Stat	141.77 (0.0000)					
obs	60					

Source: Author's computation (2018)

It can be deduced from the panel data (random effect) output above that the coefficient of determination (R-squared) has a value of 0.8135 implies that explanatory variables (dividend yield, dividend payout ratio, firm size, firm growth, leverage ratio and earning volatility) were able to explain about 0.81% of the total variation in share price volatility which is a portrayal that the explanatory variables constitute about 81% of the elements that predict the dependent variable (share price volatility), implying that the stochastic (unobserved) features in the model constitute about 19% which also showcase a strong goodness of fit of the model. The F-statistics was significant at 1% evidenced by its probability of 0.0000 which implies that all independent variables were jointly significant in explaining share price volatility.

With respect to the coefficients, the constant (C) has a value of 0.0587527, whose implication is that if all the explanatory variables are held constant or pegged at zero (0), the explained variable – return on assets will surge by 0.0587527 units. This shows that regardless of change on the explanatory variables, selected firms' share price volatility will be elevated.

A consideration of the strength of relationships, using the z-statistic shows that only leverage ratio whose z-statistics is -1.78 relates insignificantly with return on assets given its 0.075 probability which is above the 0.0500 significant margin, while other explanatory variables show statistically significant at 1% level with the explained variable (share price volatility).

The variable “dividend yield” shows a negative coefficient of 0.108825 in share price volatility (Pvol), and significant at 1% level implying that where other predictor variables are held constant, a unit change in the total leverage will precipitate 0.10units decline of share price volatility. This is in tandem with a priori expectation as it also supports the findings of Baskin (1989), Nishat and Irfan (2001, Jafri (2008), Asamoah (2010), Okafor, Mgbame and Chijioke – Mgbame (2010, Jecheche (2012).The finding of this study as regards the relationship between dividend yield and share price volatility does not support the findings of Hussainey, Mgbame and Chijioke – Mgbame (2013) who find that dividend yield has a significance positive impact on stock return volatility. Also contrarily, Rasheed and Rahman (2008), Allen and Rachim (1996) and Zakaria, Muhammed and Zudkefli (2010) find no impact of dividend yield on share price volatility. Dividend payout ratio shows a negative coefficient of 0.2252998 in share price volatility and significant at 1%, implying that where other predictor variables are held constant, a unit change in the dividend payout ratio will precipitate a 0.23units decline of share price volatility. This is consistent with the findings of Baskin (1989), Nishat and Irfan (2011), Asamoah (2010 and Hashemijoo, Ardekani and Younesi (2010). However, this finding is contrary to those of Rasheed and Rahman (2008) and Zakaria, Muhammed and Zulkifli (2010) who find that dividend yield does not have any evidence of impact on stock price volatility.

Firm size shows a negative coefficient of 0.056307in share price volatility and significant at 1%, implying that where other predictor variables are held constant, a unit change in selected

conglomerates firms' size will result to a 0.06units decline of share price volatility. This is supported by the studies of Allen and Rachim (1996) and Hashemijoo, Ardekani and Younesi (2010). Asamosh (2010) however, finds a surprising result that size has positive impact on stock price volatility. Firm size reduces risk because firms have opportunity to diversity both across industry and geographically.

Selected Firms' leverage ratio reports a negative coefficient of 0.1898479 implies a unit increase in selected firm leverage ratio will bring about 0.19units decline in selected firm share price volatility. This is far contrary to theoretical expectations. Because it's theoretically believes that Overloading firms with debt increases the uncertainty of the share price. The finding does not also corroborate with Hassainey Mgbame and Chijoike- Mgbame (2010), Baskin (1989) and Allen and Rachim (1996) findings.

On the other hand, selected firm growth reveals a positive coefficient of 0.0865906, and significant at 1% implying a unit increase in short term to total assets ratio will result to about 0.087unit rise in return on assets. This finding is contrary to those of Allen and Rachim (1996) and Nishat and Irfan (2001) who found an insignificant relationship between firm growth and share price volatility. Baskin (1989) reports that the effect of adding growth to the model is negligible. Base on this firm's growth seems to have impact on stock return volatility. It can be explained that selected conglomerates firms investors do put into consideration the firms growth.

Finally, another firm specific variable Earning Volatility found to have a positive significant effect on share price volatility as it reported a positive coefficient of 0.082217in price volatility. Implying that an increase in earnings volatility will result to about 0.082 units increase in share price volatility in selected listed conglomerates firm in Nigeria. This is tandem with a priori

expectation as it was argued by Rasheed (2014) that “the higher the volatility in the firm earning the riskier the stock returns.

4.4 Discussion of Findings

Evident from the descriptive statistics reported in the previous chapter, the mean price volatility is compared with the results of Baskin (1989), Allen and Rachim (1996) and Nishat *et.al* (2011) Okafor, Mgbame & Chijioke-Mgbame (2010) after multiplying by Parkinson’s constants number. The comparison suggests that stock price in Nigeria follows a normal distribution on average. Nigerian investors accept moderate dividend on their investments. This is reflected by the value of the dividend yield. Nigerian conglomerates firms are found to payout a large portion of their earnings to stock holders. The correlation coefficients of the variable generally conform to an expectation with virtually no multicollarity.

Based upon extensive research on the issue under study in developed countries settings; such as Baskin (1989) on USA, Allen and Rachim (1996) on Australia, Jecheche (2012) on China Hussainey *et al.* (2013) on UK, Song (2012) on Canada; and also in developing countries setting such as (1989), Nishat and Irfan (2001, Jafri (2008), Asamoah (2010), Okafor, Mgbame and Chijioke –Mgbame (2010) in Nigeria, , Zakaria (2017) on Malaysia and the latest Ramadan (2018) on Jordon; it has been empirically proved that dividend policy i.e. Dividend Payout ratio and Dividend Yield have significant relationship with stock price volatilities and this relationship can either be positive or negative depending upon the financial and political system a country has.

The panel data regression results from this study on the conglomerates firm listed in Nigeria are found to be in accord to the previous studies in developed and developing countries setting such as mentioned in the above paragraph. We also found that presented coefficient signs of

independent variables in regression results, matched to study's theoretical expected coefficient signs. Only leverage ratio comes out with insignificant negative coefficient. These negative signs matched with the study of Song (2012) on Canadian stock market. Overall findings of current study in regression model support the existing dividend policy literature by showing negative significant relationship on Dividend Yield, Dividend Payout, size and leverage (insignificant). It means the more Dividend Payout by the conglomerates firms listed on NSE the fewer stock price volatilities would be. Beside this, if firms have large size it will have less volatility in their stock prices compares to volatility of small firms listed on NSE. It is due to the fact that large and diversified firms are on maturity stage and such firms have stable earnings, consistent Dividend Payout and stable stock prices, hence, fewer Share Price Volatility (Baskin, 1989). These findings of dividend policy on Conglomerates Firms listed in Nigerian Stock Exchange Market is in consonance with the prior studies of Baskin (1989), Allen and Rachim (1996) and more recent Hussainey *et al.* (2013).

The inverse relationship between dividend yield and stock price volatility is determined. Dividend policy intrinsically affected stock price volatility in the United States (Baskin, 1989). A later research by Profilet and Bacon (2013) in the United States also came to the same finding that dividend related negatively to the stock price volatility. However, contradictory studies are also presented in some other countries where evidence of positive, but not significant, relationship between stock price volatility and dividend is found after controlling for earning volatility, payout ratio, debt, firm size and growth in assets (Rashid and Rahman, 2008). (Their research was targeting Bangladesh market and share price reaction to the earning announcement is not similar to that of other developed countries.) Azeem *et al.* (2011) mentioned in their study performed in Pakistan that firms in Pakistan are reluctant to pay dividends as a disbursement of their profit. Under such situation, using dividend policy to gauge share price volatility may not provide a concrete outcome.

Moreover, empirical results found that two firm-specific variables, growth opportunity and earnings volatility, have significant positive relationships with share price volatility in listed conglomerate firms in Nigeria. The significant result of growth opportunity elaborates that firms at the growth stage have more volatile stocks in Nigeria. It has been proved empirically by Higgins (2017) that firms on the growth stage retain most of their earnings and payout less in dividends. Hence, this decision puts the corporations in uncertainty regarding future cash inflows from their new investment projects. This uncertainty results in more fluctuations in their stock prices, which is also proved in the case of Nigeria in this study.

Similarly, the more volatile earnings of a company are, the lower is the dividend paid by them. As a result, lower dividends paid make its stock prices more volatile (Foong, 2018). Earnings volatility has proved to have a positive significant relationship with share price volatility. This is in tandem with Foong (2018) who found that earnings of a firm are significantly positively associated with stock prices. This movement in share prices and dividend policy is due to the fact of signaling hypothesis and bird-in-hand theory suggestion. We conclude our analysis by expressing that dividend policy is value-relevant to share price volatility in the Nigerian Stock Exchange.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS.

This chapter covers summary of the study, conclusion arises from the findings from which relevant recommendations were made. Finally, suggestion for further studies and contribution to knowledge were discussed.

5.1 Summary

This study was conducted to investigate the impact of dividend policy on share price volatility in listed conglomerate firms in Nigeria. The study was divided into five chapters. The first chapter discussed the background issues, which led to developing three objectives, and formulating three hypotheses for the research with a scope covering ten (10) years, from 2007 to 2016. The review of conceptual literature and empirical studies on dividend policy and share price volatility was carried out. Also, the concept and measurement of dividend policy was discussed as well as the review of the relationship between each of the proxies of the independent variables and the dependent variable. The theoretical framework that underpinned the study was also discussed.

Descriptive research design was used in measuring the relationship among the variables of the study. Data was collected from secondary source through the annual reports and accounts of 6 conglomerate firm. Panel Data regression was used to analyzed the collected data using STATA where Hausman specification test is used to select between the fixed and random effects models. The researcher used share price volatility as dependent variable while independent variables include dividend yield, dividend payout ratio, as the measure of dividend policy Firm size, firm growth, leverage and earning volatility as other firm specific factors that influence share price

volatility. The result of the descriptive statistics, correlation matrix and regression were presented, analyzed and discussed in chapter four.

The result reported a significant negative relationship in dividend yield, dividend payout ratio, firms' size except leverage ratio that reported an insignificant negative relationship with share price volatility. On the other hand, selected listed conglomerates firm's growth and earnings volatility has a positive significant effect on share price volatility.

5.2 Conclusion

The present study investigates the impact of dividend policy on the share price volatility in the listed conglomerate firms' in Nigeria for the period of 2007 to 2016. Evident from the descriptive statistics reported in the previous chapter, the mean price volatility is compared with the results of Baskin (1989), Allen and Rachim (1996) and Nishat *et.al* (2011) Okafor, Mgbame & Chijioke-Mgbame (2010) after multiplying by Parkinson's constants number. The comparison suggests that stock price in Nigeria follows a normal distribution on average. Nigerian investors accept moderate dividend on their investments. This is reflected by the value of the dividend yield. Nigerian conglomerates firms are found to payout a large portion of their earnings to stock holders. The correlation coefficients of the variable generally conform to an expectation with virtually no multicollinearity. Also, the regression coefficients of the variables conform to expectations and are generally significant. The only variables that fail to meet expectations is firm growth.

Conclusively, the findings of this study indicate that dividend policy has a significant impact on stock price volatility. As this necessitate the rejection of null hypotheses formulated in this study and accept the alternative hypotheses. We conclude our analysis by expressing that dividend policy is value relevant to Share price volatility in Nigerian Stock Exchange.

5.3 Recommendations

The following recommendations are put forward base on the empirical outcome of this study:

Managers of quoted companies should use the findings of this study to implement dividend policy that will benefit the shareholders. Being agents of the shareholders, their position should be maximizing shareholders wealth. They should do that by increasing dividend amounts in order to reduce investment risk.

Government and government agencies should use the findings of this study to make regulations that will benefit the investing public. If Government and its agencies such as Securities and Exchange Commission do not do that, there will be no confidence in the capital market. Lack of confidence will impair funds flow to the market.

Institutional investors should capitalize on the findings of this study to take beneficial investment decisions. Institutional investors are bulk investors. They should seek for tested model results such as that provided by the findings of this study. This will help reduce losses on their investments.

Informed members of the public should also use the findings of this study to benefit themselves. They should do this by investing in companies that pay high dividends. This action will reduce investment risk and will increase share price.

5.4 Suggestion for Further Studies

This research does not claim to cover everything in the area of dividend policy and stock price volatility. Some areas are yet to be explored. Studies can be conducted to cover longer period of time. Such studies may show sustenance of the linkage between dividend policy and stock price volatility.

Similarly, studies may be conducted that would break the firms into small and large firms. It is theorized that small firms are riskier than large firms because small firms are less diversified. Studies should be conducted to measure the effect of size.

Other than the two considered dividend policy measures (dividend yield and dividend payout) other variables chosen were firm specific variables and may not be the only variables that affect share prices volatility. It is recommended that further research should be conducted to establish whether macroeconomic variables affect share price for firms listed in the Nigerian Stock Exchange.

Studies can be conducted to test the linkage between dividend policy and price volatility, industry by industry. This will be to establish whether price volatility varies across industries. Further, research may be conducted to test whether dividend initiations or normal dividend announcements have equal impacts or not. Understanding whether the impacts are the same or not, will help in advancing the knowledge of dividend impact.

5.5 Contribution to Knowledge

This study has contributed immensely to knowledge by showing, in empirical terms, how the dividend policy have contributed specifically to share price volatility in listed conglomerates. Hitherto, very few empirical studies in Nigeria have considered these indices of dividend policy and selected conglomerates firms' specific variables' relevance in the stock price volatility. This study has also re-emphasized, via empirical method, that the dividend policy are sine qua non to any meaningful influence on the firm optimal decision on the maximization of shareholder's wealth and firms' value.

References:

- Akinsulire, O. (2011). *Financial management* (7th ed.)
- Alii, A. (2014). Stock prices under time- varying dividend risk: An exact solution in an infinite horizon general equilibrium model. *Journal of Monetary Economics*, 22:375-393.
- Allen, D.E., & Rachim, V.S. (1996). Dividend policy and stock price volatility: Australian evidence. *Journal of Applied Economics*, 6, 176-188.
- Al-Malkawi, H.N. (2007). Determinants of corporate dividend policy in Jordan: An application of the tobit model. *Journal of Economics and Administrative Sciences*, 23 (22), 44-70.
- Al-Malkawi, H.N. (2008). Factors influencing corporate dividend decision: Evidence from Jordanian panel data. *International Journal of Business*, 13 (2), 177-195.
- Amadeo, K. (2012). Definition and meaning of volatility. *Received from use economy about com* >---> *stock market definitions*.52(5), 78-98
- Asghar, M., Shah, S.Z.A., Kalid, K., & Suleiman, M.T. (2011). The impact of dividend policy on stock price risk: Empirical evidence from equity market of Pakistan. *Far East Journal of Psychology and Business*, 4 (1), 45-52.
- Asquith, P., & Mullins, D.W. (1983). The impact of initiating dividend payments on shareholders' wealth. *Journal of Business*, 56(1), 77-96.
- Ball, R., Brown, P., Finn, F., & Officer, R.R. (1979). Dividends and the value of the firm: evidence from the Australian equity market. *Australian Journal of Management*, 4:13-26.
- Baskin, J. (1989). Dividend policy and the volatility of common stocks. *Journal of Portfolio Management*, 3, 19-25.
- Battacharya, S. (1979). Impact information and dividend policy and the Bird in Hand Fallacy. *The Bell journal of economics*: 5(1) 259 – 270.
- Beaver, W., Kettler, P., & Scholes, M. (1970). The association between market determined and accounting determined risk measures. *The Accounting Review*, 45 (3), 654-682.
- Ben-zion, U., & Shalit, S. (2015). Size, leverage and dividend record as determinants of equity risk. *Journal of finance*, 30:1015-1026.
- Black, F. (1976). The dividend puzzle. *Journal of Portfolio Management*.

- Black, F., & Scholes, M. (1973). The pricing of options and corporate liabilities. *Journal of Political Economics*, 18 (3), 44-70.
- Bollerslver, T., Angle, T.R., & Woolridge, J. M. (1988). A capital asset pricing model with time varying covariances. *Journal of political Economy*, 96, 116-131.
- Brennan, M.J. (1970). Taxes, market valuation and corporate financial policy. *National Tax Journal*, 23(4):417-1427.
- Chiwen, O.G. (2015). A diagnosis of the determinants of dividend payout policy in Nigeria: A factor analytical approach. *American Journal of Scientific Research*, 21 (5) 57-67.
- Christie, A.A. (1982). The stochastic behavior of common stock variances: Value, Leverage and Interest Rate Effects. *Journal of Financial Economics*, 10:407-432.
- Cuthbertson, K. & Nitzsche, D. (2015). *Investments; Spot and Derivatives Markets*. United Kingdom: John Wiley & Sons Limited.
- De Angelo, H., De Angelo, L., & Skinner D.J. (1996). The reversal of fortune, dividend signaling and disappearance of sustained earnings growth. *Journal of Financial Economics*, 40,341-371.
- Easterbrook, F.H. (1984). Two agency-cost explanations of dividends. *American Economic Review*, 74 (4), 650-659.
- El-Ahmed (2016). Payout policy irrelevance and the dividend puzzle. Retrieved from <http://www.ssrn.com>
- Fischer, D.E., & Jordan, R.J. (1995). *Security analysis and portfolio Management*. 6th ed. Upper saddle River, New Jersey: Prentice- Hall Inc.
- Foong, S.P.(2017). An empirical study of the relation between stock return volatility and trading volume in the BRVM. *African journal of business management*, 1(7): 126 – 184.
- French, K.R., Schwert, G.W., & Slambaugh, R.F. (1987). Expected stock returns and volatility. *Journal of Financial Economics*, 19(3), 29.
- Glosten, L.R, & Milgrom, P.R (1985). Bid, Ask and transaction prices in a specialist market with heterogeneously informed traders. *Journal of financial economic* 14(1), 71 – 100.
- Gordon M. J. (1963). Optional investment and financing policy. *Journal of Finance*, 18,264-272.
- Grullon, G., Michaely, R., & Swaminathan, B. (2002). Are dividend changes a sign of firm maturity? *Journal of Business*, 75(3), 387-424.

- Gujarati, D.N., & Porter, D.C. (2009). *Basic econometrics*. Irwin, New York: McGraw-
- Guo, H. (2017). Stock market returns, volatility and future output. Retrieved from <http://www.research.sttoyisfed.org/publications/review/02/49/75-86Guo.pdf>
- Habib, Y., Kiani Z.I., & Khan M.A. (2012). Dividend policy and share price volatility: Evidence from Pakistan. *Global Journal of Management and Business Research*, 12 (5).
- Hashemijoo, M., Ardekani, A.M., & Younesi N. (2012). The impact of dividend policy on share price volatility in the Malaysian Stock market. *Journal of Business Studies Quarterly*, 4 (1), 111-129.
- Hussainey, K., Mgbame, C.O., & Chijoke-Mgbame, A.M. (2013). Dividend policy and share price volatility: U.K evidence. Retrieved from <http://www.ainshamsaccounting.com/download/8840.pdf>
- Jecheche, P. (2012). Dividend policy and stock price volatility: A case of the Zimbabwe stock exchange. *Journal of Finance and Accounting*.
- Jensen, M.C. (1986). Agency cost of free cash flow, corporate finance and takeovers. *American Economic Review*, 76 (2), 323-329.
- Jensen, M.C., & Meckling, W.H. (1996). Theory of the firm: Managerial behavior, agency cost and ownership structure. *Journal of Financial Economics*, 3 (4), 305-360.
- Lee, F.N. (2018). Determinants of changing dividend behavior: Evidence from the Amman stock exchange. *Far East Journal of Psychology and Business*, 4 (2), 1-15.
- Lintner J. (1959). The distribution of incomes of corporations among dividends, retained earnings and taxes. *The American Economic Review*, 46, 97-11.
- Litzenberger, R.H., & Ramaswamy, K. (1982). The effects of dividend on common stock prices: Tax effects or information effects? *Journal of Finance*, XXXVII (2), 429-443.
- Merton, R.C. (1980). On estimating the expected returns on the market: An Exploratory Investigation. *Journal of Financial Economics*, 8:323-361.
- Miller, M.H., & Modigliani, F. (1961). Dividend policy, growth and the valuation of shares. *Journal of Business*, 34(4), 411-433.
- Miller, M.H., & Rock, K. (1985). Dividend policy under asymmetric information. *Journal of Finance*, 40 (4), 1031-1051.

- Nazir, M.S., Abdullah & Nawaz M.M.(2012).How dividend policy affects volatility of stock prices of financial sector firms of Pakistan. *American Journal of Scientific Research*, 6,132-139.
- Nazir, M.S., Nawaz, M.M., Anwar, W., & Ahmed, F. (2010). Determinants of stock price volatility in Karachi Stock Exchange: The mediating role of corporate dividend policy. *International Journal of Finance and Economics*, 55, 100-107.
- Nigerian Stock Exchange Fact Book (2014/2015)
- Nigerian Stock Exchange Fact Book (2015/2016)
- Nishat, M., & Irfan, C.M. (2001). Dividend policy and stock price volatility in Pakistan. Retrieved from <http://www.pide.org.pk>
- Nnamdi, M.A., & Akpomi, M. (2008). Effects of taxes on dividend policy of banks in Nigeria. *International Research Journal of Finance and Economics*:55, 100-107.
- Officer, R.R. (1973). The volatility of the market factors of New-York stock exchange. *Journal of Business*, 46: 434-453.
- Okafor, C.A., Mgbame, C.O., & Chijoke-Mgbame, A.M. (2011). Dividend policy and share price volatility in Nigeria. Retrieved from <http://www.ajol.info/journals/jorind>.
- Oseni, I.O., & Nwosa, P.I. (2011). Dividend policy and stock price risk. *Journal of economics and sustainable development*, 2(10).
- Pandian, P. (2001). *Security analysis and portfolio management*. New Delhi: viskas publishing house pvt ltd.
- Parkinson, M. (1980).The extreme value method for estimating the variance of the rate of return.*Journal of Business*, 53 (1), 61-65.
- Peron, P. (2018). Noise trading and stock market. *Journal of Multinational Financial Management* 17(3): 231-243.
- Porterba, J.M., & Summers, H. (1984). New Evidence that Taxes Affect the Valuation of Dividends. *Journals of Finance*, 39:1397-1415.
- Raju, M.T., Ghosh, A. (2004). Stock market volatility: An international comparison. Securities and exchange Board in India, Working Paper Series, No.8.
- Rashid, A., & Rahman, A.Z.M.A. (2008). Dividend policy and stock price volatility: Evidence from Bangladesh. *Journal of Applied Business and Economics*.

- Razaq O. J. (2015). Dividend policy and firm performance: A study of listed firms in Nigeria. *Accounting and management information system*, 11(3): 442 – 452.
- Roll R. (1988). The international crash of October 1987. *Financial analysis Journal*, 19.
- Roll, R (1983). Was Ist dos? The turn of the year effect and the return premium of small firms. *Journal of portfolio management*, 10:18-28.
- Rozeff, M.S. (1982). Growth, beta and agency costs as determinants of dividend payout ratio. *Journal of Financial Research*, V (3), 249-258.
- Schwert, G.W. (1989). Why does stock market volatility change over time? *Journal of finance*, XLIV(5), 1115-1153.
- Sharpe, W. (1964). Capital assets prices: A theory of market equilibrium under conditions of risk. *Journal of Finance*, 19 (3), 425-442.
- Shiller, R.J. (1981 b). The use of volatility measures in assessing market efficiency. *Journal of Finance*, 36:291-304.
- Shiller, R.J. (1981a). Do stock prices move too much to be justified by subsequent changes in dividends? *American Economic Review*, 75:421-436
- Van Horne, J.C. & Wachowicz, J.M. (2010). *Fundamentals of financial management*. New Delhi: Asoke K. Ghosh, Phl learning private limited.
- Waithara S.K .Ngugi, J.K. Aiyabei, J.K. Itunga, J.K. & Kirago, P. (2012). Effects of dividend policy on share prices: Case of companies in Nairobi securities exchange prime *journal of business administration and management* 2(8): 442 – 648.
- Zakaria, Z., Muhammad, J. & Zulkifli, A.B. (2012). The impact of dividend policy on the share price volatility. Malaysian construction and material companies. *International journal of economics and management*, 2(5): 01 – 08.