DETERMINANTS OF DIVIDEND PAYOUT RATIO AMONG LISTED INDUSTRIAL GOODS COMPANIES IN NIGERIA

BY

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BEING A DISSERTATION SUBMITTED TO THE DEPARTMENT OF BUSINESS ADMINISTRATION AND ENTREPRENEURSHIP, FACULTY OF MANAGEMENT SCIENCE, BAYERO UNIVERSITY KANO. IN PARTIAL FULFILMENT FOR THE AWARD OF MASTER OF SCIENCE (M.SC.) IN MANAGEMENT

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DELARATION

I, Abubakar Hamisu umar hereby declare that this research work titled "Determinants of dividend payout Ratio of Listed Industrial Goods Companies in Nigeria" is entirely the product of my own effort done under the supervision of DR Mukhtar Shehu Alyiu. I declare that no portion of work in this dissertation has been submitted in support of an application for another degree or qualification of this or any other, in any university or other institute of learning. All work, books and articles used here have duly been acknowledged in the reference section.

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CERTIFICATION

This is to certify that this dissertation titled "Determinants of dividend Payout Ratio on Listed Industrial Goods Companies in Nigeria" written by ABUBAKAR HAMISU UMAR was carried out under my supervision.

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APPROVAL PAGE

This is to certify that this dissertation titled "Determinants of Dividend Payout Ratio of Listed Industrial Goods Companies in Nigeria" has met the partial requirement for the award of Master of Science (M.Sc.) in Management by the school of Postgraduate Studies, Department of Business Administration and Entrepreneurship, Bayero University, Kano and is approved for its contribution to knowledge.

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DEDICATION

This Project is dedicated to my love Prophet Muhammad (S. A. W.), and to my ever- caring parent, Alhaji Hamisu Umar and my caring mother Hajiya Fatima Usman May your soul rest in peace and May Jannatul Firdausi be final abode, amin.

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All these would not have come to pass without the incomparable effort of my humble, caring and loving parent, members of my family, my working colleaques, my friends from all direction and also my business bosses.

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ABSTRACT

The objective of this study is to assess the determinant of dividend payout policy of listed industrial goods companies in Nigeria over ten years' period (2008-2017). An expos factor research design is adopted and data were collected from secondary source. The population of this study is made up of all the 15 quoted industrial goods companies in the (NSE, 2017). From the Multiple Regression Analysis using Ordinary Least Square, Profitability, Leverage, and investment have significant effect on dividend payout while liquidity and firm size have no significant effect on dividend payout ratio. Companies should observe policies dealing with these variables in order to ensure that their dividend payout ratio is kept stable because of the key information that passes to both investors and the general public, they should also maintain steady cash flow to enable them meet their cash flow requirements as and when they fall due. Lastly, listed companies at the NSE balance their company sizes to ensure that they attract the right shareholders using their dividend payout.

Keywords: Profitability, Leverage, liquidity, investment and dividend payout,

CHAPTER ONE

INTRODUCTION

1.1   Background to the Study

The management of a firm, at all levels, make various decisions purposely for achieving its objectives. The literature on financial management assumes that the primary objective of a firm is to maximize the wealth of its owners in form of market value of its shares (Akinsulire, 2011). In order to achieve this objective three major decisions of financial management are pursued by the management. These are investment, financing and dividend decision. The dividend decision of a firm is concerned with how much earnings could be paid out as dividend and how much could be retained by the firm. In other words, dividend policy determines what proportion of earnings is paid out to shareholders by way of dividends and what proportion is ploughed back in the firm itself for reinvestment purposes. Each firm should develop such a dividend policy, which divides the net earnings into dividends and retained earnings in an optimum way to achieve the objective of maximizing the wealth of the shareholders (Pandey & Ashvini, 2016).

Similarly, the decision of a firm to pay dividend is determined by some factors or variety of variables that might potentially be associated or 'responsible' for the dividend payout. These variables have been identified by various studies (John & Muthusamy, 2010; Mehta, 2012; Alzomaia & Al-Khadhiri, 2013; Zaman, 2014; Ahmed, 2015; Rani & Bodla, 2015; Wasike & Ambrose, 2015; Soondur & Maunick, 2016). They include but not limited to firm size, growth, profitability, corporate tax, financial leverage, liquidity, tangibility, investment opportunity, management ownership, ownership concentration, and board composition audit quality. However, the focus of this study is to examine five factors or variables that determine dividend decision (dividend payout). These are firm size, profitability, leverage, liquidity and investment.

Corporate profitability has long been regarded as the primary indicator of a firm's capacity to pay dividends. It is concerned with the net earnings of a company in a particular year. It is considered as an indicator of a company performance. Profitability is one of the most important determinants of dividend payout policy; it is measured by Return on Assets, Return on Equity, and Earning per share. Directors normally recommend the payment of dividend when the firm has made sufficient profit to warrant such payments (Nuhu, 2014). The size of a firm is another factor that determines its dividend payout. It is measured by the total assets, number of employees, revenue, or market capitalization of a firm. Large enterprises are more likely to be mature and Thus have easier access to capital markets, and should is able to pay more dividends. Also dividends are more likely to be paid by mature firms that have accumulated profitability throughout their life cycle. These firms are more self-reliant in financing their assets. These kinds of firms possibly have more Free Cash Flow available for the shareholders. Hence, distribution of Free Cash Flow dominates retention among these kinds of firms. Thus, they are more likely to pay dividends (Lestari, 2018).

In the same vein, financial leverage is among the factors that determine the decision of a company to pay dividend or otherwise. It involves the extent to which the capital of company constitutes debt. By acquiring debt, a firm commit sit self to repay fixed financial charges in the form of interest payments and the principal amount. Firms need to pay for their obligations, and they thus need to maintain their internal cash flow rather than paying dividends to shareholders (Mahdzan, Zainudin & Shahri, 2016).Also, the development of dividend policy is greatly influenced by investment opportunities available to the firm and the value of dividends as against capital gains to the shareholders (Pandey & Ashvini, 2016).The dividend will only be paid when retained earnings exceed the funds required to finance the suitable investment project.

Conversely when the total investment funds required exceed retained earnings no dividend will be paid (Odesa & Ekezie, 2015). Liquidity position of a company is not left behind in determining its ability to pay dividend. Payment of dividends means cash outflow. Although a firm may have adequate earnings to declare dividends it may not have sufficient cash to pay dividends thus the cash position of the firm is an important consideration in paying dividends, the greater the cash position and overall liquidity of a company, the greater will be the ability to pay dividends. These decisions involve determining an optimum dividend pay-out ratio which in turn depends on the liquidity of the firm. Firms with adequate liquidity are more likely to pay higher dividend s than firms with lower liquidity (Olang, Akenga & Mwangi, 2015).

The industrial goods sector witnessed impressive performance in 2013, as it saw almost 50percen of the stocks listed in the segment close with positive average returns (The Analyst Report, 2013). In addition, companies listed under the industrial goods sector of the Nigerian Stock Exchange (NSE) took the worst hit from the protracted economic recession that threatened most businesses in the country in 2016. At the end of 2016, the industrial goods sectors recorded 26.37 percen negative return which affected the earnings of the firms and also lead to reduction in their dividend payout, the worst in the market (NSE Report, 2017). According to Tony, (2017), a cursory look in to the third quarter financial report and accounts of key players (large firms) in the industrial goods sector for the period of 9 months ended September 30, 2016 as most firms most of the firms do not have access to external fund (leverage) and their liquidity was down so their investment opportunities remain untapped, these issues also made those firms particularly Dangote Cement Plc, Chemical and Allied Products Plc, Ashaka Cement Plc and Lafarge Africa among others showed a declining revenue and profit after tax thereby reduction in their dividend payment. According to market operators the negative return recorded in the sector was a reflection of the

lackluster financial performance by the companies. Other factors high interest rate which impaired the ability of the industrial firms to borrow long-term funds at sustainable rates in order to be able to generate higher domestic output (Odukoya, 2017; Fakrogha, 2017).

Similarly, Return on Investment (ROI) such as bonuses and dividend payments by quoted firms remain a key attraction to shareholders as they usually look up to what various companies have to offer at the end of every financial year (Proshare Market Report, 2016). According to the same report, in 2016, 82 quoted companies have declared dividends and bonuses on the NSE. Financial sector having (27), consumer goods (16), industrial goods (9), oil and gas (7), while ICT and natural resources (2). In 2016, despite the challenges of the market and economy, Dangote cement Plc which is a key player in the industrial goods sector, was among the four (4) companies who declared highest dividend 800 kobo per share. Others are Nestle 1900 kobo, Total 1200 kobo and Mobil 720 kobo per share (Proshare Market Report, 2016).

As a result, low level of investment capital available to most industrial organizations has accounted for the low capacity utilization. As one of the responses to the agony of capital shortage in the industrial sector, government initiated the deregulation of the capital market. The aim was to foster a developed capital market (Uwuigbe, Jafaru & Ajayi, 2012). Hence, no company is under any legal obligation to pay out dividends in Nigeria. Company tends to reduce its dividend and even eliminate the payment altogether when there are large debt, severe fall of profit and share price declines (Odesa & Ekezie, 2015). Also, the present harsh economic environment, high interest rate, low income, high cost of goods, and delayed salaries make it necessary for investors to receive current regular income to augment earned income and meet socio-economic needs in Nigeria (Nwidobie, 2016). It is therefore in view of the above issues that this study is aimed at examining some determinants of dividend payout among some listed industrial goods companies in Nigeria.

1.2 Statement of Problem

Dividend policy is among the areas of finance that have resulted in a great deal of debate among researchers since the middle of the last century (Al-Kuwari, 2009). However, the Dividend Puzzle: whether the dividend payout policy affects the value of the firm and the factors which affect the determination of the dividend policy is yet to be solved (Mehta, 2012). Many unrealistic reasons are given for why dividend policy might be important and many of the claims made about the dividend policy are economically illogical (Mehta, 2012; Ahmed, 2015).

Brealey and Myers (2005) described dividend policy as one of the top ten most difficult unsolved problems in financial economics. This description is consistent with Black (1976) who stated that the harder we look at the dividend picture, the more it seems like a puzzle, with pieces that don't fit together.

Similarly, Al-Kuwari (2009) argues that dividend policy has been analyzed for many decades, but no universally accepted explanation for companies' observed dividend behavior has been established. Almeida, Pereira and Tavares (2015) have added that the controversy of the dividend policy is an old thread, making us go back to 1938, when John Burr Williams first established a relationship between dividends and the value of the company. However, it was in the 1950s and 1960s that this issue had taken relevance in research with theoretical and empirical studies showing dividends, and it persists decisively influencing all the research and recent explanatory theories of dividend policy.

To this effect, a large number of conflicting hypotheses, theories and explanations have emerged. Starting from Dividends were irrelevant and had no influence on a firm's share price Modigliani and Miller (1961) when they believed in the world of efficient market, dividends policy does not

affect the shareholder's wealth, then the bird in hand theory by (Gordon, 1963Lintner, 1962). Consequently, a series of market and firm characteristics have been suggested as potentially significant in determining firm's dividend payout decisions. Nevertheless, attempt to examine these contending features and process has in turn spawned a vast empirical literature majority of which are from developed countries. However, despite the emergence of several decades of academic research mostly from developed markets, no agreement or consensus has emerged about the rival theoretical approaches to dividend policy (Ranti, 2013).

In fact, researchers have primarily focused on developed markets, while little attention has been paid to dividend policy in emerging markets. As a result, this field is not well established in the financial literature. Dividend policy in emerging markets is often very different in its nature, characteristics, and efficiency, from that of developed markets (Al-Kuwari, 2009; Rafique, 2012). This is because of difference in tax policies, rules, regulations and institutions and capital markets (Zameer, Rasool, Iqbal & Arshad, 2013). Hence, additional insight into the dividend policy debate can be gained by an examination of developing countries. This has resulted in conducting more researches in the developing and also developed countries across the world such as Mehta (2012), Wasike and Ambrose (2015) in Ghana; Ahmed (2015), Muiand Mustapha (2016), Naz and Abbasi (2016) in Nigeria; Zaman (2014) in Jordan; John and Muthusamy (2010), Devanadhen and Karthik (2015), Sheikh, Echchabi and Azouzi (2016) in South Africa; Alzomaia and Al-Khadhiri (2013) in Poland; Soondur and Maunick (2016) in Australia; Zameer, Rasool, Iqbal and Arshad (2013) in Tunisia; Movalia and Vekariya (2014) in Jordan; Kumar and Waheed (2015) in Saudi Arabia, Milhem (2016) in America; among others.

However, despite a growing relevant literature internationally, most of the prior studies carried out so far are concentrated in the Asian and European countries. Hence, similar expanse of studies are

lacking in the African context other than a few studies such as Ranti (2013), Dada, Malomo and Ojediran (2015), Odesa and Ekezie (2015), Bassey and Atairet (2014), Inyiama, Okwo and Inyiama (2015), Olang, Akenga and Mwangi (2015). in Nigeria; Badu (2013), Nuhu, Musah and Senyo (2014), Baah, Tawiah and Eric (2014) in Ghana; and Arumba (2014) in Kenya.

In Nigeria, some of the studies conducted like (Uwuigbe, Jafaru & Ajayi , 2012; Ranti,2013; Odesa & Ekezie, 2015) considered an insignificant sample of the entire companies, which cannot efficiently give a true attribute of the entire Nigerian Companies. In essence, examination towards one particular industry, particularly the industrial goods sector, would not only provide deeper |and more specific evidence on the specific industry, but would also validate prior cross sectional empirical observations of the determinants of dividend policy of listed industrial goods companies in Nigeria. On the other hand, despite the importance of the industrial goods industry to the Nigerian economy, the industry- specific studies in Nigeria were focused on other industries, especially the banking industry. Moreover, a panel study that further examines the determinants of dividend policy is needed to make sure the results were not subject to error because of the sampling period of ten years. A study covering several years (ten years) would also serve as a better foundation when making generalizations. In particular, the case of Nigeria has some interesting characteristics that make the study appropriate in terms of policy recommendations for the country and other emerging countries. Further, the choice of the variables such as leverage, profitability and liquidity which were adopted for this study were suggested by (Linter, 1956; Myers & Majluf, 1984; Mui & Mustapha 2016; Echchabi & Azouzi, 2016) they suggested that future studies should examine the relationship between firm size, liquidity, and investment opportunities and dividend payout. Hence, this study intends to fill in this gap by examining the relationships among some

determinants of dividend payout among quoted industrial goods companies in Nigeria, Incorporate suggestion for future research.

1.3 Research Questions

As a result of the above problem statement, the main question for this study is to examine the effects some determinants of dividend payout among the listed industrial goods companies in Nigeria? Based on the major question, the following specific questions are hereby raised in order to guide the study:

1) What is the effect of Profitability on dividend payout of listed industrial goods companies in Nigeria?

2) To what extent does Leverage affects dividend payout of listed industrial goods companies in Nigeria?

3) To what extent does Firm size affect dividend payout of listed industrial goods companies in Nigeria?

4) To what extend does Liquidity affect dividend payout of listed industrial goods companies in Nigeria?

5) To what extent does Investment affect dividend payout of listed industrial goods companies in Nigeria?

1.4   Objectives of the Study

As a result of the above research questions, the goal of the present research is to examine the relationship between some determinants of dividend payout among the listed industrial goods companies in Nigeria. In order to achieve the goal of the study, the following specific research

objectives were developed to take care of the research questions. The specific objectives of the study are:

i. To examine the extent to which Profitability affects dividend payout of listed Industrial goods companies in Nigeria

ii. To ascertain the extent to which Leverage affects dividend payout of listed Industrial goods companies in Nigeria

iii. To measure the extent to which Firm size affects dividend payout of listed Industrial goods companies in Nigeria

iv. To evaluate the extent to which Liquidity affects dividend payout of listed Industrial goods companies in Nigeria

v. To assess the extent to which Investment affects dividend payout of listed Industrial goods companies in Nigeria.

1.5 Research Hypotheses

Based on the specific objectives of the study, the following hypotheses were formulated in a null form to guide the study:

Ho1: Profitability has no significant effect on dividend payout of listed Industrial goods companies in Nigeria

Ho2: Leverage has no significant effect on dividend payout of listed Industrial goods companies in Nigeria

Ho3: Firm size has no significant effect on dividend payout of listed Industrial goods companies in Nigeria

Ho4: Liquidity has no significant effect on dividend payout of listed Industrial goods companies in Nigeria

Ho5: Investment has no significant effect on dividend payout of listed Industrial goods companies in Nigeria

1.6 Significance of the Study

This study contributes to the literature in several ways. First, the findings from this study can serve as guidance to the corporate managers to consider certain important factors before making any decision on the dividend payment policy. The dividend policy is very important to the growth of firm since its distribution will reflect the health of the company as well as to encourage investors to pour in capita1 and help companies to expand their business activity to achieve higher profit. The findings of this study will also be important to managers of listed companies in formulating appropriate dividend policies.

In addition, both existing and potential investors would be provided with information and knowledge regarding which factors they should consider when predicting future dividends. Since dividend policies have been described as a puzzle, it is necessary to conduct a study regarding the determinants of the company's dividend payout ratio. Investors who are trying to predict future dividends will therefore gain some useful insights regarding which company selected factors to look for when predicting future dividends. The study would also be of great help to investors when selecting and building their investment portfolios depending on their dividend payout preferences. The findings would also help provide investors with information about the predictability of returns in the securities market. Hence, this study would reveal which factors that have an impact on the dividend payout of listed Industrial goods companies in Nigeria.

Further, this study would also contribute to both practical and theoretical knowledge regarding the determinants of dividend payout ratios of listed Industrial goods companies in Nigeria. Therefore, the findings would offer support for a number of theories such as irrelevance theory, agency theory, life-cycle theory, bird in hand theory and signaling theory. The study would also compare the results with the existing dividends theories and will reveal which theories that are applicable on stocks listed on the Nigerian Stock Exchange. In addition, this study would have far-reaching implications for the field of management and finances it will contribute to the further advancement of the state of knowledge in relation to dividend decision both empirically and methodologically. This study would therefore fill the research gap that previously exists and other academics may use the study as a benchmark case. Thus, students, academicians and other researchers will also find this study very resourceful for further similar researches.

The study would as well aid investment officers/financial advisors while managing investors' portfolios in terms of selecting for inclusion or selling off some securities deemed not preferable for a given investor's preference. Additionally, the research findings will be helpful to other policy makers and the government's regulatory agencies in formulating dividend payout policies and guidelines on best practices that would protect and encourage investments thus creating a vibrant local market.

1.7 Scope and Limitations of the Study

The study covers and is limited to all companies that are listed under the industrial goods sector in the NSE because of their important roles in economic development. Also, the period for which the study is conducted is limited to 10 years period (2007 - 2017) due to availability of data. This is considered adequate to examine the effect of some determinants of dividend payout among the

listed industrial goods companies in Nigeria. This period provided basis for analyzing and assessing the patterns and trends of the dividend payout behavior of the sampled companies over the period, and the likely factors contributing to those changes.

1.8 Definition of Terms

Dividend payout ratio: Dividend payout refers to the proportion of total profit paid out to ordinary shareholders as dividends (Fumey & Doku, 2013).

Firm size: This is the (log of Total asset), assets illustrates the size of the company. This size is expected to be an effect on the company's performance. (Al-Twaijry ,2007)

Leverage: This measured the extent to which a firm has been financed by debts and its ability to pay interest and other fixed charges obligation. (Abor & Bokpin ,2010)

Liquidity: The measures how effective a firm is in its day to day operations or activities (Mehar, 2002).

Investments: This measure the effect of the earnings made by the firm on the market price of the stock. (Abor & Amidu, 2006)

Profitability: This measured the extent to which a firm was able to generate profit after payment of interests and taxes. (Yiadom & Agyei, 2011), **NSE**: Nigerian Stock Exchange.

CHAPTER TWO

LITERATURE REVIEW THEORETICAL FRAMEWORK

2.1 Introduction

This chapter covers conceptual issues on dividend policy and some of its determinants, empirical review of the study variables and dimensions as well as the conceptual framework of the study.

2.2 Dividend Policy

Dividend policy (DP) is considered as one of the three major decisions of financial management. The decision of the firm regarding how much earnings could be paid out as dividend and how much could be retained by the firm is the concern of DP. The DP determines what proportion of earnings is paid out to shareholders by way of dividends and what proportion is ploughed back in the firm itself for reinvestment purposes. The development of such a policy will be greatly influenced by investment opportunities available to the firm and the value of dividends as against capital gains to the shareholders. Each firm should develop such a DP, which divides the net earnings into dividends and retained earnings in an optimum way to achieve the objective of maximizing the wealth of the shareholders.

Dividend policy refers to the payout policy that a firm follows in determining the size and pattern of distributing profit to shareholders over time (Sharma &Wadhwa, 2013). Study on dividend policy can be traced back to the seminal work of Modilgiani and Miller (1961) where they show that in a perfect capital market with rational behavior and perfect certainty and with investment and borrowing decisions given, dividend policy has no effect on the value of the firm. DeAngelo and DeAngelo (2006) re-examine the Modigliani and Miller (1961) and challenge the notion of dividend policy irrelevance in the original Modigliani and Miller (1961) model and provide the

rationale for the relevance of dividend policy. They conclude that, contrary to that famous result, dividends are not irrelevant.

Ullah, Fida and Khan (2012) also argue that, dividend policy is an influential control vehicle to reduce the conflicting interests of the shareholders and managers because shareholders are interested in getting dividends, but managers prefer to retain earnings in order to maintain higher control over the resources. Managers prefer to retain earning instead of giving it to shareholders as a dividend. Managers want to use the resources for the growth of the firm, as well as for personal benefits and empire building (Jensen, 1986). Many studies also view dividend as a relevant and an important indicator of stability and performance of the company. Shefrin and Statman (1984) suggest that investors may prefer dividend because they derive less utility from one large gain (a large capital gain) than from a series of small gains (a small capital gain and a dividend). Kindelberger (1984) also argued that dividend payments are signs that a firm is being run efficiently for investors rather than for management.

Another vein of the literature ties dividend payout to firms' lifecycle. In particular, numerous studies observe that companies that pay dividends tend to be more mature and less volatile (BenDavid, 2010). Fama and French (2001) also provide evidence to show that US dividend paying firms tend to be large and profitable, while non-payers are typically small and less profitable but with high investment opportunities. In the same vein, big companies are believed to be paying more dividends, for example, multinational companies' payout proportionately more dividends than wholly domestic companies (Adelegan, 2001). Lintner (1956) explained that the dividends patterns are subjective to the profitability of the company. Those companies that are more profitable are expected to pay more dividends compared to those that are less profitable. La

Portaet al. (2000) also noted that firms in legal regimes that focus on protecting investors are more likely to pay higher dividend than companies in legal regimes with less investor protection.

2.2.1 Issues in Dividend Policy

Shapiro and Balbier (2000) submit that the following issues, based on empirical evidence and theoretical suggestions, are vModigliani, F., & Miller, M., (1958). "The Cost of Capital, Corporation Finance and the Theory of Investment", *American Economic Review* ital for firms to consider when setting dividend policy.

2.2.1.1 What are our investment opportunities?

Setting dividend payouts in relation to long term growth opportunities maximizes financial flexibility and reduces the financial frictions associated with raising external capital. Hence, a rapidly growing firm, with an abundance of positive net present value projects, should retain a larger share of its operating cash flow than a firm with few profitable investment opportunities.

2.2.1.2 What kind of Business Risk Do We Face?

A firm with unstable or cyclical earnings should set a low dividend payout rate to reduce the odds that it will be forced to cut its dividend. On the other hand, firms with stable earnings should be more willing to pay dividends. Modigliani, F., & Miller, M., (1958). "The Cost of Capital, Corporation Finance and the Theory of Investment", *American Economic Review*

2.2.1.3 Who Are Our Stockholders?

Dividend policy should match the choice of the stockholders between dividends and capital gains; though there is no evidence that one dividend clientele is better than another.

2.2.1.4 How is Our Liquidity Position?

All else being equal, firms with high liquidity and good access to the financial markets are in a better position to pay dividends than those firms with limited financial resources.

2.2.1.5 Is Control an Issue?

If a firm's owners or managers are concerned about retaining control, they may be reluctant to issue additional stock. Retained earnings are a preferred source of capital for such firms, mandating low dividend payout ratio if the present debt-equity ratio is at its upper limit.

However, some of the major proxies in dividend policy include; dividend payout ratio, dividend per share and dividend yield. Although this study will only focused on dividend payout ratio (DPR).

2.2.1.1 Dividend Payout Ratio (DPR)

This measures the percentage of net income that is distributed to shareholders in the form of dividends during the year. In other words, this ratio shows the portion of profits the company decides to keep funding operations and the portion of profits that is given to shareholders. Fumey and Doku (2013) states that dividend payout refers to the proportion of total profit paid out to ordinary shareholders as dividends. Investors are particularly interested in the dividend payout ratio because they want to know if the company or companies are paying out a reasonable portion of net income to investors. Investors can see that these dividend rates can't be sustained very long because the company will eventually need money for its operations. These proxy was used by Priya and Nimalathasan (2013), Uwuigbe, Jafaru and Ajayi (2012), Agyei and Yiadom (2011) as measurement for dividend policy in their study.

A consistent trend in this ratio is usually more important than a high or low ratio. Since it is for companies to declare dividends and increase their ratio for one year, a single high ratio does not mean that much. Investors are mainly concerned with sustainable trends. Conversely, a company that has a downward trend of payouts is alarming to investors. Generally, more mature and stable companies tend to have a higher ratio than never startup companies. The dividend payout ratio is the number of dividends paid to stock holders relative to the amount of total net income of a company. The amount that is not paid out in dividends to stockholders is held by the company for growth. The amount that is kept by the company is called retained earnings.

2.2.1.2 Dividend Yield (DY)

Is a financial ratio that indicates how much a company pays out in dividends each year relative to its share price, dividend yield is represented as a percentage and can be calculated by dividing the naira value of dividend paid a given year per share of stock held by the naira value for one share stock. Dividend yield was used by Akani, and Sweneme (2016) to measure dividend policy and the profitability of manufacturing goods in Nigeria.

Historically, a higher dividend yield has been considered to be desirable among many investors. A high dividend yield can be considered to be evidence that a stock is underpriced or that a company has fallen on hard times and future dividends will not be as high as previous ones. Similarly low dividend yield can be considered evidence that the stock is overpriced or that future dividend might be higher. In light of the above, this study would adopt only the dividend payout ratio as a proxy for the dividend policy.

2.3 Determinants of Dividend Policy

Review of literature shows that there are many determinants of dividend payout ratio among companies. These include; profitability, liquidity, firm size, growth, corporate tax, financial leverage, tangibility, investment opportunity, managerial ownership, board composition, audit quality and others. However, this study will only examine five out of the above mentioned factors. These are; profitability, financial leverage, liquidity, firm size and investments.

2.3.1 Profitability

The size of a firm's profit has been a long standing determinant of dividend policy. Directors normally recommend the payment of dividend when the firm has made sufficient profit to warrant such payments. Profitability is among the main characteristics that strongly and directly influences dividend policy (Al-Kuwari, 2009). Pruitt and Gitman (1991) conclude that current and past years' profits, the year-to-year and prior years dividend are important factors that influence dividend policy. Consequently, it is expected that profitable firms are likely to pay dividend as compared to non-profitable firms (Eriostis & Vasiliou, 2003; Ahmed & Javid, 2009).Abor and Amidu (2006), Yiadom and Agyei (2011), and Naceur,et.Al. (2006) find a positive relationship between dividend payout and profitability. Gill,et.Al. (2010) posit that there is the possibility of a non-linear relationship between dividends and profitability. Thus, the impact of profitability on dividends changes significantly after a certain level of profitability.

2.3.2 Investment Opportunity Sets

According to De Angelo et al. (2006), investment opportunity set represents a firm's investment or growth options but to Myers (1977) its value depends on the discretional expenditures of managers. Myers (1977) further explains investment opportunity as a yet-to-be realized potentially

profitable project that a firm can exploit for economic rents. The higher the growth opportunities, the more the need to finance expansion and hence the higher the chance to retain earnings (Chang & Rhee, 1990). In addition, this negative relationship is in line with (Myers & Majluf, 1984) and (Abor & Amidu, 2006) findings. An investment opportunity has been measured in various ways by various writers. These include market to book value of equity (Collins & Kothari, 1989), and book to market value of assets (Smith & Watts, 1992).

2.3.3 Leverage

Firms that finance their activities mostly with debt put pressure on their liquidity. Debt principal and interest payments reduce the ability of firms to have residual income to guarantee dividend payment. Consequently, it is expected that debt would impact negatively on the amount of dividend paid for a period. Kowalski et al (2007) argued that more indebted firms prefer to pay lower dividends. Also, Al- Kuwari (2009), Aivazian et al. (2003) and Abor and Bokpin (2010) confirm that dividend payout is negatively related to leverage ratio.

2.3.4 Firm Size

Firm size has the potential to influence a firm's dividend policy. Larger firms have an advantage in capital markets in raising external funds, and therefore depend less on internal funds (Higgins, 1972). Furthermore, larger firms have lower likelihood of bankruptcy and, therefore, should be more likely to pay dividends. This implies an inverse relationship between the size of the firm and its dependence on internal financing. This indicates that, large firms are able to distribute higher dividends than the smaller firms. This relationship is also supported by the transaction cost explanation of dividend policy (Chang & Rhee, 1990; Ho, 2003; Aivazian, et al., 2003). Furthermore, the effect of firm size on dividends is seen as a proxy for agency problems.

2.3.5 Liquidity

Liquidity is the degree to which an asset or security can be bought or sold in the market without affecting the asset price. It is the ability to convert an asset to cash quickly (Pandey, 2005). The fact that the trading friction is pervasive in financial markets leads one to believe that the more liquid a stock is, the better, and investors do indeed have a dividend preference based on the liquidity of the stock (Banarjee, 2008). Stocks that pay dividend satisfy investors need for liquidity. This is even more important for stocks that are thinly traded, for which investors may either have to wait long time for a buyer and/or take a potentially lower price. Liquidity refers to the ease with which an investment asset (stock, bond, and mutual funds) can be converted into cash in a short period of time without a significance decrease in its value (Eljelly, 2004). Although the possibility of a link between liquidity and dividend rates back to Modigliani and Miller (1961) there is a very little direct evidence on the issue. Liquidity is a relatively broad concept which in this case refers to the ability to trade large volumes quickly, at low cost and without moving the price. Liquidity affects the attractiveness of a stock to investors. Investors may require higher expected returns on assets whose returns are sensitive to liquidity.

According to Pandey (2005) the availability of cash and sound financial position is also an important factor in dividend decisions. A dividend represents a cash outflow, the greater the funds and the liquidity of the firm the better the ability to pay dividend. The liquidity of a firm depends very much on the investment and financial decisions of the firm which in turn determines the rate of expansion and the manner of financing. If cash position is weak, stock dividend will be distributed and if cash position is good, company can distribute the cash dividend. Liquidity is about how big the trade-off is between the speed of the sale and the price it can be sold for. In a liquid market, the trade-off is mild: selling quickly will not reduce the

price much (Sharan, 2009). Liquidity affects the dividend policy since the firms paying out dividends must take into consideration the liquidity position of the firm. Cash dividends distribution not only depends on the profitability of a firm but also depends on the free cash flow, which is the amount of operating cash flow left over after payment for capital expenditures

2.4 Review of Empirical Literature

This part contains the review of previous studies and their findings.

2.4.1 Firm Size and Dividend Payout

The previous literature found that there is a relationship between the firm's size and its dividend policy. The big size companies pay higher dividends and smaller size companies pay less dividends, as they find it difficult to raise funds, as compared to large companies who have easier access to the capital market and hence are less dependent on the internal funds, leading to more capability to pay the dividends. Musiega, Alala, Douglas, Christopher, and Robert (2013) Dada, Malomo and Ojediran (2015) also supported the same view.

King'wara (2015) examined the effect of six factors shown to influence dividend policies in companies operating in developing countries on companies operating in Kenya, a developing economy using a Tobit Regression model. It is observed that dividend payout ratio is impacted negatively by the growth rate, debt ratios and firm size and positively by earnings, market-tobook ratio and retained earnings to total assets ratio. Tariq (2015) identify the joint determinants of leverage and dividend policy of non-financial firms in Pakistan and India. The annual reports of companies from India and Pakistan during years 2010-2014. Multiple regression analysis is used on reduced form equations to see the impact of variables on dividend policy and leverage of the firms. Regression results were used. The results indicated that only size of the firm positively

impacts the decision to take additional debt, while all other variables have negative effect on debt policy. From second regression, both profitability and liquidity negatively impact dividend policy while remaining variables impact it positively. Additionally, only liquidity of a firm jointly determines both leverage and dividend policy.

Yimam (2016) evaluated internal determinant factors of dividend payout in private commercial banks in Ethiopia. The study considers the impact of seven variables: profitability, liquidity, leverage, growth, size and previous year's dividend on dividend payout by using panel data regression technique with a random effect model between years 2009 and 2014. The findings of the study show that last year's dividend, bank size and growth have statistically significant and positive relationship with banks' dividend payout. On the other hand, variables profitability and leverage have negative and statistically significant relationship with dividend payout of private commercial banks in Ethiopia. However, the relationship of liquidity and dividend payout is positive but statistically insignificant. Also, Ranti (2013) also studied determinants of dividend policy: A study of selected listed Firms in Nigeria, this study investigated the determinants of dividends policy in the Nigerian Stock Exchange market. The paper was basically modeled to examine the effects of financial performance of firms, firm size, financial leverage and board independence on the dividend payout decisions of listed firms operating in the Nigerian Stock Exchange market using the regression analysis method. The study in its findings observed that there is a significant positive relationship between firms' financial performance, size of firms and board independence on the dividend payouts decisions of listed firms in Nigeria. In addition, Kuwari (2015) studied the determinants of the dividend policy in GCC countries. The study investigated the determinants of dividend policies for non-financial firms listed on the Gulf Co-operation Council (GCC) country stock exchanges. The study found out that the firms pay

dividends with the intention of reducing the agency problem and the listed firms in GCC countries alter their dividend policy frequently and do not adopt a long-run target dividend policy. The study concluded that dividend payments are strongly and directly related to government ownership, firm size and firm profitability but negatively to the leverage ratio. Hence, this study measures size of the firm by the natural logarithm of the book value of the firms Total Assets. The above studies used different variables and also there are more inconsistent finding which shows that more need to be done.

2.4.2 Profitability and Dividend Payout

Previous researchers have found profitability as one of the most important determinants of dividend payout policy. However, the results on relationship of profitability and dividend payout have been mixed. Gill, Biger and Tibrewala (2010) analyzed the American service and manufacturing firms and found that the dividend payout ratio is a function of profit margin, sales growth, debt-to-equity ratio and tax. For the services industry, the dividend payout ratio is a function of profit margin, sales growth, and debt-to-equity ratio. For manufacturing firms, the dividend payout ratio is a function of profit margin, tax and market-to-book ratio. Ahmed and Javid (2013) find out the determinants of dividend payout policy of non-financial firms listed in the Karachi Stock Exchange during the period of 2004 to 2012. The study supported Linter"s policy. They clearly demonstrated that the firms rely on both current earnings per share and past dividend per share to set their dividend payments. The profitability, market liquidity and ownership have positive impacts on the dividend payout whereas market capitalization and size of the firms have negative impact on dividend payout policy which clearly shows that the firms prefer to invest in their assets rather than pay dividends to shareholders. Al-Twaijry (2014) studied the emerging market of Malaysia. The study confirmed that current dividends are affected by the past and future.

Also, dividends were associated with net earnings but less strongly. Neither the age of the paying dividend company nor its home sector (industry and nonindustry) had an impact on the amount paid on each share (DPS). However, size was found to have a significant effect on the DPS as compared to either the current, past or future net earnings. Appannan and Sim (2014) in their study of Malaysia listed companies for food industries under the consumer products sector showed that variables having a strong relationship with dividend payout are not necessarily the determinants of the dividend payment decision such as profitafter-tax that has the strongest relationship with dividend per share. The study further confirmed the fact that debt-to- equity ratio and past dividend per share were the important determinants of dividend payment. Alzomania and Alkhadiri (2013) examined the factors determining dividend policy represented by dividend per share for firms in the Saudi Arabia stock exchanges. They used regression model and used a panel data covering the period during 2006-2012 for 105 nonfinancial firms listed in the stock market. The results consistently supported that Saudi Arabia non-financial firms rely on current earnings per share (profitability) and past dividend per share of the firm to set their dividend payments.

Mistry (2016) attempted to ascertain the influence of the factors affecting dividend decision of Indian cement industry for a period from 2004-05 to 2008-09 based on secondary data of 28 out of 36 listed public firms listed in NSE. The study found that significant increase in the selected factors influence the dividend decision rather than the factors which has resulted marginal or moderate increase. The study also found that the change in total assets (TA) and profitability affects dividend decision positively while change in liquidity, inventory turnover ratio, retained. Similarly, Michaely (2017) studied corporate dividend policies: lessons from private firms. The study compare the dividend policies of publicly and privately held firms in order to help identify the forces shaping corporate dividends, and shed light on the behavior of privately held companies.

It shows that private firms smooth dividends significantly less than their public counterparts, suggesting that the scrutiny of public capital markets plays a central role in the propensity of firms to smooth dividends over time. Public firms pay relatively higher dividends that tend to be more sensitive to changes in investment opportunities than otherwise similar private firms. Ultimately, ownership structure and incentives play key roles in shaping dividend policies. Tsuji (2010) examined the determinants of dividend policy. The case of the Japanese electrical appliances industry. This paper explores the determinants of the dividend policy of firms in the Japanese Electrical Appliances Industry. Empirical investigations reveal that in this industry, corporate managers do not cater to investors' demands in both their dividend initiation and continuation decisions. All data in the study were from Quick Corporation. Their full sample period is from 2007 to 2016. The paper finds relations between corporate earnings and firm dividend payments in general. However, on an aggregate time-series basis, dividend payments tend to decrease company earnings in the Japanese Electrical Appliances industry, and this means rejection of the traditional signaling hypothesis. Odesa and Ekezie (2015) suggested leading determinants of dividend policy: A case study of the Indian Banking Industry. Their paper was an attempt to understand the banking dividend decisions in a competitive global economy. Dividend decisions may enhance the market value of the firm but on the other hand it may mean less availability of internal funds and more dependence on external sources and expansion purposes. Furthermore, while determining dividend payment, a prudent management strikes a balance between shareholder's expectation and firm's long term interest. Such analysis is of great relevance from the policy standpoint, because as the dividend literature suggests, if these decisions are handled efficiently, this is expected to be reflected in value of the firms. More importantly, such analysis is useful in enabling policymakers to identify the success or failure of policy initiatives or,

alternatively, highlight different strategies undertaken by banking firms, which contribute to their successes. Ahmed (2015), investigated the impact of liquidity and profitability on the dividend policy in the UAE banking sector, and examined any kind of variations between Islamic and conventional banks prior and subsequent to the financial crisis. He analyzed the data of 18 out of the 24 UAE national banks over the period 2007-2015. The dividend payout ratio is analyzed in relation to six liquidity and profitability ratios. The correlation analysis and regression analysis were conducted to analyze the data. The main finding is that the dividend payout ratio has a significant and positive correlation with liquidity but negative and insignificant correlation with profitability. There is a significant variation of the variables in Islamic banks but not significant with the period. Mehta (2012) evaluated the determinants of dividend payout for all firms in the areas of real estate, energy sector, construction sector, telecommunications sector, health care and industrial sectors (except bank and investment concerns). He analyzed a range of determinants of dividend policy: Profitability, Risk, Liquidity, Size and Leverage of the firm. Correlation and the multiple regression techniques were applied to find out the most significant variables used by the UAE firms in making the dividend decisions. The study provides evidence that profitability and size are the most important considerations of dividend payout decisions by UAE firms. The above empirical studies indicated that profitability is a of the major determinants of Dividend payout of firms but there is for further study in the context of Nigeria and applying or using different industries (industrial Goods Companies).

2.4.3 Debt (Leverage) level and Dividend Policy

Debt level measures the level at which a corporation relies on external funds to finance investments (Al-Najjar & Hussainey, 2009). A correlation between debt level and dividend disbursement is

expected from the trade-off theory and pecking order theory. Several authors examined this relationship but until now there are mixed findings.

Nuhu (2014) re-examined the factors that determine dividend payout in Ghana. The sample for the study was drawn from 30 listed firms on the Ghana stock exchange from 2000 to 2009.The study used ordinary least squares panel regression model to estimate the determinants of dividend payout. The results show that, profitability, the square of profitability, board size, board independence, leverage, and audit type are important determinants of dividend payout in Ghana.

Hosain (2016) investigated the determinants of dividend payout policy of the listed private commercial banks in Bangladesh. In the study, eight variables are considered as potential determinants of dividend payout policy. He ran pooled ordinary least square (POLS) and dynamic panel regression model on a sample of ten listed private commercial banks of Dhaka Stock Exchange Limited in Bangladesh for the period of eleven years from 2005 to 2015. While testing the impact of the eight independent variables on the dividend payout ratio, he concluded that only five can explain the dividend policy. Fixed effect regression model was chosen to test the relationship between dividend determinants and dividend payout. The results showed that dividend payout ratio is positively and significantly affected by liquidity, firm growth, previous year's dividends but are negatively affected by leverage and profitability. Firm size, firm risk and ownership structure do not have a direct influence on the dividend payments. Thus, Leverage, liquidity, firm growth, previous year's dividends, and profitability are functioning as the key determinants of dividend payout of the listed private commercial banks in Bangladesh

Fahim, Khurshid, and Tahir (2015) ascertained the determinants of dividend payout of financial sector in Pakistan. The dividend is an important indicator and serves as a measure of a firm's

financial performance and growth. They used quantitative approach to explore the effective determinants of DPO for the financial sector of Pakistan. The data were collected over a period of seven years from 2007 to 2013. However, sample of this research is restricted to the selected listed financial firms of Pakistan. A sample of 53 financial firms is selected out of 181. For the analysis of data various statistical tools i.e. descriptive statistics, correlation matrix and panel data analysis are applied. Random effects model is selected to measure the determinants of DPO and their impact on it. The results conclude that financial leverage has a statistically significant and negative effect on dividend payout, while the advances to deposit ratio, return on equity, investment and size have a positive and statistically significant influence on dividend payout for the selected financial firms of Pakistan. Detain. Wirasasmita, Kartini and Padmadisastra (2015) determined the influence of financial performance to management decision in paying dividend to the stock holder. The Sampling Method used in the study was purposive sampling. Sample size is based on the criteria of a total units from 45 firms registered on JSX in the analysis more than less 20 are used as samples for this study. Analysis used was multiple regression analysis, which is preceded by a test consisting of the assumption of classical test for normality,

heteroscedasticity test, test of multicollinearity and autocorrelation. The result of this study using path analysis suggests that only two variables (liquidity ratio and current ratio) that significantly affect the following year stock price with level of significance 5 percent. The ratio is used for research profitability, liquidity sales growth and dividend payout ratio the implication on the stock price.

Ahmad and Muqaddas (2016) explored the influence of financial efficiency, safety, risk and profitability on dividend policy using panel data of 10 commercial banks listed at Pakistan Stock Exchange (PSX) for a period of 9 years between 2006 to 2014. The panel regression technique

was used to analyze the data. The analysis shows a positive relationship of dividend payout ratio with safety and profitability in banking sector of Pakistan. The study identifies a negative association of dividend payout measure with financial efficiency and risk. The results show the statistically significant association of safety, risk and profitability with dividend payout ratio. Based on these findings it is concluded that safety, risk and profitability measures are relatively strong measures for defining dividend policy. Most of the studies above, used short time period (5 years) which is not enough to justify the effect of the study variable (independent) on the dependent variable.

2.4.4 Liquidity and Dividend payout ratio

Liquidity is the extent at which a firm can pay short-term liabilities based on its liquid assets Gupta (2010) found the determinants of corporate dividend policy. The study re-examines various factors that have a bearing on the dividend decision of a firm the sample size of the study is 150 companies from 16 industries the study period is January 2001 to December 2007 the tools used for analysis is a two-step multivariate procedure. First factor analysis is performed on the data to extract prominent factors from various variables and then multiple regression has been conducted on such factors. Results of factor analysis indicate that leverage, liquidity, profitability, growth and ownership structure are the major factors. Regression on these factors shows leverage and liquidity to be the determinants of the dividend policy for Indian Companies. Aivazian, Gatchev and Spindt (2016) tried to establish a link between the firm dividend policy and stock market liquidity of NYSE and AMEX firms for the period 1963 to 2003. In the cross section analysis, they found that the owners of less (more) liquid common stock are more (less) likely to receive cash dividends. Hence, this study will measure liquidity by current ratio (CR).

Abu (2014) did a research on the Determinants of dividend payout policy: Evidence from Bangladesh. The six independent variables used for this study were: sales, earnings per share, net income, liquidity, retained earnings and price earnings ratio. With the use of Operating Least Squares, the results identified EPS to be negatively significant for dividend payout policy; NI to have a positive effect on dividend payout; revenue (sales) has no effect on dividend payout; P-E ratio does not have any effect on dividend payout policy and liquidity may have significant role for dividend payout. The results concluded that dividend payout of commercial banks in Bangladesh is based upon NI rather than other variables selected in the analysis. Demirgüne (2015) investigated the determinants of target dividend payout ratio (TDPR) of BIST - listed firms operating in the non-metallic products (cement) manufacturing industry in the period of 2002-2012. The short and long-run effects of factors related to profitability, liquidity, growth, risk, market expectations and taxation on TDPR is analyzed via panel autoregressive distributed lag analysis methodology. His findings indicated that in the long-run, factors related to profitability, growth and corporate taxation significantly affect TDPR negatively; while factors related to risk and market expectations have statistically significant and positive effects on TDPR. Additionally, in the short-run only profitability seems to have statistically significant and positive effect on the dependent variable.

Farman Ali Khan and Nawaz Ahmad (2017) examined the impact of profitability, growth opportunities, risk, liquidity, firm size, leverage, taxation and audit type on dividend payout in order to increase understanding of the determinants of dividend payout within Pakistani corporate environment. five year financial data from 2009-2014 of listed pharmaceutical companies is used and analyzed to determine the impact of selected variables on dividend payout. Correlation analysis and backward multiple linear regression was applied on the data to determine the

association between variables and the impact of selected independent variables on dividend payout. Findings reveal that audit type, liquidity, growth opportunities & profitability are the key determinants of dividend payout of pharmaceutical companies of PSX. 31.90% variation in dividend payout is caused by these variables. Other independent variables including taxation, risk, firm size and leverage insignificantly influence dividend payout decisions of pharmaceutical companies of PSX. John and Muthusamy (2010) examined the corporate dividend policy for the Indian paper industry. In this paper, we have used Vintner dividend model and its extended versions for analysis of dividend determinate. Growth in sales, Earnings per share, Price earnings ratio, Market value to book value, Cash flow, Leverage, Liquidity and

Return on assets are used as independent variables while dividend payout is the dependent variable. The results imply that the Indian paper industry employs more leverage for narrating dividend payout ratio. Komrattanapanya and Suntrauk (2013) determined the factors that influence the dividend payout of all firms listed in the Stock Exchange of Thailand (SET) during year 2006 to 2010. Using the Tobit regression analysis, results reveal that financial leverage, investment opportunities, and sales growth negatively affected the dividend payout; on the other hand, size of firm is positively affected dividend payout. Moreover, evidence shows that firms in property and construction sector are more likely to pay dividend than others. Additionally, profitable small and large firms tend to pay dividend; meanwhile, profitable medium firms are less likely to pay dividend. However, it is found that profitability, liquidity, and business risk are insignificantly related to dividend payout. There appear inconsistent finding due applications of different methodologies.

2.4.5 Dividend Policy and Growth Opportunities (Investments)

Prior studies show mixed findings as regards the relationship between growth opportunities and dividend payout of different industries and countries, Pandey and Ashvini, (2016) indicated that the market value of equity to book value of equity ratio, that is a proxy of investment opportunities, does not impact on dividend reimbursement. Additionally, Odesa and Ekezie, (2015) found a statistically insignificant result in the effect of Tobin's q variable that represents investment prospects on dividends in Nigeria. Olantundun (2014) has studied the determinants of dividends in Nigeria using the Lintner-Brittain model and its variants on the pooled cross sectional / time series data for the full sample of observations from 1984-1994. The models were estimated using the Ordinary Least Square (OLS) method. The results of the study showed that there are no significant interactions between the conventional Lintner / Brittain model and dividend decisions of Nigerian firms. They concluded that the dividend behaviour of Nigerian firms depends on growth prospects, level of gearing and firms size. Mahdzan, Zainudin and Shahri, (2016) studied the possible association between ownership structure, corporate governance and firm's dividend payout policy and found that a positive association exists between dividends and earnings trend. Debt-to- equity is found to be negative and associated, whereas past investment opportunities are positively associated with dividend payout policy in

India. Alzomaia and Al-Khadhiri (2013) studied the determinants of corporate dividend policy in Jordan for a period between 2003 and 2012. Size, age and profitability of the firms have been found to be the determinant factors of corporate dividend Policy in Jordan. The findings provide strong support for the agency costs hypothesis and are broadly consistent with the pecking order hypothesis. For this reason, this study will examine whether this correlation subsists among quoted Industrial goods companies in the Nigerian stock market.

The above review of literature shows that the dividend determinants have been well researched and well documented in developed countries but very few studies has been done in developing and emerging markets. Moreover, the dividend policy is relatively unexplored in the industrial goods sector especially in the Nigerian context and hardly any study that has been conducted using the same determinants in this region. Hence, the need to explore the relationships among some determinants of dividend payout ratio among some quoted industrial goods sector in Nigeria.Cristea1 and Cristea (2017) identified the main factors influencing dividend policy for the non-financial companies listed on the Bucharest Stock Exchange for a period of ten years from 2007 to 2016. In order to achieve this aim, panel data were collected from the listed companies' reports and financial statements. The study reveals that dividend policy is positively related to corporate profitability and liquidity and negatively associated with leverage, size, growth, and the state of the economy. Hoque (2018) determined the impulse of dividend payment decision of listed pharmaceutical companies in Dhaka Stock Exchange of Bangladesh. Collected secondary data were analyzed by econometrics software Reviews 8 through least square method. The study reveals that profitability and agency cost positively influence the dividend payment decision and firm's size, financial leverage, growth negatively impact on the dividend payment decision of selected pharmaceutical companies. Among explanatory variables, profitability is not statistically significant at 5% significant level whereas firm's size, financial leverage, growth and agency cost are found statistically significant at 5% significant level.

Similarly, a number of variables, potentially responsible for determining dividend payout decisions in companies, have been found in the literature. In this study, the set of explanatory variables includes: firm Size, Profitability, Leverage, investments and Liquidity of the firm. These explanatory variables have been considered as the potential determinants of dividend payout in the

quoted Nigerian Industrial goods industry. The above studies show that there are issues that need to be attended to as regards the subject matter.

2.5 Theoretical Underpinning

The theories below show the relation between the study variables as opined by previous studies. The underpinning theory for the study looks at the relationship between investment opportunity, Liquidity, Leverage and profitability and the dependent variable dividend per share.

2.5.1 Residual Theory of Dividend Policy

The essence of the residual theory of dividend policy is that the firm will only pay dividends from residual earnings, that is, from earnings left over after all suitable (positive NPV) investment opportunities have been financed. Retained earnings are the most important source for financing for most companies (Baker, Powell, & Veit, 2002). A residual approach to the dividend policy, as the first claim on retained earnings will be the financing of the investment projects. With the residual dividend policy, the primary focus of the firm's management is indeed on investment, not dividends. Dividend policy becomes irrelevant, it is treated as a passive rather than an active, decision variables.

According to Baker et al. (2002), the view of management in this case is that the value of firm and the wealth of its shareholders will be maximized by investing the earnings in the appropriate investment projects (investment opportunities), rather than paying them out as dividends to shareholders. Thus managers will actively seek out, and invest the firm's earnings in, all acceptable (in terms of risk and return) investment projects, which are expected to increase the value of the firm. Dividends will only be paid when retained earnings exceed the funds required (liquidity) to

finance the suitable investment projects. Conversely when the total investment funds required exceed retained earnings, no dividend will be paid.

2.5.2 Supporting Theory

Below are the supporting theories for the study. They discuss the relationship between the other variables under study.

2.5.3 Dividend Signaling Theory

This theory looks at the relationship between the firm size and dividend payout ratio. In practice, change in a firm's dividend policy can be observed to have an effect on its share price. An increase in dividend produce an increase in share price and then shareholders wealth and a reduction in dividends produce a decrease in share price and then shareholders wealth. This pattern led many observers to conclude, contrary to M & M's model, that shareholders do indeed prefer dividends to future capital gains. Needless to say M & M disagreed (Nnamdi, 2009).

Baker et al. (2002) states that the signaling models for paying dividends, developed by Bhattacharya, John and Williams, (2000); and Miller and Rock, (1985) suggest that managers as insiders choose dividend payment levels and increases, to signal private information to investors.

According to them, managers have an incentive to signal this private information to the investment public when they believe that the current market value of their firm's shares is below its intrinsic level. The increased dividend payment serves as a credible signal when other firms that do not have favorable inside information cannot copy the dividend increase without unduly increasing the chance of later incurring a drop in dividends. The theorists therefore conclude that the dividend signaling hypothesis confirms that increased (decreased) cash dividends should experience

positive (negative) price reactions. Dividend announcements signaling future profitability have also been established through empirical research (Baker et al., 2002). Most share price changes took place immediately following the announcement of a dividend, especially positive or negative dividend changes, through findings of empirical studies conducted by (Aharony & Swary, 1990; Asquith & Mullins,1983; Kalay& Lowenstein, 1996) as noted in Baker et al. (2002). However, consistency in findings in respect of dividend signaling models, have not been achieved over the years.

Studies conducted by DeAngelo, DeAngelo, and Skinner (2004) did not support the hypothesized relation between dividend policies and future earnings. According to Frankfurter and Wood (2002), advocates of the signaling theories believe that corporate dividend policy is a cheaper medium of conveying private information to the markets than any other media forms. Frankfurter and Wood (2002) states that the use of dividends as signals imply that alternative methods of signaling are not perfect substitutes.

2.5 Conceptual Framework

The research framework for the study seeks to study the relationship between the independent variable determinants of dividend policy (profitability, leverage, firm size, investment opportunities and liquidity) and dependent variable Dividend payout ratio)

Independent Variables   Dependent Variables

Profitability

Liquidity

Firm Size   Dividend Payout
                                               Ratio (DPR)

Leverage
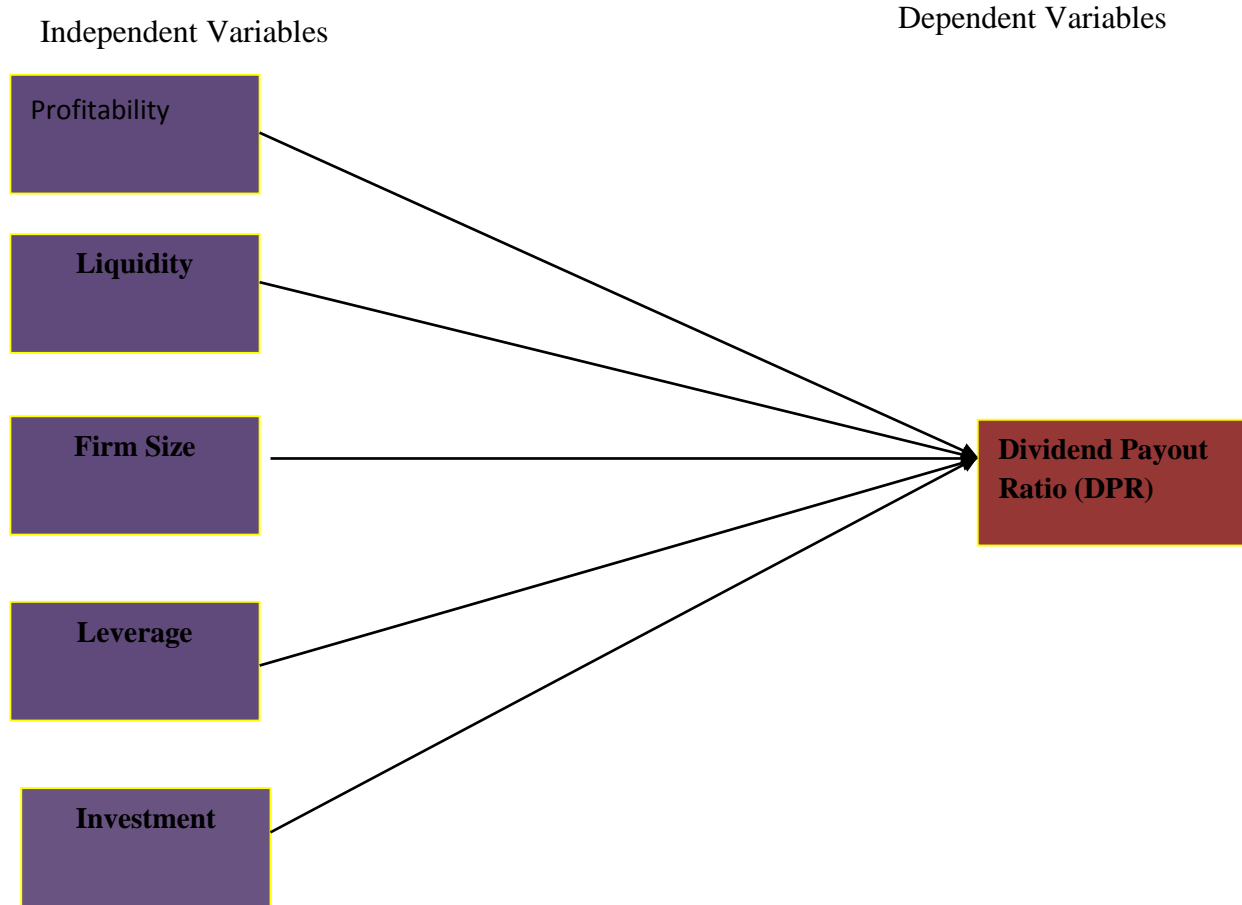
Investment

Fig: 2.1 Conceptual frame works of the study.

Source: Survey (2018)

The above conceptual model shows the relationship among some determinants (profitability, firm size, investment, leverage and liquidity) of dividend policy. The study intends to find out how a change in profitability, differences in the size of firms, liquidity difference, different debt level as well as the available investment of growth opportunities as they affect dividend decisions of firms. These predictors were all obtain from the review of literature which shows how some of the determinants were tested in different industries and countries. Hence this study would test only the above five determinants as they affect dividend decisions in the Nigerian industrial goods companies.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter discusses issues relating to research designs, population and sampling size, sampling technique, operational definitions and measurement of variables, data collection procedure, technique of data analysis.

3.2 Research Design

According to Zikmund (2010) and Cresswell (2008) research design is categorized into three types; firstly, survey/ non-experimental design, which is concerned with the use of questionnaires and interviews. Secondly, experimental design, which is usually carried in research laboratories. The last is the historical research design, which is about the use of secondary data and observation as well. Expos facto research design was adopted for this study because it involves the use of secondary data to be obtained from financial reports of the quoted industrial goods companies in Nigeria.

3.3 Population and Sample Size

According to Cavana, Delahaye and Sekaran (2001) population is seen as the collection of subject of interest to be studied. Similarly, Sekaran and Bougie (2010) defined population as a gathering of data whose properties are to be assessed in a given research situation. Additionally, Creswell (2012) defined a population as the group of individuals who have identical features that the researcher can identify and study.

In view of the above, the population of this study is made up of all the 15 quoted industrial goods companies in the Nigerian Stock Exhange as at 31st December 2017. However, this study used censors sampling because it used all the 15 quoted companies due to their limited number and availability of the needed information to facilitate achievement of the research objective. The list of the 15 quoted industrial goods companies in the NSE as at 2017.

Table 3.1 List of Firms

S/N	Name of Company
1.	Dangote Cement Plc
2.	Ashaka Cement Plc
3.	Lafarge Africa Plc
4.	African Pains Nigeria Plc
5.	Berger Paints Plc
6.	Beta Glass Co Plc
7.	Cap Plc
8.	First Aluminium Nigeria Plc
9.	Portlant Paints and Products Nigeria Plc
10.	Meyer Plc,
11.	Austin Laz & Company Plc
12.	Avon Crowncaps & Containers
13.	Cement Co. of North Nig. Plc
14.	Cutix Plc
15.	Paints and Coating Manufactures Plc.

Source: NSE (2017)

3.4 Data Collection Technique and Source

secondary method was used for this study. According to Aliaga and Gunderson (2000), quantitative research is explaining phenomena by collecting numerical data that are analyzed using mathematically based methods (in particular statistics). This research study used secondary sources of data which will be collected from readily available balance sheets and profit and loss accounts as contained in annual financial statements maintained at the respective companies. Data was collected from the samples annual report for the period of 2007 to 2016 these have helped the researcher to measure both aspects of the variables. According to Saunders, Lewis and Thornhill (1997) one of the advantages of using secondary data is the enormous savings in resources specially researcher's time and money. The Reliability (consistency) and validity (accuracy) of the data was guaranteed since the data was gathered from audited financial statements which reduced chances of misrepresentation of information contained.

3.5 Method of Data Analysis

Data analysis refers to the tools, techniques and procedures for summarizing and testing relationship among the variables on which data have been collected. The statistical technique that was used to analyze the data in this research work is regression analysis with the help of STATA version 14. Specifically, this study employed regression model to assess the level of the effect and relationship of the independent variables measured by determinants of dividend payout ratio (profitability, liquidity, firm size, financial leverage and investments), have on the dependent variable dividend payout ratio (DPR).

3.6 Model of the Study

The dependent variable for this study is dividend payout ratio (DPR) and determinants of dividend payout (profitability, liquidity, firm size, financial leverage and investments) as the proxies for independent variable. The model is specified below:

DPR =a+βEPS +βCR +βLogTA +βDER+βPER + e_____I Where:

Yi   = Dividend Payout Ratio (DPR)

X1   = Profitability (EPS)

X2   = Liquidity (CR)

X3 = Firm Size (LogTA)

X4 = Financial Leverage (DER) X5 = Investments (PER) a= Constant value βi= the co-efficient of variable ei= error term

Therefore, the regression equation would be:

3.7 Measurement of Variables

Variables measurement as adapted or adopted from the previous studies are explained below:

Table 3.2 Description Variable

S/N	Variable	Proxies	Measurement
1.	Dependent Variable (Dividend Policy)	Dividend Payout Ratio	Dividend Declared/PAT x 100
2.	Independent Variable (Determinants)	Profitability (Earnings per share)	PAT/Number of shares
		Firm Size	Log of Total Assets

Financial Leverage (Debt-Equity Ratio)	Total Debt/Equity x 100
Liquidity (Current Ratio)	Current Assets/Current liabilities
Investments	Market Price Per Share/Earning
Price Earning Ratio	Per x100

(Priest, McColl, Thomas & Bond, 1995; Nunally & Bernstein, 1994; Creswell, 2012)

Dependent Variable

The dependent variable for this study is stated below.

Dividend payout ratio; dividend payout refers to the proportion of total profit paid out to ordinary shareholders as dividends. This ratio shows the portion of profits the company is given to shareholders, it will be measured by dividing the dividend paid by the profit after tax multiply by a hundred (dividend paid for the year ÷ profit after tax × 100)

Independent Variables

Firm size: is the (log of Total asset), assets illustrates the size of the company. This size is expected to be an effect on the company's performance (Movalia & Vekariya 2014).

Financial Leverage: This measured the extent to which a firm has been financed by debts and its ability to pay interest and other fixed charges obligation. This will be measured by DebtEquity Ratio (DER) (Movalia & Vekariya 2014).

Liquidity: The measures how effective a firm is in its day to day operations or activities? It will be measured by Current Ratio (CR) (Arumba 2014).

Investments: This will be measured by Price –Earnings Ratio (PER). It measures the effect of the earnings made by the firm on the market price of the stock (Echchabi & Azouzi 2016).

Profitability: This measured the extent to which a firm was able to generate profit after payment of interests and taxes. This is measured by Earning Per Share (EPS) ((Movalia & Vekariya 2014).

CHAPTER FOUR

DATA INTERPRETATION AND ANALYSIS

4.1 Introduction

The purpose of this chapter is for presentation, evaluation and analysis of regression results of the model postulated as well as verification of the various working hypothesis of this research which is drawn from the objective of the study. The parameters estimates will be subjected to various economic, statistical and econometric tests, using STATA version 14.0.

Finally, after the analyses of the results, we will evaluate our working hypothesis and draw some policy implication of the findings.

4.2 Descriptive Statistics

The summary statistics of the variables is presented below in table 4.1,

	Mean	**Std. Deviation**	**Skewness**	**Kurtosis**
DPR	70.7182	3.4759	6.9264	5.2778
Profitability	2.4743	2.3739	-4.5204	3.3685
Leverage	10.4749	2.3092	5.1359	2.3769
Investment	3.1575	7.1194	5.2569	3.7768
Liquidity	1.6943	3.1276	8.9990	9.6100
Firm Size	6.7673	0.9496	0.3555	2.78462

Source: Authors computation using STATA version 14.0 (2018)

Table 4.1 above shows the descriptive statistics of the variables used in the study. The series have a total of 221 observations with six variables. These variables include Dividend Payout Ratio (DPR) proxy of which is the dependent variable. Earnings Per Share (EPS) proxy of profitability. Also, Debt-Equity Ratio (DER) proxy of Financial Leverage, Price Earnings Ratio (PER) which is proxy of investment, Current Ratio (CR) proxy of Liquidity, Total Assets (TA) proxy of firm size.

The results showed that DPR has a mean of 70.72 with a standard deviation of 3.48. ESP has a mean of 2.47 with a standard deviation of 2.37. Also, DER has a mean of 10.47 with a standard deviation of 2.31 while, PER has a mean of 3.16 with a standard deviation of 7.12. Likewise, CR has a mean of 5.69 with a standard deviation of 3.13 as TA has a mean of 6.77 with a standard deviation of 0.95. The results showed that with the exception of EPS all other variables are positively skewed.

4.3   Correlations analysis

The study uses the correlation matrix to analyze the relationship between the dependent variables and the independent variables

Table 4.2 Correlation Matrix

	DPR	EPS	DER	TA	CR	PER
DPR	1					
Profitability	0.396**	1				
Leverage	0.884**	-0.617	1			
Firm Size	-0.358**	0.353	-0.377	1		
Liquidity	-0.097	0.045	-0.133	-0.077	1	
Investment	0.931**	-0.502	0.937	-0.373	-0.109	1

*The asterisks ** indicate Correlation is significant at 5%.*

Source: Authors computation using STATA version 14.0 (2018)

The table 4.2 above presents the Pearson Correlation matrix of the variables used for the study. The correlation matrix shows the extent of Correlation between the dependent variable and the independent variables.

The results above showed that the Correlation between DPR and EPS is positive at 39.6%. The Correlation between the two is statistically significant at 5%. Also, the relationship between DPR

and DER is positive at 88.4%. The Correlation between the two is statistically significant at 5%. The Correlation between DPR and TA is negative at 35.8%. The Correlation between the two is statistically significant at 5% PERCENT. Meanwhile, the Correlation between DPR and CR is negative at 9.7%. The Correlation between the two is statistically significant at 5%percent. Furthermore, the Correlation between DPR and PER is positive at 93.1%percent. The Correlation between the two is statistically significant at 5%percent.

4.4 Multiple Regression Analysis

The Ordinary Least Square Multiple Regression Technique was employed to test the impact between the independent variables and the dependent used in the study. The econometric model was designed to investigate the effects on the dependent variable, as the expected direction and amount of change in the criterion for a 1-unit increase of independent variable; while all the other variables held constant. The table below present the Multiple Regression analysis computed using STATA version 14.0

Table 4.3 OLS regression outputs

Dependent Variable: DPR			
Variables	**Coefficient** **(S.E.)**	**t-values**	**P-Values**
	23.12614***		
EPS	(4.606439)	5.020394	0.0000
	3.756396**		
DER	(1.029297)	3.649476	0.0003
	-11.7915		
TA	(95.37711)	-1.245493	0.2143
	12.70273		
CR	(26.60851)	0.477394	0.6336
	35.8355***		
PER	(34.44987)	10.41616	0.0000

Constant	12.5661
R-squared	0.881590
Adjusted R-squared	0.878836
F-statistic	320.1445
Prob(F-statistic)	0.000000
Durbin-Watson stat	1.784824

Legends: ( ) parenthesis is Standard Error,

*Statistically significant at 10% (90%)

    **Statistically significant at 5% (95%)

   ***Statistically significant at 1% (99%)

Source: Authors computation using STATA version 14.0 (2018)

In this section, we present the economic interpretation of the regression results and verify whether parameter estimates in each model conform to a priori expectation and the significance of the parameter estimates.

The F-statistics measures the overall significance of the regression model. The F-value provides a test of the null hypothesis that the true slope coefficients are simultaneously zero. F-statistics = 320.1445 which is greater than the critical F=1.11 with a P-value of 0.000 at 5percen level of significance. This indicates the model has a robust fit and it is statistically significant, that means there exist a true relationship between the regress.

The R^2 measures the goodness of fit of the estimated model. The R^2 measure the proportion of total variation in the regress and explained by the regression model. From the regression result the R^2 is 0.88 while the adjusted R^2 is 0.88. This means that the model explains about 88percen of the total variation in DPR explained by the explanatory variables.

Profitability

Earnings Per Share (EPS): the sign of the coefficient is positive and statistically significant at 5percen. The coefficient of 23.12614 which implies that over the study period on average a oneunit increase in EPS leads to approximately 23.1 increase in DPR while other variables are held constant.

Leverage

Debt-Equity Ratio (DER): the sign of the coefficient is positive and statistically significant at 5percen. The coefficient of 3.756396 which implies that over the study period on average a oneunit increase in DER leads to approximately 3.76 increase in DPR while other variables are held constant.

Firm Size

Total Assets (TA): the sign of the coefficient is negative and statistically insignificant at 5percen. The coefficient of -11.7915 which implies that over the study period on average a one-unit increase in TA leads to approximately 11.79 decrease in DPR while other variables are held constant.

Liquidity

Current Ratio (CR): the sign of the coefficient is positive and statistically insignificant at 5percen. The coefficient of 12.70273 which implies that over the study period on average a oneunit increase in CR leads to approximately 12.70 increase in DPR while other variables are held constant.

Investment

Price Earnings Ratio (PER): the sign of the coefficient is positive and statistically significant at 5percen. The coefficient of 35.8355 which implies that over the study period on average a oneunit increase in PER leads to approximately 35.83 increases in DPR while other variables are held constant.

4.4 Post Estimation Tests

After estimating the parameters of the model, it is a good practice to check whether the model satisfies some of the GAUSS MARKOV assumption before subjecting the model to forecasting and policy prescription for the economy. Therefore, some tests were conducted as diagnostic checks for the model to test the robustness and reliability of the result obtained from the OLS regression. The following tests were conducted

1) Test of Normality on the estimated residual

2) Test of Serial Correlation

3) Test of heteroskedasticity

4) Multicollinearity

5) Specification Test

4.4.1. Normality

One of the major assumptions of CLRM (Classical linear Regression model) is that errors of the model should be normally distributed with Zero Mean and Constants Variance. The statistical consequences when the assumption of normality collapsed, is that there are presence of outliers in

the data (Gujarati, 2003, Gujarati & Porter 2009). For this study, the normality analysis will be carried with three methods, these include; the Residual Normal Plots and Shapiro-Wilks test test.

Table 4.4 Shapiro-Wilk Test of Normality on the Estimated Residual

Z-statistics	29.032
Chi-Square Value	0.89813

Source: Authors computation using STATA version 14.0 (2018)

The null hypothesis of normality is the residual is normally distributed. From the table 4.2 above the S-W Z-statistics is 29.032 from the P-value above; we do not reject the null hypothesis of normality. Therefore, conclude that the error terms are normally distributed at 5% level of significance.

However, to prove the above assertion of normality graphically the study used the output of a residual plots given in Figure 1 below
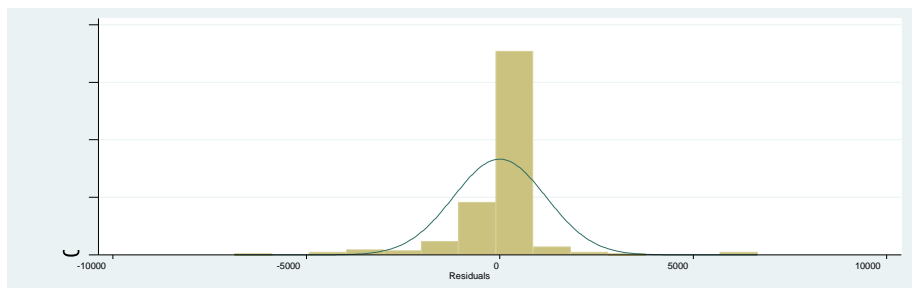
Figure 4.1

Source: Generated by Author using STATA version 14.0 (2018)

If the data are normally distributed, then the residual curve will be in a shape of a bell. If the residual curve is not in a shape of a bell it is obvious that the errors are not normally distributed. As presented in figure 1 above, the residual normal plot show that the data is normally distributed. The histogram of the fitted residual showed that the distribution is normal. A fitted normal distribution plot indicates that; the assumption of normality has been met; the entire bars on the histogram were close to the normal curve.

4.4.2 Autocorrelation (or serial correlation) Test

The error term of the model should not be correlated. If the assumption is violated, then we run into a serious statistical problem. To check for autocorrelation, we used the Durbin-Watson statistic and Dublin-Statistics. The test assumes the null hypothesis of no serial correlation. The table 4.5 below presents the results of serial correlation.

Table 4.5 Serial Correlation Test

D-W Statistics	1.7848245	
Dubina	138.650	Prob. Chi-Square(2) 0.084824

Source: Authors computation using STATA version 14.0 (2018)

From the results above, the Durbin-Watson statistic is used to test the assumption that the residuals in the model are independent (or uncorrelated). This statistic can vary from 0 to 4. From the results the value is 1.784 which is within the range of 0 to 4 hence we conclude that the model does not suffer from autocorrelation. Also from the Duna results shows a Dubin-Statistics is 138.650 with probability value of 0.084824 indicating the acceptance of the Null hypothesis of No Serial Correlation. We thereby conclude that the model does not suffer from serial correlation problem.

4.4.3 Homoscedasticity Test

It is assumed under CLRM (Classical linear Regression model) that the variance of the error term is constant over time. Homoscedasticity means that the variance of independent variables is approximately the same at different level of the independent variable. If the variance of the error term is not constant then there is a statistical problem in the model. The problem of hetroskadacity exits in the model.

This study used the both Breusch-Pagan and Cameron & Trivedi's heteroskedasticity test. The Null hypothesis is the model has a constant variance. The two tests are summarized in table 4.6 below.

Table 4.6 Heteroskedasticity Test

Breusch-Pagan -chi2(1)	142.54	Prob > chi2	0.9804
Cameron & Trivedi's	242.65	Prob. Chi-Square(4)	0.4274

Source: Authors computation using STATA version 14.0 (2018)

From the results above, the Breusch-Pagan and Cameron & Trivedi's statistic is used to test the assumption that the residuals error terms are constant. The null hypothesis is the variance of the error terms is constant over time. From the results above, The Breusch-Pagan-chi2 (1) value is 142.54 with a probability value of 0.9804 while, Cameron & Trivedi's statistics is 242.65 with a probability value of 0.4274 which are greater than 0.05, hence indicating the acceptance of the Null hypothesis of constant variance. We thereby conclude that the model does not suffer from heteroskedasticity problem and the variances of the error term are constant.

4.4.4 Multicollinearity Test

Multicollinearity occurs when two or more predictors in the model are correlated and provide redundant information about the response. Multicollinearity is a situation where two or more

independent variables in a CLRM (classical linear regression model) are correlated. A collinearity Diagnostic test Variance Inflation Factor (VIF) method was used. The table 4.8 below presents VIF index for variables used in the model;

Table 4.7 Multicollinearity Test

Variables	Tolerance	VIF
DER	0.191980	2.87
PER	0.110616	9.04
EPS	0.551413	1.81
TA	0.810715	1.23
CR	0.960720	1.04
	Mean VIF	4.80

Source: Authors computation using STATA version 14.0 (2018)

The table 4.7 above showed the VIF and tolerance level as well as the condition index. The VIF that exceeds 10 and the tolerance value that is lower than 0.10 indicate a problem of multicollinearity. The results of this study shows that VIF of the variables are less than 10 and the tolerance value is more than 0.10. The Mean VIF is less than 10 which implies that the model those not suffer from multicolinearity problem.

4.4.5 Specification Test

The assumption that the model is suffering from mathematical misspecification is one of the assumptions of CLRM. This problem may lead to biasness in the model due to presence of unwanted variables. The Ramsey RESET test is used to test for misspecification problems. The Null hypothesis is that model has no omitted variables. This means the there is no misspecification error in the model.

Table 4.8Specification Test

F(3, 212)	116.24	Prob > F	0.7416

Source: Authors computation using STATA version 14.0 (2018)

From the results above, The Ramssey RESET F- value is 116.24 with a probability value of 0.7416 which are greater than 0.05, hence indicating the acceptance of the Null hypothesis of no omitted variables bias. It is thereby concluded that the model does not suffer from omitted variables biases

4.5 Hypothesis Testing
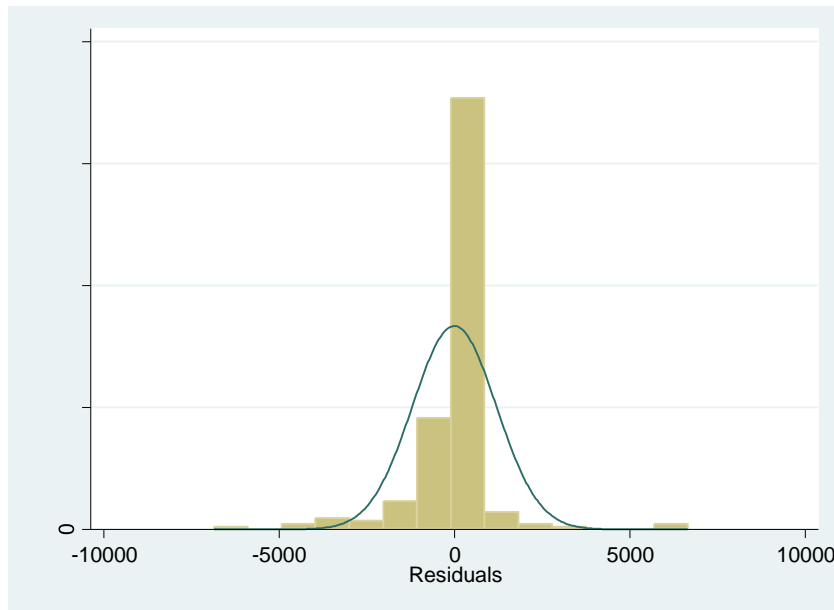
Figure 4.2

Source: Generated by Author using STATA version 14.0 (2018)

4.5.1 Decision Criterion

Probability test of significance (p-value) of the parameters are employed in the research to verify the statistical significance of the estimates. All computations were done at 5 percent (5%) level of

significance. If the probability (p-value) is less than or equal to 0.05 (p-value ≤ 0.05) the null hypothesis will be rejected and alternate hypothesis will be accepted, given that the estimates are statistically significance. However, if the p-values is greater than 0.05 (p-value > 0.05) the null hypothesis will be accepted and the alternate hypothesis will be rejected, certain that the estimates are not statistically significance

4.5.2 Testing Hypothesis 1

Ho1 Profitability has no significant relationship with the dividend payout of listed Industrial goods companies in Nigeria

From the Multiple Regression result from the t-value is 5.020394 and p-value is 0.0000

Hence with a p-value of 0.000 from the model, the null hypothesis is thereby rejected. It is therefore concluded that: Profitability has a significant effect on dividend payout of listed Industrial goods companies in Nigeria

4.5.3 Testing Hypothesis 2

Ho2 Leverage has no significant effect on dividend payout of listed Industrial goods companies in Nigeria

From the Multiple Regression result from the t-value is 3.649476 and p-value is 0.0003

Hence with a p-value of 0.003 from the model, the null hypothesis is thereby rejected. It is therefore concluded that: Leverage has a significant effect on dividend payout of listed Industrial goods companies in Nigeria.

4.5.4 Testing Hypothesis 3

Ho3 Firm size has no significant effect on dividend payout of listed Industrial goods companies in Nigeria

From the Multiple Regression result from the t-value is -1.245493 and p-value is 0.2143.

Hence with a p-value of 0.2143 from the model, the null hypothesis is thereby accepted. It is therefore concluded that: Firm size has no significant effect on dividend payout of listed Industrial goods companies in Nigeria

4.5.5 Testing Hypothesis 4

Ho4 Liquidity has no significant effect on dividend payout of listed Industrial goods companies in Nigeria

From the Multiple Regression result from the t-value is 0.477394 and p-value is 0.6336. Hence with a p-value of 0.6336 from the model, the null hypothesis is thereby accepted. It is therefore concluded that: Liquidity has no significant effect on dividend payout of listed Industrial goods companies in Nigeria

4.5.6 Testing Hypothesis 5

Ho5 Investment has no significant effect on dividend payout of listed Industrial goods companies in Nigeria

From the Multiple Regression result from the t-value is 10.41616 and p-value is 0.0000. Hence with a p-value of 0.000 from the model, the null hypothesis is thereby rejected. It is therefore

concluded that: Investment has a significant effect on dividend payout of listed Industrial goods companies in Nigeria.

4.6 Discussions of Major Findings

The study examines the relationship between some determinants of dividend payout among the listed industrial goods companies in Nigeria.

The result showed that Profitability has a significant effect on dividend payout of listed Industrial goods companies in Nigeria. This finding is in line with that of Al-Twaijry (2014), Gill, Biger and Tibrewala (2010) and Appannan and Sim (2014)

Also, the study found out that Leverage has significant effect on dividend payout of listed Industrial goods companies in Nigeria. This finding is in line with that of Nuhu (2014) and Hosain (2016). As the study further revealed that firm size has no significant relationship with the dividend payout of listed Industrial goods companies in Nigeria. This finding is in line with that of Dada, Malomo and Ojediran (2015), and King'wara (2015) but differ from the findings of Tariq (2015) and Yimam (2016).

While the study found out that liquidity has no significant effect on dividend payout of listed Industrial goods companies in Nigeria. This finding is in line with that of Gupta (2010) and Aivazian, Gatchev and Spindt (2016).

Likewise, the study found out that Investment has a significant effect on dividend payout of listed Industrial goods companies in Nigeria. This finding is in not line with that of Pandey and Ashvini, (2016), Odesa and Ekezie, (2015), Olantundun (2014). But the finding is in line with that of Alzomaia and Al-Khadhiri (2013).

CHAPTER FIVE

SUMMARY, CONCLUSION, RECOMMENDATIONS, & SUGGESTIONS FOR FUTURE RESEARCH

5.1 Summary

This study examined the determinants of dividend payout ratio among listed industrial goods companies in Nigeria. This study can guide the managers of corporate organization to consider certain factors before making any decision on the dividend making policy. It will also contribute to theoretical knowledge regarding the determinants of dividend payout ratio of listed industrial goods companies in Nigeria. The sampled firms for this study were industrial goods companies. Dividend payout ratio is the dependent variable for this study and profitability, leverage, firm size, liquidity and investment are the proxies for independent variable (determinants). Regression analysis was used for this study. The hypotheses were tested to achieve these objectives, using multiple regression for ten years' data between the years 2008 to 2017.

The findings of this study shows that Profitability, Leverage, and investment have significant positive effect on dividend payout of listed Industrial goods companies in Nigeria.

Conversely, Liquidity has insignificant positive effect on dividend payout of listed Industrial goods companies in Nigeria.

While Firm Size has insignificant negative effect on dividend payout of listed industrial goods companies in Nigeria.

5.2 Conclusion

Based on the objective of the study, it therefore concludes that the profitability, leverage and growth (investment) have effect on the payout ratio of industrial goods companies in Nigeria while liquidity and firm size do not have effect on payout Ratio of industrial goods companies in Nigeria.

Investors of should therefore pay more attention on profitability and investment of companies as they determine the amount of dividend that companies pay.

Leverage is an important factor to look as it also determines ratio that companies can give out as dividend. The higher the leverage the lower the amount of dividend paid.

5.3 Recommendations

This study established that company profitability, leverage and growth (investment) play a key role in determining dividend payout for firms listed at the NSE. This study therefore recommends that;

I.   Managers of Industrial goods companies should ensure that they have stable and or improved profit so as to increase their payout ratio in order to increase the market share and also have more capital.

II.   The study further established that there was a negative relationship between firm Size liquidity and dividend payout. This means that the more the companies' liquidity constraints the higher the probability that such companies will not pay cash dividends. This study therefore recommends that companies maintain steady cash flows to enable them meet their cash flow requirements as and when they fall due.

III.   Lastly, investors need to look appropriately at factors like profitability, leverage and growth of firms and not liquidity and firm's size before investing in the cash.

5.5 Suggestions for Future Research

This study investigates the determinants of dividend payout ratio of industrial goods companies listed at the Nigeria Stock Exchange. The determinants are profitability, leverage and growth (investment). Study suggests that future researchers can use other variables like retained earnings, earnings per share on dividend payout ratio.

Future study can be conducted looking at other sectors and countries. More also considering more years.

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APPENDIX

su DPR EPS DER TA CR PER

Variable	Obs	Mean	Std. Dev.	Min	Max
DPR	221	704.718	3.4759	-935.6269	33632.9
EPS	221	2.47432	.3739	-188.9541	53.9594
DER	221	10.47492	.30927	.344694	1797.722
TA	221	6.7673	.94964	.835545	9.184097
CR	221	1.69433	.1276	.0041883	36.41061
PER	221	3.15757	.1194	.2629092	58.53011

su DPR EPS DER TA CR PER, detail

DPR

	Percentiles	Smallest		
1%	-35.71894	-935.6269		
5%	-5.579288	-51.87603		
10%	6.149102	-35.71894	Obs	221
25%	25.72387	-35.03225	Sum of Wgt.	221
50%	37.66985		Mean	704.6572
		Largest	Std. Dev.	3475.905

75%	73.04741	15228.82		
90%	190.9511	19830.5	Variance	1.21e+07
95%	2400.161	25824.72	Skewness	6.926437
99%	19830.5	33632.9	Kurtosis	5.2778

EPS

	Percentiles	Smallest		
1%	-127.2984	-188.9541		
5%	-12.09392	-138.6783		
10%	-7.786351	-127.2984	Obs	221
25%	1.075507	-93.26308	Sum of Wgt.	221
50%	4.927016		Mean	2.924743
		Largest	Std. Dev.	23.8473
75%	9.847411	38.79106		
90%	18.21648	46.68169	Variance	568.6939
95%	23.61563	51.02393	Skewness	-4.520782
99%	46.68169	53.9594	Kurtosis	31.46856

DER

	Percentiles	Smallest		
1%	12.31613	7.344694		
5%	33.39603	10.0019		
10%	35.57602	12.31613	Obs	221

70

25%	44.27988	12.42355	Sum of Wgt.	221

50%	56.99902		Mean	108.8547
		Largest	Std. Dev.	261.3092
75%	72.81094	1433.623		
90%	94.34175	1580.798	Variance	68282.5
95%	109.0203	1657.314	Skewness	5.135947
99%	1580.798	1797.722	Kurtosis	3.3685

TA

	Percentiles	Smallest		
1%	4.84289	4.835545		
5%	5.27244	4.838433		
10%	5.533122	4.84289	Obs	221
25%	6.271374	4.849315	Sum of Wgt.	221

50%	6.594906		Mean	6.767763
		Largest	Std. Dev.	.9498716
75%	7.208758	8.925932		
90%	8.207046	8.993313	Variance	.9022561
95%	8.485549	9.045692	Skewness	.3555781
99%	8.993313	9.184097	Kurtosis	2.784629 CR

	Percentiles	Smallest		
1%	.0065058	.0041883		

	Percentiles	Smallest					
5%	.3042694	.0057757					
10%	.5588104	.0065058	Obs	221			
25%	.9052987	.0075005	Sum of Wgt.	221			
50%	1.222207		Mean	1.694203			
		Largest	Std. Dev.	3.127693			
75%	1.688717	6.021304					
90%	2.257722	11.24961	Variance	9.782464			
95%	2.882901	27.70963	Skewness	8.999979			
99%	11.24961	36.41061	Kurtosis	91.61003			

PER

	Percentiles	Smallest					
1%	.4799866	.2629092					
5%	.6471531	.4083289					
10%	.8173414	.4799866	Obs	221			
25%	1.04707	.4862758	Sum of Wgt.	221			
50%	1.336585		Mean	3.157757	Largest	Std. Dev.	7.119435
75%	1.950028	34.18044					
90%	4.863345	41.87902	Variance	50.68636			
95%	8.274182	48.27823	Skewness	5.256947			
99%	41.87902	58.53011	Kurtosis	32.77683			

.

pwcorr DPR EPS DER TA CR PER, obs sig

```
             |   DPR     EPS     DER     TA      CR     PER
-------------+------------------------------------------------------
         DPR |  1.0000
             |
             |    221
             |
         EPS |  0.3955  1.0000
             |  0.0000
             |    221     221
             |
         DER |  0.8842  -0.6166  1.0000
             |  0.0000   0.0000
             |    221     221     221
             |
          TA | -0.3580   0.3527  -0.3770  1.0000
             |  0.0000   0.0000   0.0000
             |    221     221     221     221
             |
          CR | -0.0966   0.0453  -0.1330  -0.0773  1.0000
             |  0.1524   0.5028   0.0483   0.2528
             |    221     221     221     221     221
             |
         PER |  0.9308  -0.5022   0.9373  -0.3730  -0.1090  1.0000
             |  0.0000   0.0000   0.0000   0.0000   0.1060
             |    221     221     221     221     221     221
```

reg DPR EPS DER TA CR PER

```
      Source |       SS           df       MS      Number of obs   =     221
-------------+----------------------------------   F(5, 215)       =   320.14
       Model |  2.3433e+09          5   468656822   Prob > F        =   0.0000
    Residual |  314736632         215  1463891.31   R-squared       =   0.8816
-------------+----------------------------------   Adj R-squared   =   0.8788
       Total |  2.6580e+09         220  12081912.5  Root MSE        =   1209.9
```

```
------------------------------------------------------------------------------
         DPR |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
         EPS |   23.12614   4.606439     5.02   0.000     14.04658    32.20571
         DER |   3.756396   1.029297     3.65   0.000      1.72759    5.785202
          TA |   -11.7915   95.37711    -1.25   0.214    -306.7854    69.20244
          CR |   12.70273   26.60851     0.48   0.634    -39.74421    65.14967
         PER |    35.8355   34.44987    10.42   0.000     290.9327    426.7382
       _cons |   -12.5661   668.7626    -0.18   0.855    -1440.737    1195.605
------------------------------------------------------------------------------
```

Kernel density estimate

kernel = epanechnikov, bandwidth = 99.2703
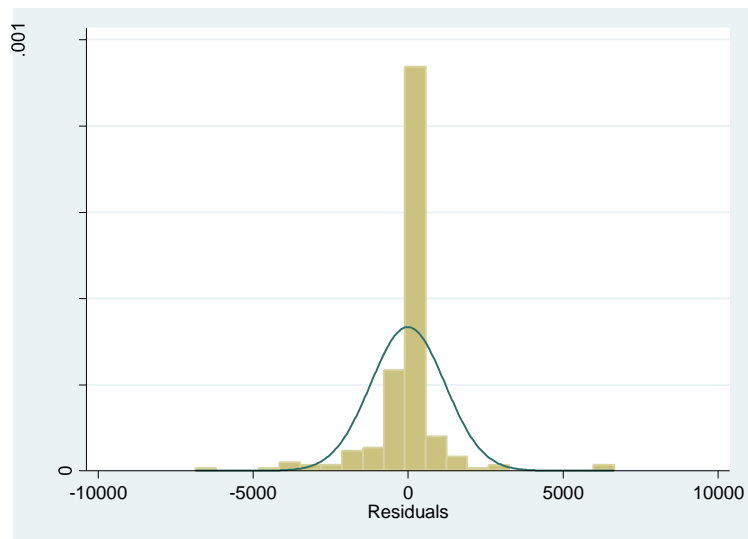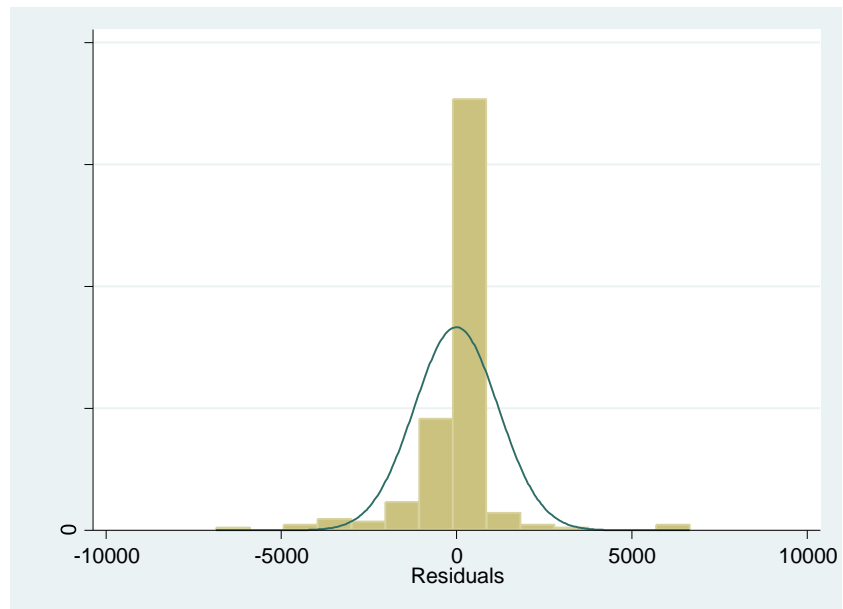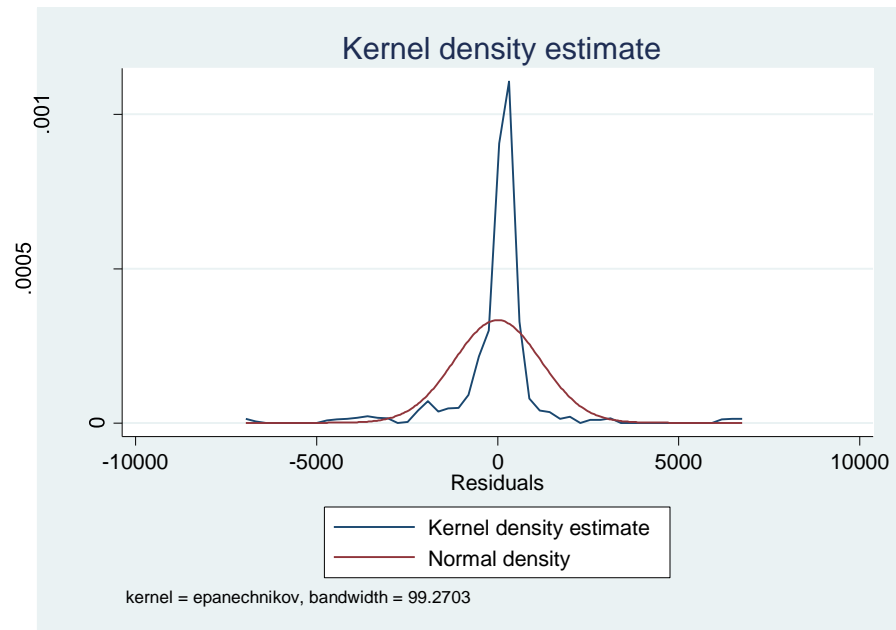
Variable	Obs	Mean	Std. Dev.	Min	Max
e	221	-2.51e-07	1196.086	-6857.728	6663.071

Shapiro-Wilk W test for normal data

Variable	Obs	W	V	z	Prob>z
e	221	24.69468	49.697	29.032	0.89813

Durbin-Watson d-statistic(6, 221) = 1.7848245

estat durbina

Durbin's alternative test for autocorrelation

----

lags(p) | chi2   df   Prob > chi2

-------------+---

   1 | 138.650   1   0.0848245

H0: no serial correlation

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity

Ho: Constant variance

Variables: fitted values of DPR

chi2(1)   =   142.54

Prob > chi2 =   0.9804

Cameron & Trivedi's decomposition of IM-test

Source | chi2   df   p

---------------------+----------------------------

Heteroskedasticity | 191.30   20   0.0546

Skewness | 46.49   5   0.3453

Kurtosis | 4.86   1   0.0275

```
--------------------+----------------------------
      Total |   242.65    26   0.4274
----------------------------------------------------
```

estat vif

```
    Variable |     VIF     1/VIF
-------------+----------------------
     DER |    2.87   0.191980
         PER |    9.04   0.110616
         EPS |    1.81   0.551413
          TA |    1.23   0.810715
          CR |    1.04   0.960720
-------------+----------------------
    Mean VIF |     4.80
```

Ramsey RESET test using powers of the fitted values of DPR

Ho: model has no omitted variables

$F(3, 212) = 116.24$

$Prob > F = 0.7416$